

## ENJOY FULL TEXT SEARCH VERY FAST USING AI/MACHINE LEARNING

282 PAGES TO SEARCH IN LESS THAN 1 SECOND

107,940 WORDS TO SEARCH IN LESS THAN 1 SECOND

**HUMAN BRAIN CAN'T DO THAT. THAT'S WHY FUTURE JOB IS HUMAN + MACHINE**

NVIDIA is seeking an experienced software program manager to be responsible for the development and execution of robotics applications. For two decades, NVIDIA has pioneered visual computing, the art and science of computer graphics. With our invention of the GPU we also set the stage for advances in the field of robotics, computer vision and artificial intelligence. Today NVIDIA is building a platform and solutions for Robotics and Autonomous Machines, making it an excellent time to join our company and this team.

We are looking for an experienced program management leader to help us define, build, execute and launch an autonomous robotics solution. In this role, you'll join the robotics engineering team whose focus is on building the robotics platform to bring AI to autonomous machines. Within an engineering team this role encompasses tracking dependencies across teams, planning the deliverables. This role will work closely with software development engineers, hardware engineers, engineering managers, and product managers to connect the dots, define processes, and run schedules.

### **What You Will Be Doing**

- Drive technical programs from requirements through launch, including running complex project schedules, removing roadblocks, and keeping processes running efficiently.
- Partner closely with Engineering, Product Management, and Customer Program Management teams to define, prioritize, and implement features, infrastructure, processes, and workflows.
- As the focal point, schedule and lead status meetings, handle communication of progress/status within/across engineering teams, and supervise critical issues.
- Lead and improve existing product development and software release processes (PLC); and collaborate with engineering and product management leaders to refine the workflows to improve efficiencies.

### **What We Need To See**

- Bachelor of Science or Master of Science degree in Computer Science, Electrical Engineering, related field or equivalent work experience
- 6+ years of experience developing and leading complex software projects.
- Solid track record of being well organized, having excellent listening skills and being detail oriented; in an environment with shifting priorities and changing requirements.
- Ability to think long term and to build consensus to make programs successful.
- Detailed knowledge of software engineering principles.

## **Ways To Stand Out From The Crowd**

- Hands on experience in a software development role.
- Experience with modern programming language or simulation tools (like Unity 3D or Omniverse) or Robotics SDKs (like Isaac or ROS)
- Background with Agile tools and processes.
- PM Certification/training and/or MBA from leading school.
- Prior experience working in the following areas: Autonomous Vehicles, Robotics, Embedded system and Data Center product
- Good knowledge of industrial safety (ISO10218/ISO13849) or automotive safety (ISO26262) standards and prior experience in this area.

The **Azure Automated ML (AutoML) team** - is hiring for an experienced **Deep Learning Engineer** in Sunnyvale, CA to work on algorithms for Computer Vision.

Do you want to build the AI that builds AI?

As the world has truly embraced a period of “pervasive intelligence”, products and services are increasingly graduating from just being data-driven to data and intelligence driven. In the new world we will need way more machine learning models than data science teams can create. Progress towards this AI driven world requires that we make data scientists more productive and open the machine learning model creation to anyone needing a quantitative prediction from data. Automation of machine learning applications is the key to meeting that need.

The Azure Automated ML (AutoML) team creates software that turns anyone into a ML model builder - just bring data! AutoML is part of AI Platform organization for creating, managing, operating and maintaining machine learning workflows. It offers our customers a comprehensive answer to: “How do I build AI into my product or business?”

AutoML covers Classification, Regression, Forecasting, NLP, Computer Vision -- and any machine learning task you can build to cover our customer’s needs. Learn from many talented colleagues on this high-energy team!

## **Responsibilities**

As a leader in this customer-obsessed team, you will engage with business end-users of data science solutions, as well as data scientists whose favorite tools we aim to create. You will collaborate on solving computer vision (and other, as applicable) problems in their full complexity, and translate your solutions to automatable methods. You will drive the incorporation of these customer-inspired innovations into our software. You will take a holistic ownership of your features, implementing core algorithms, documenting them, and shipping them to production.

For instance, here are the types of things you would do:

- Customize latest available models in computer vision in domains like classification, object detection and segmentation and integrate them in our product. You would be responsible for the end-to-end solution, from offline experiments to production level code that uses these models.
- Apply the latest advances in deep learning and machine learning to increase our current models' performance.
- Contribute to the product road map and planning.
- Contribute to the design and improvement of our end-to-end platform.
- Mentor and support more junior members of the team.

### **Qualifications**

- 6+ years working experience in computer vision, machine learning or statistics (or equivalent research experience).
- Expertise designing and training deep learning (DL) architectures, preferably for CV
- Expertise in machine learning spanning supervised and unsupervised learning methods and applying ML to realworld problems.
- Experience with deep learning frameworks such as PyTorch, Tensorflow, Keras.
- Strong software development experience in languages such as Python, Java, C++, Scala, or C#
- Independent, self-driven person with a high sense of accountability.
- Excellent problem solving and data analysis skills. Effective communication skills, both verbal and written and a great team player.
- Master's degree (PhD preferred) in Computer Science, Machine Learning or related field.

### **Preferred But Not Required**

- Familiarity with state-of-the-art vision models
- Computer graphics, video understanding, 3D, or adversarial training.
- Audio, NLP, or multimodal algorithms
- Active Learning

**Course Hero** is Scaling. We are looking for a Senior Software Engineer who can help us build an end-to-end platform for scaling machine learning (ML) experiments, ML microservices deployment, and configuration management of ML models. You'll be a part of the Machine Learning Product Engineering team at Course Hero and collaborate multi-functionally to ship ML products that personalize learning experiences for students and help educators build outstanding course content. The scalable ML systems you build will enable our product designers to bring intelligent data products to the Course Hero platform.

A Course Hero Staff Engineer is a technical leader who provides mentorship for team members,

drives execution on key projects, and participates in the continuous improvement of our software systems. We expect you to thrive in a fast-paced, high-growth environment, and adapt to constantly evolving business needs. You can view these videos on our engineering culture and our company mission.

### **Here Are Some Ways You'll Make An Impact**

- Architect, build, and maintain a scalable platform for training, deploying, and supervising ML models, microservices, and APIs in modern containerized cloud environments.
- Automate various steps in ML workflow, from model training, inference, and deployment.
- Build prototypes/web apps to rapidly experiment on various versions of ML algorithms and DNN architectures for optimized content recommendations to our customers.
- Partner with ML engineers, data scientists/engineers, and product engineering teams to understand business needs, find the right solution to a problem, and ship products.

### **Are you our next Senior Software Engineer, ML Platform?**

- You have 7+ years of validated experience working as a software engineer, with 2-3 years on a Machine Learning focused product or infrastructure.
- You have 3-5 years of demonstrated ability writing Python code in production
- Confirmed knowledge of SQL/NoSQL databases, RESTful APIs, and docker-containerized microservice-based architectures.
- Experience with the AWS ecosystem including ML frameworks like Athena, S3, EMR Spark, Sagemaker, Tensorflow.
- Experience with Docker, Kubernetes, or similar orchestration and configuration management

Square builds common business tools in unconventional ways so more people can start, run, and grow their businesses. When Square started, it was difficult and expensive (or just plain impossible) for some businesses to take credit cards. Square made credit card payments possible for all by turning a mobile phone into a credit card reader. Since then Square has been building an entire business toolkit of both hardware and software products including Square Capital, Square Terminal, Square Payroll, and more. We're working to find new and better ways to help businesses succeed on their own terms—and we're looking for people like you to help shape tomorrow at Square.

### **Job Description**

As a Machine Learning Tech Lead within the Risk Machine Learning team, you will drive the technical strategic direction of our machine learning efforts as it pertains to risk. This enables a software driven, machine learning centric view on all money movement and every transaction within the rapidly growing Square seller ecosystem. Developing a deeply technical, strategic perspective around

active maximization of the trade off of revenue growth and risk using artificial intelligence that spans detection, reinforcement learning, experimentation, and other topics falls under such purview. The machine learning driven software that we release interacts with every transaction and money movement within our seller ecosystem - a profound degree of scale and impact. Such machine learning techniques touch on reinforcement learning, decision theory, deep learning sequence modeling, and optimization theory. In addition, we also strive to provide our sellers, through seller facing products, with transparency around why our machine learning made a particular decision. This touches on algorithms in the relatively new space of explainable artificial intelligence.

Our algorithms derive value from our unique and rich data from our entire product portfolio within our rapidly growing seller ecosystem. We partner with business, product, operations and engineering teams to drive optimal decision making systems using sophisticated modeling and machine learning. We're a passionate team of entrepreneurs, scientists, and engineers who are shipping machine learning software that actively manages Square's view on each transaction as it pertains to our revenue growth and risk.

### **You Will**

- Lead and drive cross functional machine learning projects from beginning to end: build relationships with partner teams, other machine learning leaders across Square/Cash, frame and structure questions, collect and analyze data, research, prototype, and build out machine learning pipelines, and runtime services of models in production.
- Ability to decompose a complex product area and develop technical themes to work with various teams on the execution of such. Ownership of various machine learning projects will also be part of the role in addition to the aforementioned technical thesis across a variety of work streams.
- Strong machine learning / software development experience in Python plus experience with tensorflow, pytorch, and sklearn.
- Expert level knowledge of modern techniques in machine learning and deep learning, e.g., transformer network architectures, with an orientation to maximizing such algorithms in a large scale production setting. Reinforcement learning experience is a plus for developing optimal control policies.
- Collaborate with business leaders, subject matter experts, and decision makers to develop success criteria and optimize new products, features, policies, and models
- Must have a strong strategic perspective of how various machine learning driven solutions come together against a team, technical product strategy, and lead to an optimal sequence of work.

### **Qualifications**

#### **You Have:**

- 10+ years industry experience in software engineering or machine learning-focused roles.

- An advanced degree (M.S., PhD.), preferably in Computer Science, Electrical Engineering, Statistics, Physics, Mathematics or a related technical field.
- A strong track record of performing machine learning model development and deep learning in practice using Python (numpy, tensorflow, pytorch, scikit-learn, etc.) and SQL/NoSQL interaction patterns.
- Familiarity with Linux/OS X command line, version control software (git), and general software development principles with a machine learning software development life-cycle orientation.
- Machine learning strategic sequencing of methodological and software improvements to work back from maximizing core metrics associated with optimizing the business.
- The ability to clearly communicate complex results to technical and non-technical audiences.

Turner Services Inc. seeks Director, Machine Learning for the CNN.com department.

CNN Digital's Senior Director, Machine Learning and Artificial Intelligence will grow and lead a team of talented machine learning engineers, data scientists and data engineers to develop innovative algorithms, scalable data infrastructure, and personalization and discovery features for CNN. The Sr. Director will partner closely with product, engineering, and user research stakeholders across WarnerMedia to identify data, natural language processing and machine learning opportunities, and to ensure delivery of impactful and elegant solutions for the business and our audience.

### **The Daily**

- Develop innovative data science solutions that utilize machine learning, statistical and quantitative modeling approaches to support product and engineering initiatives.
- Build and lead a world-class team of data, natural language processing and ML scientists and engineers.
- Be a hands-on leader to mentor the team in latest science and machine learning approaches, and to introduce new technologies and processes.
- Work with machine learning engineers to design solution architecture and develop scalable machine learning systems to accelerate learning cycle.
- Identify data science opportunities that deliver business value.
- Develop ML and science roadmap, and educate both internal and external stakeholders at all levels to drive implementation and measurement.
- Manage project priorities and ensure timely delivery.
- Develop and evangelize best practices for scoping, building, validating, deploying, and monitoring ML products.
- Prepare and present ML modeling results and analytical insights that help drive the business to senior leadership.

## The Essentials

- 8 + years of work experience in machine learning, data science or natural language processing with a proven track record to drive innovation and business impacts
- 3 + years of managing a team of data scientists or machine learning researchers and engineers
- Strong machine learning, statistical modeling expertise
- Advanced knowledge of SQL and experience with big data platform (AWS, Snowflake, Spark, Google Cloud etc.)
- Proficiency in machine learning platforms (Python, R, TensorFlow, Keras, PyTorch, MXNet etc.)
- Experience in deploying machine learning algorithms and advanced modeling solutions
- Experience in developing advanced analytics and ML infrastructure and system
- Self-starter and self-motivated with the proven ability to deliver results in a fast-paced, high-energy environment
- Strong communication skills and the ability to explain complex analysis and algorithms to non-technical audience
- Works effectively cross functional teams to build trusted partnership
- Experience with Agile methodologies preferred

### Position Summary...

Software Data Engineer will be responsible for expanding and optimizing our data and data pipeline architecture, as well as optimizing data flow and data collection for cross functional teams. The ideal candidate is an experienced data pipeline builder and data wrangler who enjoys optimizing data systems and building them from the ground up. The Data Engineer will support our software developers, data analysts and data scientists on data initiatives and will ensure optimal data delivery architecture is consistent throughout ongoing projects. They must be self-directed and comfortable supporting the data needs of multiple teams, systems and products.

- Create and maintain optimal data pipeline architecture
- Assemble large, complex data sets that meet functional / non-functional business requirements
- Works closely with data scientists to build the datasets that feeds in as input to model
- Build the infrastructure required for optimal extraction, transformation, and loading of data from a wide variety of data sources using SQL and Big Data technologies.
- Build analytics tools that utilize the data pipeline to provide actionable insights into customer acquisition, operational efficiency and other key business performance metrics
- Creates metrics to continuously evaluate the performance of Data Science solutions
- Identify, design, and implement internal process improvements: automating manual processes, optimizing data delivery, re-designing infrastructure for greater scalability, etc.

- Leads the work of other small groups of six to ten engineers, including offshore associates, for assigned Engineering projects by providing pertinent documents, direction, and examples; identifying short- and long- term solutions and timeline; reviewing and approving proposed solutions; implementing new architectural patterns; and performing design and code reviews of changes.
- Troubleshoots business and production issues by reviewing and analyzing information (for example, issue, impact, criticality, possible root cause); engaging support teams to assist in the resolution of issues; formulating an action plan; directing actions as designated in the plan; interpreting the results to determine further action; performs root cause analysis to prevent future occurrence of issues; and completing online documentation.
- Develops Innovation strategies, processes, and best practices by leading internal technical teams; partnering with cross-functional teams across the business; developing assessments of key opportunities; documenting project scopes; developing long-range plans and project timelines; communicating with and influencing decision-makers and executives within the organization; and resolving technology differences across teams through informed discussions.
- Supports business objectives by collaborating with business partners to identify opportunities; addressing high-priority initiatives (for example, business strategy, technical feasibility, implementation alternatives); identifying short- and long-term solutions; and leading cross-functional partnership.
- Utilizes industry research to improve Wal-Mart's technology environment by analyzing industry best practices; bench marking industry against internal processes and solutions; researching or influencing future industry solutions for fit with internal needs; and defining software development guidelines, standards and processes.
- Promotes and supports company policies, procedures, mission, values, and standards of ethics and integrity by training and providing direction to others in their use and application; ensuring compliance with them; and utilizing and supporting the Open Door Policy.

You'll sweep us off our feet if you have:

- Advanced working SQL knowledge and experience working with relational databases, query authoring (SQL) as well as working familiarity with a variety of databases.
- Experience building and optimizing Big Data pipelines, architectures, and data sets
- Working knowledge of message queuing, stream processing, and highly scalable 'Big Data' data stores
- Ability to effectively communicate technical concepts and results to technical and business audiences in a comprehensive manner
- Enthusiastic, highly motivated, ability to collaborate effectively across multiple teams and stakeholders, including analytics teams, development teams, product management and operations
- Experience supporting and working with cross-functional teams in a dynamic environment

### **What You'll Bring**

- Preferred experience in a Data Engineering role
- 2-5+ years' experience in building and evolving complex software systems for data processing workloads
- Strong CS fundamentals in algorithms, data structures, OOPS, functional programming.
- Strong Experience with Big Data processing ( Hive/ Hadoop/ HDFS/ Spark/ Flink/ Beam fundamentals)
- Hands on Experience with GCP Cloud (Dataflow, BigQuery ,Composer, Dataproc, ML Engine, Datalabs, Kubeflow, Pub/Sub)
- Working knowledge and experience with Streaming platforms (Kafka preferred)
- Experience with stream processing frameworks / Complex event processing engines like Spark-SQL/Flink/Beam
- Strong knowledge and experience with Databases (Relational: Maria/MySQL and NoSQL: Cassandra/HBase/Bigtable)
- Expert knowledge and experience with Java/Scala/Python
- Strong knowledge of principles and approaches used in Data-driven systems, processes and algorithms
- Scripting skills in at least one of the following: Shell, Perl, Python, Bash, or Ruby
- Experience with Performance Engineering including testing, tuning and monitoring tools.
- Basic Familiarity with continuous integration tools and frameworks like Travis CI, Jenkins, etc
- Experience working with big data, such as Hadoop ecosystem, Spark, Kafka, etc.
- In-depth understanding of data structures, algorithms, and distributed systems
- Development experience in Java, Scala, or Python
- Broad understanding of various technologies and frameworks with ability to combine into practical solutions
- Familiarity with provisioning, installing, configuring, and maintaining data platform solutions

How would Facebook scale to the next billion users? The Infrastructure Strategy group is responsible for the strategic analysis to support and enable the continued growth critical to Facebook's infrastructure organization. We are looking for a Data Engineer to not only build data pipelines but also extend the next generation of our data tools. As a Data Engineer, you will develop a clear sense of connection with our organization and leadership - as Data Engineering is the eyes through which they see the product. As a member of Infrastructure Strategy Data Engineering, you will belong to a centralized Data Science/Data Engineering team who partners closely with teams in Facebook's Infrastructure organization. Through the consulting-nature of our team, you will contribute to a variety of projects and technologies. Projects include analytics, ML modeling, tooling, services, and more. This position has a 16-week duration beginning in early 2021. All candidates should be able to commit to a consecutive 16-week timeframe for successful completion of the program. At the end of the term, those who have demonstrated their abilities to succeed and make an impact at Facebook will be considered for a full-time position. Candidates are encouraged to apply early! This program is open to all candidates that have been out of the workforce for two or more years immediately prior to the start of the program.

## **Responsibilities**

- Partner with leadership, engineers, program managers and data scientists to understand data needs.
- Design, build and launch extremely efficient and reliable data pipelines to move data across a number of platforms including Data Warehouse, online caches and real-time systems.
- Communicate, at scale, through multiple mediums: Presentations, dashboards, company-wide datasets, bots and more.
- Educate: Use your data and analytics experience to 'see what's missing', identifying and addressing gaps in existing logging and processes.
- Broad range of partners equates to a broad range of projects and deliverables: ML Models, datasets, measurement, processes, services, and tools.
- Leverage data and business principles to solve large scale web, mobile and data infrastructure problems.
- Build data expertise and own data quality for your areas.

## **Minimum Qualification**

- 4+ years of related experience, all occurring after graduation.
- 4+ years of coding/development experience.
- 4+ years of SQL experience.
- 3+ years experience with Data Modeling.
- 2+ years of experience with workflow management engines (i.e. Airflow, Luigi, Prefect, Dagster, digdag.io, Google Cloud Composer, AWS Step Functions, Azure Data Factory, UC4, Control-M).
- Experience analyzing data to discover opportunities and address gaps.
- 4+ years experience in custom ETL design, implementation and maintenance.
- Experience working with cloud or on-prem Big Data/MPP analytics platform (i.e. Netezza, Teradata, AWS Redshift, Google BigQuery, Azure Data Warehouse, or similar).

## **Preferred Qualification**

- Experience with more than one coding language.
- Experience designing and implementing real-time pipelines.
- Experience with data quality and validation.
- Experience with Airflow.
- Experience with SQL performance tuning and E2E process optimization.
- Experience with database and query performance tuning.
- Experience querying massive datasets using Spark, Presto, Hive, Impala, etc.
- Experience with notebook-based Data Science workflow.
- MS in CE/EE/CSE or computational sciences.

**Job Summary**The Learning Data Engineer is integral in creating, managing, and serving data for university-wide learning data projects in Google's Cloud Platform, vended, and on premises data services. The engineer will also be responsible for creating and maintaining infrastructure to ingest, store, translate, and serve learning data from multiple sources to multiple customers. Additional responsibilities include collaboration and consultation with university groups interested in using learning data for research, dashboards, compliance, and making data informed decisions. Represent IU and helps inform and move learning analytics projects forward with Unizin and other Unizin member institutions. The Learning Data Engineer will support the mission of the Learning Technologies division by developing, implementing, and supporting analytic tools, data modeling, data processing, and reports university wide. Apply knowledge of data modeling, database design, Google Cloud Platform, process automation, database systems languages and database programming techniques.

**Required Qualifications**Bachelor's degree in information systems, computer science, informatics, applied statistics, learning sciences, educational/instructional technology, or a similar field and two years of experience in database administration or system administration. Knowledge of data analysis that includes working with large data sets, working with relational database management systems and models, performing educational data mining and learning analytics, and educational data mining and/or learning analytics. Excellent interpersonal and communication skills. Excellent knowledge of relational databases, data structures, and supporting systems. Excellent problem solving techniques and skills. Strong presentation and writing skills. Strong organization and time management skills. Knowledge of Python or similar programming language. Knowledge of automating processes in Google Cloud Platform or other cloud service vendor. Ability to work collaboratively with faculty, researchers, staff, vendors, and other university partners. Ability to work under general supervision and general guidelines to meet customer needs and be respectful of University resources. Knowledge of data visualization and reporting tools such as Tableau or DataStudio.

**Preferred Qualifications**Familiarity with Canvas LMS data models and application. Knowledge of Google BigQuery, Cloud SQL, Cloud Functions, Cloud Storage, PubSub, and Denodo data virtualization platform. Knowledge of making calls to restful APIs and processing results. Command of data management practices and tools. Knowledge of data security processes and standards. Knowledge of data management and analysis systems such as R, SAS, Denodo, MySQL. Knowledge of current research and theories of learning, pedagogy, and assessment. Experience in designing and developing machine learning systems/recommender systems. Command of advanced statistical modeling (e.g., HLM and SEM). Command of unsupervised and supervised machine learning algorithms (e.g., Clustering and Decision Trees). Command of statistical and machine learning packages (e.g., SPSS, SAS, R, Scikit Learn). Knowledge of machine learning languages and services (e.g., Auto ML, TensorFlow, DSSTNE, Caffe, Neon, Wise.i).

Comcast Applied AI Research is an innovative research group within Comcast's Technology & Product organization with offices in DC, Philadelphia, Denver, Chicago and Silicon Valley that engages in groundbreaking research to reinvent the customer experience for Comcast's 22+ Million consumers using AI and machine learning! To learn more about the team visit - <https://jobs.comcast.com/ml-ai-team-page>. Responsible for identifying complex problems and developing and deploying novel prototypes and algorithms to solve them. Improves accuracy and functionality of algorithms and understands the overall implications of the entire machine learning

frameworks. Translates application requirements into problem statements. Analyzes and evaluates solutions both internally generated as well as third party supplied. Develops novel ways to solve problems and discover new products. Provide guidance and leadership to more junior researchers. Integrates knowledge of business and functional priorities. Acts as a key contributor in a complex and crucial environment. May lead teams or projects and shares expertise.

### **Job Description**

In the Personalization team, we work on cutting-edge research in AI and machine learning to re-invent the customer experience. Using the large amounts of data available to us, we build machine learning models that can help our customers find the content they love. Our team is responsible for building machine learning models for recommendation, personalization, and ranking.

As a key member of our team, you will be using your expertise in Machine Learning to tackle exciting problems such as: addressing fairness and bias in recommendation systems, using reinforcement learning to optimize long-term engagement metrics, using transformer models in recommendation systems, building multimodal models, etc.

A successful candidate will have extensive experience in building novel machine learning models and algorithms as part of PhD research experience or previous work experience as a machine learning researcher. Experience with one of the machine learning libraries such as TensorFlow or Pytorch is also required.

### **Core Responsibilities**

- Participates in groundbreaking research that has an impact on our products and customers.
- Applies machine learning expertise to train models, validates the accuracy of those models, and deploys the validated models into production.
- Contributes to the company by creating patents, Application Programming Interfaces (APIs) and other intellectual property.
- Publishing scientific papers and giving external talks is highly encouraged.
- Guides the successful completion of programs that identify patterns and make decisions with minimal human intervention. Determines the technical objectives of an assignment. Leads the design of prototypes, partnering with the product team and other stakeholders through development. Conducts studies to support product or application development.
- Designs and implements end-to-end solutions using optimization and other advanced computer science technologies and owns live deployments. Aggregates huge amounts of data and information from large numbers of sources to discover patterns and features necessary to automate analytical models.
- Researches, writes and edits documentation and technical requirements, including evaluation plans, confluence pages, white papers, presentations, test results, technical

manuals, formal recommendations and reports. Contributes to the company by creating patents, Application Programming Interfaces (APIs) and other intellectual property.

- Presents papers and/or attends conferences, as well as displaying leadership in these areas.
- Tests and evaluates solutions presented to the Company by various internal and external partners and vendors. Completes case studies, testing and reporting.
- Collaborates with teams outside of immediate work group. Represents the work team in providing solutions to technical issues associated with assigned projects.
- Mentor a diverse team of junior engineers in machine learning techniques, tools and concepts. Provides guidance and leadership to more junior engineers.
- Consistent exercise of independent judgment and discretion in matters of significance.
- Regular, consistent and punctual attendance.
- Other duties and responsibilities as assigned.

### **Employees At All Levels Are Expected To**

- Understand our Operating Principles; make them the guidelines for how you do your job.
- Own the customer experience - think and act in ways that put our customers first, give them seamless digital options at every touchpoint, and make them promoters of our products and services.
- Know your stuff - be enthusiastic learners, users and advocates of our game-changing technology, products and services, especially our digital tools and experiences.
- Win as a team - make big things happen by working together and being open to new ideas.
- Be an active part of the Net Promoter System - a way of working that brings more employee and customer feedback into the company - by joining huddles, making call backs and helping us elevate opportunities to do better for our customers.
- Drive results and growth.
- Respect and promote inclusion & diversity.
- Do what's right for each other, our customers, investors and our communities.

### **Job Specification**

- Bachelor's Degree
- Computer Science, Engineering, Applied Mathematics, or Statistics
- Generally requires 7-11 years related experience.

### **Nice To Have**

- PhD/MS in Computer Science, Computer Engineering or related technical field.
- Extensive background in machine learning.
- Experience with recommendation systems is a plus, but not required.
- Strong coding and software development skills.
- Experience with at least one of the Deep Learning frameworks such as TensorFlow or PyTorch is preferred.

Mathematica is a nationally recognized, nonpartisan research organization that conducts social policy research on health care, disability, education, welfare, nutrition, and other topics. Our mission is to improve public well-being by bringing the highest standards of quality, objectivity, and excellence to bear on the work we do for our clients, which include federal, state, and local government agencies, as well as private foundations. Mathematica's workforce of more than 1200 social scientists, data analytics professionals, support staff and administrators is committed to providing the policymaking community with the evidence to build better social programs. We offer our employees a stimulating team-oriented work environment, competitive salaries, and a comprehensive benefits package, as well as the advantages of employee ownership. Learn more about our benefits here: <https://www.mathematica.org/career-opportunities/benefits-at-a-glance>.

We are looking for PhD-level statisticians to join our vibrant group of over 50 statisticians and data scientists. The contributions of our statisticians underpin our ability to produce crucial evidence and information for policy and decision makers. We provide support for staff to engage in professional activities such as journal publications and conference participation.

### **Position Responsibilities**

- Analysis. Apply a wide array of statistical methods to evaluate social programs and policies, by designing rigorous studies, conducting analyses, visualizing results, interpreting findings, drafting reports, and presenting inferences to policymakers and other stakeholders
- Methods development. Leverage deep technical expertise in statistical methodology to improve upon existing analytic methods for policy research
- Mentorship. Oversee the analyses of junior statisticians and data scientists, and support their professional development
- Business development. Author the quantitative methods sections of proposals for new research projects
- Teamwork. Participate actively and thoughtfully in multidisciplinary teams

### **Position Requirements**

#### **Qualifications:**

- Doctoral degree in a quantitative discipline, such as statistics, biostatistics, applied mathematics, or a related field
- Expertise in statistical methods such as program evaluation, experimental design, natural language processing, Bayesian inference, hierarchical/multilevel modeling, longitudinal data analysis, quality measurement, and/or predictive modeling
- Fluency in one or more of the following statistical programming languages: R, Python, Stan, SAS, Stata, and/or Julia

- Excellent written and oral communication skills, including an ability to translate statistical methods and findings for a non-technical audience
- Experience contributing to proposals preferred
- Subject-matter knowledge in the health policy field preferred

Our M&E Industry Specialist (IS) Consultants are focused on designing and delivering customer outcomes across complex media workloads for our M&E clients using AWS cloud services. They deliver cloud solution guidance, support POC's (Proof-of-Concepts), lead assessments and discovery projects, develop thought leadership and represent AWS at leadership events and summits.

We are actively looking for a senior candidate with deep experience in the application of Data Sciences within the M&E (Media and Entertainment) Industry. The candidate must have extensive hands-on experience in using AI/ML tools and techniques to drive tangible outcomes within one or more phases of the media supply chain –content production, media supply chain, broadcast and direct to consumer. You will have the opportunity to help clients with the “art of the possible” for driving their business goals using the AWS AI/ML tool set (Amazon Sagemaker) and AI services built for media and content workloads (Amazon Rekognition, Amazon Comprehend, Amazon Polly, Amazon Transcribe, Amazon Comprehend and Amazon Lex).

**The Ideal Candidate Should Have a Proven Track Record In Solving The Most Complex AI/ML Based Problems In Media And Entertainment, Such As**

- Using meta data enrichment to drive more value from content archives
- Developing personalization and recommendation services to improve user engagement, increase conversion, and monetization
- Use AI/ML techniques for broadcast compliance and redaction
- Automated subtitling and localization of content
- Contextual advertising & ad personalization
- Using predictive analytics to optimize customer lifetime value models

The position requires a blend of four (4) major skills which are a strong business acumen, deep M&E functional experience, strategic vision, and an innovative/builder mindset.

**AWS Principal Consultants**

- Collaborate directly with global M&E customers to address their workflow performance, cloud workloads, security, compliance, scale, availability and manageability.
- Provide leadership to customers looking for solutions to transform their existing media workloads using Cloud technology.
- Act as the voice-of-the-customer to oversee engagements and assist with non-technical change management work on policies, procedures, operations and people.
- Acquire new technology skills and serve as trusted advisors for internal and external customers including global M&E customer architects and IT leaders

- Work across multiple AWS engineering teams introducing and refining new platforms, solutions and web based services for M&E conglomerates, major studios, music labels, OTT streaming services, new media companies, live events companies, location based entertainment, production and postproduction companies.
- Collect, package and publish best practices and repeatable offerings inclusive of AWS Partners to accelerate our customer's transition to cloud based AWS services.

### **Responsibilities Include**

Customer Engagements – In collaboration with our go to market team, engage customers to envision end state solutions built on AWS. The solutions starts with end state business outcomes in mind, then working backwards with how AWS based technology enables those outcomes..

Industry Leadership- Lead AWS architecture discussions, cloud operations optimization, AWS migrations, security and integration of AWS services supporting global M&E customer requirements.

Support Sales Teams - Support on-site client projects proving the value of AWS products, services and support moving to new distributed cloud environments.

Technology Leadership – Define and design solutions that exceed customer expectations based on the use of AWS services and partners. Services include Amazon Elastic Compute Cloud (EC2), Amazon Simple Storage Service (S3), AI Services (LEX, REKognition), AWS Identity and Access Management (IAM), AWS Media Services.

Develop Partnerships – Develop M&E industry solution roadmaps for clients, partners and service providers. Drive collaboration and integration between multiple partners to deliver comprehensive solutions for large M&E industry clients.

Industry Expertise Transfer –Work with global AWS professional services leadership to grow the AWS Professional Services (ProServe) Practice. Work with ProServe leadership to stay-ahead of the leading-edge platform services and be able to deploy quickly. Support best practices efforts for all AWS and Partners.

Customer Advocacy - Work with AWS engineering groups, technology and professional services teams conveying customer requirements, driving inputs into short-term and long-term AWS technology roadmaps.

Deliver Value - Support delivery of key M&E professional services engagements with clients and partners in feature film, feature animation, broadcast, OTT streaming, production, post production, music, live events, location based entertainment and visual effects (VFX) industries.

Industry Shows and Organizations – Support key industry trade shows, session panels, keynotes, industry groups, technology organizations and technology standards board's directly conveying AWS corporate messaging and driving new industry wide engagements as necessary.

### **Roles And Responsibilities**

Customer Requirements- Understand customer requirements, project scope, and support SOW creation for relevant work.

M&E Partners- Work with relevant M&E partners to help lift-and-shift or re-engineer the existing solutions for AWS as appropriate based on customer's project requirements.

This is a customer facing role. You will be required to travel to client locations and deliver professional services when needed.

### **Basic Qualifications**

- 7+ years of experience in the M&E industry.
- Experience in leading AI/ML initiatives to drive tangible outcomes within one or more phases of the media supply chain – content production (pre or post), media supply chain & archive, broadcast and direct to consumer.
- Knowledge and experience with ML frameworks (including TensorFlow, PyTorch and MXNet)
- Experience in architecting, deploying and operating cloud-based solutions.
- Experience with M&E industry customer C-level relationships, management experience and collaboration skills. Demonstrated ability to think strategically about M&E solutions, global workflows, cloud workloads, business strategy, products and emerging technology trends

### **Preferred Qualifications**

- Experience with AWS AI/ML tool set (Amazon Sagemaker) and AI services built for media and content workloads (Amazon Rekognition, Amazon Comprehend, Amazon Polly, Amazon Transcribe, Amazon Comprehend and Amazon Lex).
- M&E Vertical industry sales and delivery experience using industry standard technologies as well as leading-edge technology services and solutions.
- Experience with the design of modern, scalable delivery solutions for technology consulting services.
- Use of AWS services in distributed environments with Key AWS M&E industry cloud ecosystem partners.
- Advanced degree in Computer Science, Statistics, or Engineering

### **Key Duties Include**

- Analyzing data and generating results in response to data analytics and visualization needs.
- Developing and maintaining software to help support our customers which includes developing, testing and deploying software code to development, staging and production environments.
- Developing and integrating AI/ML solutions and data Analytics expertise with INL High Performance Computing resources.

## **Technical Roles**

- Proactively stay abreast of developments in industry and maintain AI/ML, data analytics, software development and visualization skills.
- Provide imaginative, thorough engineering solutions to a wide range of complex, ambiguous, and/or difficult problems.
- Apply knowledge relative to cyber security and associated policies and procedures required of DOE.
- Research, install, configure and maintain computer system software including 3rd party applications.
- Research and diagnose system operational problems quickly and effectively.
- Coordinate with vendors to resolve hardware and software problems.
- Perform systems performance analysis.
- Be able to develop software for custom solutions. Including but not limited to 3D visualization tools, parallel software, batch scripting and web api interaction/development.

## **Leadership And Outreach**

- Interact with technical networks within directorate.
- Participate in professional activities and/or external collaborations.
- Influence project and program strategies and directions.
- Engage in effective user support and training.
- Work effectively both independently and as a member of the team in computer science, scientific software engineering, and client/server programming.
- Solicit feedback from team members and peers, and also provide input in a constructive manner to others while maintaining a positive and professional relationship.

## **Minimum Requirements**

- Level 2: Bachelors Degree and 2 years relevant experience | Masters Degree and 1 year relevant experience | PhD in Computer Science, Mathematics, Statistics.
- Level 3: Bachelors Degree plus 5 years' relevant experience | Advanced Degree plus 3 years' experience in Computer Science, Mathematics, Statistics.
- Experience developing software in C++ and in R and/or Python.
- Experience utilizing and developing in MS SQL, Oracle, PostgreSQL, MySQL databases.
- Thorough understanding of design principles and database concepts for both SQL and No-SQL databases.
- Understanding of Object Oriented programming.
- Ability to hold and maintain a DOE Q Security clearance.
- Must be able to work in a culturally diverse environment.

## **Preferred Requirements**

- Desired Experienced in C#/.Net application development.
- Understanding and/or familiar with any of the following: Docker, Hadoop, Spark, Natural Language Processing Techniques and Graph Databases such as NEO4j.
- A general understanding and familiarity of Linux.

The Williams-Sonoma Technology organization is seeking an energetic, capable and seasoned engineering leader to build, manage and mentor an extremely talented team of Machine Learning engineers, Analytics/BI engineers and Data Scientists to deliver a best-in-class, cross-brand, cross-channel Advanced Analytics Technology Platform & Services offering for the enterprise.

The ideal candidate would have the ability to attract, recruit and retain the industry's best talent and have the technical chops to effectively influence/participate in architectural discussions, strategic planning, roadmaps and decisions to ensure we build impactful, compelling and scalable solutions in an incremental fashion, unlocking hyper-growth, data driven decision making and creating a world of possibilities for our customers/business.

Success in the role requires strategic and innovative thinking, a proven track record of delivering new customer-facing software products at scale, rigorous analytical skills, and a passion for automation and data-driven approaches to solving problems.

## **Here's What You Will Do...**

- Own and drive the enterprise's current and future analytics technology strategy from concept to mainstream through ONE cohesive, seamless platform at various levels of sophistication including
  - Scheduled and On-Demand Reporting
  - Business Intelligence
  - Predictive Modeling/Insights
  - Prescriptive Modeling/Insights & Automated Feedback/Action Loop
- Build a highly scalable, flexible and capable Analytics & Data Science Sandbox / Workspace for both business and technical users to
  - Connect and wrangle data from one or more ad-hoc sources
  - Join, query and analyze disparate data sets
  - Build and run ad-hoc models and experiments using standardized tools
  - Consistently measure the impact of updated models vs. existing ones (A/B test)

- CI/CD pipeline to incrementally test and promote models through environments all the way to Production
- Closely work with Business, Operations, Product, Program, and other Technology stakeholders and partners to execute a timely but smooth journey of digital transformation for the company in the field of Analytics & Data Science.
- Play a big role in transforming Williams-Sonoma Inc. into a technology hub that envisions and delivers the future of omnichannel retail with innovative AI/ML/DS solutions by hiring top talent and building a strong lasting presence in the technology community.

### **Here are a few abilities you will bring...**

- Kick off, plan, execute and deliver large-scale, cross-team initiatives & programs.
- Absorb a general business problem/opportunity and translate it into an analytic activity.
- Manage and mentor a large team of engineers, engineering managers, and technical leads and significantly contribute to their professional growth and success.
- Consistently lead by example, be a role model and change agent for your associates and the larger technology team.
- Drive an outcome/impact-based culture and implement methodologies to get us there.

### **Here's What You Will Have...**

- 12+ years of overall experience in developing technology solutions and managing multiple active tracks. Prior experience with Retail, eCommerce or Supply Chain domains is a plus.
- 5+ years of experience building and managing a medium scale (10-20) team of engineers, leads, and managers. Track record of continuously optimizing workforce between core vs. flex, associates vs. contractors is a plus.
- Ph.D. in a technical field (engineering, science, math, statistics etc.) highly desired.
- Ability to matrix manage projects through entire lifecycle (concept to completion).
- Strong project management skills with the ability to lead technical professionals.
- Ability to systematically gather relevant information from different sources to address an issue and make a prompt and insightful decision.
- Excellent organizational and leadership skills.
- Ability to build constructive business relationships and gain the trust of others.
- Demonstrated ability to anticipate, mitigate, and resolve conflicts across workgroups.
- Proven experience in developing and executing plans, project financials, meeting deadlines and operating under tight time constraints.
- Strong verbal and written communication skills.
- Demonstrated experience in making articulate and effective oral presentations to different audiences.
- Excellent interpersonal skills including such areas as team spirit, negotiation, collaboration, pitching in where needed, valuing and respecting individuals irrespective of seniority levels.

- Demonstrated ability to negotiate with and manage external vendors.
- Self-motivated and able to work independently.
- Ability to work collaboratively and influence others within a matrix environment.
- Comfortable with some ambiguity and calculated risk-taking, as these are cutting edge areas and this is a new role within the organization.

Do you want to join an innovative team of scientists who invent and apply the most advanced machine learning, NLP and machine translation techniques to create the best customer engagement experience on the earth? Do you want to revolutionize the way how customers solve their issues and got their questions answered? Do you want to help enabling any Amazon associates to aid any Amazon customers no matter what language they speak? At Customer Engagement Technology, we develop peculiar products that help customers solve problems. Our team leads the technical innovations in these spaces and set the bar for every other company that exists. We love data, and we have more than anyone else in the industry. We innovate on behalf of customers, developing Bot, self-service, and associate-facing products that delight customers and support our world class customer service workforce. We leverage big data, NLP, ML, and a focus on continuous innovation to create an amazing experience for customers as we scale to meet business growth each year. If you like to own solving end-to-end business problems with machine learning which would have a direct impact on the bottom line of Amazon's business while improving customer experience, if you see how big data and cutting-edge technology can be used to improve customer experience, if you love to innovate, to discover knowledge from big structured and unstructured data and if you deliver results, then we want you to be in our team.

We are looking for an Applied Science manager who combines exceptional technical, research and analytical capabilities to build and lead a team that will be integral to the continued improvement of chat bot and Machine Translation models at Customer Engagement Technology department. As an Applied Science Manager, you will be responsible for the design, development, testing, and deployment of algorithms and improvements, to revolutionize the way how customers solve their issues and got their questions answered and to enable any Amazon associates to aid any Amazon customers no matter what language they speak.

### **This Involves**

- Manage the design, development and evaluation of innovative, scalable models and algorithms;
- Project manage cross-functional projects;
- Lead team of applied scientists to manage the integration of successful models and algorithms in complex, real-time production systems at very large scale;
- Science leadership for technology and vision roadmaps;
- Identify best practices/latest machine learning models across Amazon and in the industry;
- Communicate effectively with senior management as well as with colleagues from business, science, and engineering backgrounds;
- Support the career development of your team members.

The successful candidate will have an established background in developing customer-facing experiences, a strong technical ability, demonstrated experience in people management, excellent project management skills, great communication skills, and the motivation to achieve results in a fast-paced environment. This is a high-visibility role managing a team of scientists working collaboratively with engineers and product managers. You'll be responsible for developing science roadmaps, staffing plans and developing your team.

### **Basic Qualifications**

- A PhD in CS Machine Learning/NLP, Statistics, or in a highly quantitative field
- 5+ years of hands-on experience in predictive modeling and large data analysis
- 1+ years of experience using R/SAS and SQL in a Linux/UNIX environment
- 1+ years of experience with Python
- Strong communication and data presentation skills
- Strong problem solving ability

### **Preferred Qualifications**

- Experienced with NLP, NLU, Machine Translation methods and Deep Neural Networks
- 8+ years of industry experience in predictive modeling and large data analysis
- Proven record of delivering results
- Strong skills with Python and Java
- 1+ year distributed programming experience
- Ability to work on a diverse team or with a diverse range of coworkers

### **Summary**

Would you like to ensure that high quality natural language processing and artificial intelligence systems are shipped to delight the Siri end customer? You will be working with multi-functional engineering, project management and quality teams to help identify product and process quality issues and improve Siri customer experience. Imagine being the part of the team that is developing intelligent assistant which is helping millions of people get things done - just by asking!

### **Key Qualifications**

10+ years of professional work experience in data engineering and data analysis

5+ years experience handling relational databases and large scale distributed systems such as Hadoop and Spark along with querying languages including SQL, Hive and SparkSQL

5+ years of experience in orchestrating scheduled jobs and optimizing the flow and schedules as needed

5+ years of experience in designing a data warehouse over a complex network of data sources that

can cater to all transactional and analytical needs of data consumers (humans and technology)

3+ years of proven ability to write python code to move and transform data from multiple sources to a data store/warehouse

Good to have applied statistics skills, such as hypothesis testing, experimental design and sample size determination

Excellent presentation skills, distilling complex analysis and concepts into concise business-focused takeaways

Creativity to engineer novel features and signals, and to push beyond current tools and approaches

Ability to communicate the results in a clear and effective manner to leadership teams to influence the overall quality of the product.

Comfortable supporting, collaborating and communicating with senior management and able to build strong working relationships through active listening, delivering promised results, and establishing trust.

Ability to initiate and drive projects to completion with minimal guidance in a fast-paced dynamic environment.

3+ years of experience to work with and manage offshore and onshore contractors on multiple projects/tasks as needed

High level of professionalism, energy and sense of urgency to “make things happen” and resolve issues.

Experience in rapid development cycles, fail fast thinking is highly desirable.

Great teammate with a positive attitude, strong sense of empathy with ability to make decisions.

## **Description**

As a Data Engineer in Siri Quality Analytics team, you will understand the diagnostics, evaluation and metrics used to qualify various products, features and ML models. You will support product development, quality and ML model engineers in identifying the root cause of failures by providing relevant data for root cause analysis. You will play a key part in understanding the points of failure and defining metrics that can track them. You will support the analytics team by ensuring seamless, accurate and timely flow of data from various testing platforms to a central data store/warehouse. You should have developed a strong intuition towards understanding various logs of information and translating it to analytical schema.

## **Sr. Manager, Data Infrastructure**

### **Job Description**

We are currently looking for a talented tech lead / manager to lead our data infrastructure department. The tech lead will lead an engineering team focused on infrastructure powering transformative AI/ML products reaching tens of millions of customers per day. The department covers data infrastructure, data pipelines, analysis, and performance optimization.

The ideal candidate has experience leading engineers focused on building robust, scalable, large-scale datastores, and a passion for building agile, high-performing teams.

### **Responsibilities:**

- Build, lead and mentor a team of infrastructure engineers in a fast-moving and quickly growing organization.
- Create big data and batch/real-time analytical solutions that leverage hybrid datastore technologies operating at petabyte scale.
- Collaborate with ML/AI teams to develop features and APIs to support use cases spanning analytics, research, triage, and monitoring.
- Develop and maintain pipelines to manage resilient idempotent coordination with external databases, APIs and systems.
- Identify and address functionality, stability and scalability design decisions across the stack.

### **Qualifications:**

- BS degree in Computer Science, similar technical field, or equivalent experience.
- 5+ years of experience in data infrastructure with proven experience leading a team of engineers.
- 5+ years of Java experience working in Linux/Unix environment.
- 3+ years of Python and scripting experience preferred.
- Strong experience developing infrastructure powering products and services operating in high performance, distributed systems in large-scale, open-source Linux/Unix environment.
- Strong understanding of databases, distributed systems, data lakes, data warehouses, workflow systems and event streaming.
- Experience with modern, large scale data processing technologies such as Hadoop, Hive, Pig, Spark, Presto and Impala.
- Experience with pub/sub pipelines and dataflows such as Kafka, SQS, MQTT.
- Experience with Elasticsearch and search engine capabilities.
- Experience with API design and gRPC.
- Experience with AWS technologies such as Redshift, Athena, S3, RDS, ECS and SNS.
- Demonstrated ability to facilitate and coordinate complex API design and implementation activities across teams in agile sprints with minimal direction.

### **Key Responsibilities**

- Lead the implementation of a Business Intelligence capability across our technology products.
- Design, build and deploy creative BI visualizations based on requirements from clients and/or client services.
- Continually look for process improvements and more efficient use of BI technology.
- Apply data security oversight throughout the project life cycle.

### **Knowledge & Skills**

- Knowledge of application, data, and infrastructure architecture disciplines
- Experience with Git as well as bash scripting
- Familiarity with Docker and Kubernetes
- Strong data analysis skills & experience with data wrangling with Python
- Demonstrative experience operating in both Linux and windows environments
- Good experience in analyzing business and designing dashboards based on databases is a must
- Must have knowledge on datawarehousing concepts, knowledge on data modeling including 3NF, Inmon, Kimbal methodologies.
- Drive the architecture of a project, including authoring functional and design specifications, scalability, testing, quality data flow, and interface.
- Ability to Lead and Manage team and interact with End users.
- Proficient in creating documentation related to design documents, Unit testing, handover and walk-through documents.
- Excellent analytical, interpersonal and leadership skills along with excellent oral and written communication skills.

### **Professional Experience Required**

- Post-secondary education in Computer Science or Management Information Systems, or equivalent professional experience.
- 4+ years of professional experience in Python scripting languages
- 8+ years Architect experience in IT industry strong data-warehouse and reporting background
- 6+ years expertise in Business Intelligence applications such as Tableau, Sisense or Power BI
- Superior communication skills.
- Proven ability to quickly learn and adapt to a dynamic environment.

The LinkedIn AI org is responsible for developing machine learning algorithms, engineering data pipelines and scalable software platforms that fuel all LinkedIn applications. We use state-of-the-art big data and AI technologies to solve problems. To name a few examples:

We developed new classes of machine learning models based on generalized mixed effects models to combine disparate sources of data for personalization at the member level.

We heavily employed LSTM, CNNs, and sequence-to-sequence models for most of our natural language processing and computer vision tasks.

We built an “AI automation” platform called Pro-ML that allows us to manage the features and machine learning models for every engineering team at the company from one system. This system provides a single platform for the entire lifecycle of developing, training, deploying, and testing machine learning models. Our data infrastructure team innovated Kafka and Samza. We leverage them as well as Hadoop, Ambry, Spark, TensorFlow, Pig/Hive, Azure to process data.

The LTSC AI teams provide end-to-end AI support to LinkedIn’s talent solutions and careers product suites. As a software engineer on machine learning, you will build tools and systems to improve LinkedIn’s job search and recommendation products. You will be responsible for designing algorithms and systems that help job seekers find their next dream jobs, facilitating hiring efficiencies for companies as well.

#### Responsibilities:

- You will be developing cutting-edge AI Algorithms in areas including Natural Language Processing, Ranking, Personalization, Reinforcement Learning, Hyper-parameter Auto Tuning, that power all LinkedIn’s AI products.
- You will work with Big data, crunching millions of samples for statistical modeling, data mining, recommendation, or search relevance solutions
- You will be working with partner data science & analytics teams, product & infrastructure teams to onboard models online.
- You will provide technical leadership, shaping, driving, and practicing best engineering practices
- You will initiate, plan, and execute large scale, cross functional, and org wide critical programs

#### Basic Qualifications:

- Bachelor’s degree in Computer Science or related technical field or equivalent technical experience
- 2+ years of industry experience
- Experience in one of the machine learning libraries such as Tensorflow, PyTorch, Sci-Kit, Numpy etc
- Experience in one of the programming languages such as Java, C++, Python etc
- Experience in working on large scale data, and deploying ML solutions into production environments

#### Preferred Qualifications:

- MS or PhD in Computer Science or related technical discipline
- 3+ years of work experience in the search or recommendation domain
- Experience working on the TensorFlow platform and in designing scalable recommendation algorithms.
- Experience in designing and building infrastructure and web services at large scale.
- Experience in one or more of the following: machine learning, data mining, advanced statistics, information retrieval, recommendation or natural language processing.
- Experience with Hadoop, Spark, Pig or other MapReduce paradigms.
- Authored (co-authored) publications on top-tier AI-ML conferences such as NeurIPS, KDD, SIGIR, WWW.

***In recent years, GM Information Technology has successfully executed the largest IT transformation in the history of the automotive industry, fully insourcing what once was a nearly completely outsourced IT function. Today GM IT is a dynamic and fast paced organization that designs, develops and maintains all IT infrastructure, applications and solutions enabling GM's global operations. From designing and building the next generation of electric and other vehicles to developing a world-class GM experience for our dealers and customers, GM IT is driving real change in the most iconic automaker on the planet. Our team delivers unique enterprise-wide IT solutions in cutting-edge technologies such as mobility, telematics, mission-critical business systems, supercomputing, cloud, vehicle engineering and real-time computing. We offer challenging positions for passionate professionals looking to advance their careers and be a part of an IT organization focused on innovation, speed and business value.***

*This is a unique opportunity to translate subject matter expertise and experience in practices around virtuous cycles for machine learning data as part of a multi-disciplined team of experienced individuals who will be driving the solution design, development, and deployment of advanced statistical and mathematical solutions using machine learning techniques as well as traditional methods. The team will generate new algorithmic and software models enabling enterprise tools for automated and autonomous driving systems development.*

- Candidates should have deep familiarity with predictive modeling techniques based off time series analysis with very high dimensional data sets, especially regarding kinematics.
- Experience in generating geospatial feature detection models such as land use, land type, or object detection leveraging sensor fusion or imagery classification is highly desired.
- Experience establishing sampling policies for understanding real-world dynamic events from small samples of data, and methodological bases for calculating comprehensive statistics needed to validate expected performance of models or generalization from small samples.
- Experience translating real-world sensor data into simulated environments and vice-versa.
- Familiar with linear discriminant analysis, cluster analysis, and other methods to identify latent class features in both labeled and label-free data.

### **Qualifications**

Additional Job Description

### **The Scope Of The Landscape May Include**

The candidate will design and lead iterative development and learning cycles in these areas, and ultimately will produce new and creative solutions that will become part of the operating fabric of the global enterprise.

- Geospatial analysis

- Mobility and behavioral analysis
- Risk analysis and forecasting
- Comparative frameworks between sparse real-world observations, dense simulated observations, and opportunities to expand sensor or sensing frameworks
- Emerging techniques such as generative adversarial networks, self-supervised reinforcement learning, and imitation learning for complex optimization problems
- Optimization, econometric modeling and forecasting, machine learning and text analytics

## **Role**

) The candidate should have experience across a broad set of potential roles, including

**Candidates must be collaborative team players who will work closely with fellow IT professionals (scientists, developers, and product leads.**

- **Research Scientist**
- **AI Analyst**
- **Developer**
- **Architect**

**Development experience in one or more of the following areas:**

- **Python proficiency required (Sklearn, numpy)**
- **GPU programming, NVidia CUDA**
- **Theano, Caffe, CNTK, or TensorFlow framework**

## **Education**

- **Bachelor's Degree or higher with relevant experience. Master's or PhD preferred in Mathematics, Computer Science, Econometrics, or related quantitative areas.**

Innovative opportunity to lead a highly talented BCBSMA team responsible for Enterprise Data Analytics and Business Intelligence. We're looking for a leader in our Data team to work closely with Business Leaders, Product Managers, Data Scientists and Software Engineers to build data architecture and solutions that informs and drives insights. In this role, you'll see a direct link between your work, company strategy and member well-being. In this role, you will provide the organization with thought leadership and strategic subject expertise on matters including the democratization of data, just in time data delivery and data governance.

The ideal candidate will have strong data architecture & engineering leadership background, a proven track record of building solutions in the cloud, a proven track record of leading and scaling data teams, strong operational skills to drive efficiency and strong project management leadership.

## **Key Responsibilities**

- Lead a team of delivery managers, engineers, and analysts to design, build and support Analytics and BI solutions
- Proactively drive the vision for BI and Data Warehousing and define and execute on a plan to achieve that vision.
- Drive the design, building, and launching of new data models and data pipelines
- Evangelize and champion the adoption of AI & ML tools across data verticals
- Create new data assets and applications to enable business to better understand behavior of consumers, accounts and providers
- Drive data quality across the product vertical and related business areas
- Manage the delivery of high impact dashboards and data visualizations
- Define and manage SLA's for all data sets, applications and processes running in production
- Build cross-functional relationships with Data Scientists, Product Owners, Product Managers, Governance teams and Software Engineers to understand data needs and deliver on those needs
- Enable and support Population Health, Health Risk Methodologies, Medical Expense Reporting/Rating and other critical analytics and BI applications
- Represent BCBSMA on key Vendor Product Advisory Committees

## **Qualifications**

- Five+ years of experience leading data development and BI Teams
- Familiarity with a variety of healthcare data including care coordination, claims, provider, account and call center data
- Experience building BI and Analytics solutions on cloud platform (AWS preferred)
- Familiarity with R, Python, Tableau, SAS, Cognos, TM1 or similar tools and technologies
- Experience building ETL solutions and familiarity with Informatica, ODI or similar tools
- Knowledge of industry standard Health Payer reporting (HEDIS, DOI etc.)
- Development of Data Standards, Data Governance and Data Security policies and procedures
- Experience with machine learning algorithms, statistical techniques, and data interpretation methodologies
- Familiarity with Health Care Groupers such as ETGs and deploying Predictive Models
- BA/BS in Computer Science, Math, Physics, or other technical field

You'll be an important part of our high-energy, unique, fast-paced, and innovative culture that delivers with the agility of a tech startup and the backing of a leading global consulting firm. In this particular role, you'll work specifically in the AI Analytics & Engineering Community within the Digital Lighthouse, on a wide range of projects. From applied AI to optimization to big data platform engineering, your analytical and technical skills will drive real impact in the business world. At KPMG, our commitment to your career development helps to set us apart as an employer. We want to enhance your potential, both for yourself and as a contributor to our firm. That's why we provide every opportunity to expand your skills, knowledge and experiences through formal education and

training programs, leadership development opportunities, and, as well as informal one-on-one coaching and mentoring from your KPMG colleagues.

KPMG is currently seeking a Manager in Digital Lighthouse for our Consulting practice.

### **Responsibilities**

- Rapidly architect, design, prototype, implement, and optimize cloud architectures, platforms and applications to tackle the needs for a variety of Fortune 1000 corporations and other major organizations; develop cloud platforms and applications using infrastructure as code methodologies to solve real world problems ensuring quality and compliance following best practices in the industry
- Work in cross-disciplinary teams with KPMG industry professionals to understand client needs and be part of teams developing holistic operational solutions & applications contributing with the cloud infrastructure
- Research, experiment, and utilize leading cloud methodologies and new tools for increased productivity, security, reliability and performance; provide proficient documentation and operating guidance for users of all levels
- Progress tools and services useful in cloud environments such as performance monitoring, security monitoring, deployment/configuration, continuous integration/build servers, and cloud resource creation scripts
- Develop skills in business requirement capture and translation, hypothesis-driven consulting, work stream and project management, and client relationship development; help promote the KPMG brand in the broader data analytics community
- Help drive the process for pursuing innovations, target solutions, and extendable platforms for Lighthouse, KPMG, and clients; participate in developing and presenting thought leadership and help to ensure that the Lighthouse technology stack incorporates and is optimized for using specific technologies

### **Qualifications**

- Bachelor's degree from an accredited college/university or Master's degree from an accredited college/university with minimum two years of experience; or a PhD in Computer Science, Computer Engineering, Engineering or related fields from an accredited college/university
- Experience in architecting/designing cloud architectures and implementing production infrastructures and applications in one or more of the following cloud environments/technologies: Azure, AWS, GCP; experience in developing data and analytics platforms and applications on cloud is a plus and experience with cloud native container technologies such as Kubernetes, OpenShift, or Docker experience with Terraform, Ansible, Chef, and Puppet is preferred
- Basic software development skills/experience; scripting experience is preferred with a proficiency in Unix/Linux environments and ability to develop in terminal environments; experience with source code management systems like GIT and SVN and the ability to communicate technical concepts to non-technical team members

- Strong understanding of networking, identity management, monitoring, logging, vulnerability management, and concepts; depth of understanding with security concepts, protocols and configuration (authentication, authorization, encryption, PKI) with knowledge of IT operating models and processes and experience hardening infrastructures & systems and developing highly available & scalable systems is a plus
- Capability to work with other technical team members to assess needs, provide assistance, and resolve technical problems; understand engagement objectives which includes a clear understanding of the client's business problem and how the engagement helps address the client's business problem
- Ability to travel as needed and applicants must be currently authorized to work in the United States without the need for visa sponsorship now or in the future

Your goal is to improve the ease of discovering content for teachers in their lesson plans and to recommend to students to improve their educational outcomes. You'll advise the team on research that translates into solving real-world problems, with an emphasis on live testing. Your work is driven by practical applications, continuously tying development to tangible outcomes based on the product roadmap. You'll also help to establish KPIs and metrics for recommendation systems, both offline and online.

We are building a newer platform within Discovery to provide personalized suggestions in the whole creative process for our end users in multiple Adobe products by combining asset information and machine learning techniques.

Search & Discovery of information retrieval is a critical part of Adobe's Cloud offering. Adobe Clouds are brimming with billions of pieces of creative content and growing daily. We have built a platform that powers multiple Adobe product lines such as Adobe's Creative Cloud products, Experience Cloud, Document Cloud, and creative marketplace to handle creative assets such as Adobe Stock. This platform takes care of billions of assets stored in cloud for variety of use cases ranging from privately accessible assets as in Lightroom, Creative Cloud and others, shared assets via teamwork in Creative Cloud and experience cloud and public discoverable assets in Adobe Stock Marketplace, Adobe.com, Adobe Learn & Tutorials content.

### **What are we looking for?**

We're looking for a top notch technical leadership in building Search as the core tenet in Adobe Clouds. Technical leadership entails influencing search indexing, Search algorithms, recommendation algorithms, relevance & ranking, visual search, analytics, machine learning, data analysis & metrics, query processing, multi-lingual search, search UX, and overall Adobe Cloud ecosystem. This is an opportunity to make a huge impact in a fast-paced, startup-like environment in great company. Join us!

### **Job Duties And Responsibilities**

- Automation and software development – Develop new tools, workflows & platforms to streamline processes and shorten problem resolution time. Tackle operational problems

using software engineering standard methodologies. Identify and reduce toil using automation, ensuring a high level of value, productivity and quality.

- Dig deeper into all platform components, including application layers, to shape efficient resource utilization to drive optimization both for production, pre-prod, stage & load-testing footprint. This role includes optimizing both real-time and batch processing workloads. This includes Java and Python based code base, git, Big Data components like Apache Storm, Apache Spark, HBase, Elastic Search, Redis, DevOps Frameworks and Tools like Terraform, Chef, Kubernetes, Testing tools like JMeter and so on.
- Evaluate new technologies and help incorporate them into the technology stack
- Works with developers, Machine Learning Engineers, Data Scientists, Quality Engineering and DevOps to come up with roadmap improvements in all phases of SDLC cycle
- Analyze performance metrics and logs to identify inefficiencies and opportunities to improve scalability and performance
- Able to code and deploy the application code when ever needed for major upgrades to new frameworks using open source.
- Able to refine the processes around continuous integration, code reviews and deployment patterns
- Define metrics and implement instrumentation approach, across components, to measure and to deliver on the resource utilization goals.

### **Minimum Requirements**

- 8+ years of relevant experience in the industry
- 5+ years of experience working with Java, Python, C++ or similar languages in full software development lifecycle environment
- 4+ years of experiences in two of the following technology stacks: Messaging queues (Kafka, SQS), NoSQL databases (HBase, Cassandra, MongoDB, CouchDB), real-time ingestion systems (Apache Storm, Apache Flink, Kafka), Big Data offline processing systems (Apache Spark, Pig, Hadoop), Search Technologies (Solr, SolrCloud, Lucene, Elastic Search, Vespa)
- 3+ years experience in building complex N tier systems using open source technologies
- 1+ year of experience using distributed logging and metrics systems: Prometheus, Datadog, Splunk, New Relic
- Experience of version control systems like Git, customizing the workflows using Jenkins, in AWS or Azure cloud infrastructure
- Knowledge on the newer virtualization and clustering solutions like Docker, Mesos, CoreOS, Kubernetes, etc.
- Experience with the design of and integration with RESTful API services

SiriusXM, As a senior member of the Search team at Pandora/SiriusXM you are responsible for building and maintaining the service that supports Search functionality interactions across our native mobile and web applications, automotive systems and third party devices.

You work closely with Product Management and Data Science partners to implement innovative

features and measure their impact. You are comfortable working in a distributed team, in a fast-paced environment and have excellent written and verbal communication skills. You have a collaborative attitude and love working with others to find elegant solutions to complex problems, always keeping the end user in mind. You have a solid foundation of Java development and are comfortable building services at scale. You are familiar with cloud software deployment and monitoring tools and are enthusiastic about learning new technologies and skills. You have a background in Search or Recommender systems or a deep curiosity and willingness to learn.

### **Duties And Responsibilities**

- Write high performant, well-documented code.
- Excellent complex problem solving and critical thinking skills.
- Deploy application on prem and on cloud.
- Understands the requirements mentioned in the document/stories strategize a solution.

### **Supervisory Responsibilities**

- This role has no supervisory responsibilities.

### **Minimum Qualifications**

- Must have a Bachelor's degree in Computers

### **Requirements And General Skills**

- 5+ years development experience with a focus on microservice development
- Working knowledge of Elastic Search or other search framework
- Experience deploying code to production environments
- Experience with cloud computing (Google Cloud Platform, Amazon Web Services)
- Experience with Spring/SpringBoot
- Experience with Recommender, or Search systems.
- Working knowledge of Logstash and Kibana
- Working knowledge of Kafka
- Experience collaborating with data scientists, exposure to machine learning algorithms and/or statistical modeling methods.
- Interpersonal skills and ability to interact and work with staff at all levels.

Technical Skills -

### **Deep Understanding And Proficiency With**

- Working knowledge of Java, Elastic Search or Solr , Kibana.
- Cloud Platform offerings and capabilities (especially with Google Cloud)
- Experience using "Infrastructure as code" (e.g. Docker, Ansible, Kubernetes, Nomad, Terraform, etc.)

### **Some Experience With**

- Monitoring dashboards with tools such as Grafana, Prometheus, Metabase and otherwise
- CI/CD, build and deployment technologies such as Jenkins, Spinnaker, Terraform
- Working with big data pipelines and a batch processing scheduling system such as Apache Airflow
- Building and distributing command line tools via Bash, Python, or otherwise
- Unit Testing frameworks and methodologies
- Familiar with using ELK stack or similar for log aggregation
- Good to have experience with Logstash, Python.

### **Any Experience With The Following Is a Bonus**

- NoSQL based storage systems such as Neo4j, BigTable, MongoDB, DynamoDB, Redis
- Containerization technologies such as Docker, Nomad and Kubernetes
- A passion for building tools that help others succeed
- Working knowledge of Clojure is a plus.

Newsela , Your goal is to improve the ease of discovering content for teachers in their lesson plans and to recommend to students to improve their educational outcomes. You'll advise the team on research that translates into solving real-world problems, with an emphasis on live testing. Your work is driven by practical applications, continuously tying development to tangible outcomes based on the product roadmap. You'll also help to establish KPIs and metrics for recommendation systems, both offline and online. You have 5+ years of practical machine learning experience in industry, building out machine learning systems in production, and have experience with showing users the content they want to see (such as media, e-commerce, advertising). You understand the complexities of building out live machine learning pipelines in production, and have experience choosing metrics to monitor as well as understand tradeoffs between modeling decisions. You prefer deploying practical solutions to test rather than researching theoretical ideas without live data. Ideally, you've worked on recommendation systems in the past. You think about the architecture and system of interactions between different algorithms. Bonus if you have experience with knowledge graphs and how it relates to content, experience with NLP, or topic modeling. You love learning more about information retrieval. You are fluent in SQL and Python (or other scripting languages), and you are comfortable using git and Linux environments. You have experience working alongside product managers to take business outcomes and break them down into projects. You are passionate about improving literacy for students and empowering teachers to find the best content for the classroom.

Siri's universal search engine powers search features across a variety of Apple products, including Siri Assistant, Spotlight, Safari, Messages, and News. The Siri Data organization seeks to improve Siri by using data as the voice of our customers. Within this organization the Search Data Engineering team builds systems that process data reliably at scale to generate scalable and high quality datasets that support confident, data-driven decision making for Siri Search.

We're looking for exceptional data engineers who are passionate about our product and values; who love working with data at scale; and who are committed to that hard work necessary to continuously improve. As a part of this group, you will work with petabytes of data daily using diverse technologies like Spark, Flink, Kafka, Hadoop and others. You will be expected to effectively partner with upstream engineering teams and downstream consumers, including analysts and product engineers.

In this role you will build datasets to support analytics, experimentation, and machine learning. Specifically, you will build out stream processing applications powering real-time metrics and you will help to drive our self-serve strategy for reporting on-behalf of data scientists and product engineers as we collectively make Siri better.

### **Key Qualifications**

You have excellent written and verbal communication skills

You are curious and have excellent analytical and problem solving skills

You are excited about digging into massive petabyte-scale semi-structured datasets

4+ years of industry experience working with distributed data technologies (e.g. Hadoop, MapReduce, Spark, Flink, Kafka, etc.) building efficient extraction and transformation pipelines at scale

Proficiency in at least one high-level programming language (Python, Go, Java, Scala, or equivalent)

Experience with large, complex, highly dimensional data sets; hands-on experience with SQL

You are pragmatic, not letting "the perfect" be the enemy of "the good"

You are self-directed and capable of operating amidst ambiguity

You are humble, continually growing in self-awareness and possessing a growth attitude

Extras we'd be excited about...

Experience building stream-processing applications using Apache Flink, Spark-Streaming, Apache Storm, Kafka Streams or others

Experience with data engineering in support of ML: Anomaly detection in time series data, engineering work to product-ionize models developed by data scientists, etc.

### **Description**

Developing data pipelines and/or software libraries to process, transform, and analyze data to identify signals from the billions of events we collect every day

Designing and building abstractions that hide the complexity of the underlying big data stack (HDFS, Hadoop, Hive, Impala, Spark, Kafka, Parquet, etc) and that allow partners to focus on their strengths: product, data modeling, data analysis, search, information retrieval, and machine learning

Defining and implementing the “source of truth” for our most fundamental data—such as search activity and content—as well as our core metrics across a variety of products

Optimizing end-to-end workflows of data users (crafting libraries, providing abstractions to define jobs, scheduling data pipelines, managing access to datasets, etc)

Building internal services and tools to help in-house partners implement, deploy and analyze datasets with a high level of autonomy and limited friction.

Surfacing datasets in near-real-time to mission critical products and business applications throughout the company, providing the signal that feeds our machine learning algorithms as well as our daily product-defining decisions

Automating and handling lifecycle of datasets (schema evolution, metadata store, backfill management, deprecation, migration)

Improving the quality and reliability of our pipelines (monitoring, retry, failure detection)

## **Education & Experience**

Surprise us! Many will have an MS or BS in CS, Engineering, Math, Statistics, or a related field or equivalent practical experience in data engineering.

Our team is responsible for building search and discovery services for Etsy. Our aim is to help our buyers discover and explore Etsy’s unique inventory and help them find the perfect item that they are looking for . As an engineer on the team, you will play a major role in improving the shopping experience for millions of Etsy buyers.

## **Here’s a Taste Of The Problems We’re Solving**

Search Matching team specializes in information retrieval and focuses on improving the quality of search results through machine learning, natural language processing and personalization techniques..

- How can we help someone find that perfect item, even when they don’t know what they’re looking for?

- How do we rank millions of search results in a matter of milliseconds, so that we're always surfacing the best of Etsy?
- How can we maximize the relevance of search results over an enormous range of queries and buyers?
- How can the search experience make Etsy come to life and feel as vibrant as the community of makers that's behind it?
- How can we understand buyer's motives and interests to personalize their experience?
- How can we help buyers to explore the breadth of Etsy's inventory?

We are language-agnostic in our approach to interviewing.

This role is located in Brooklyn, NY and also open to remote.

## **Qualifications**

### **About the role**

### **In This Role You Will**

- Contribute at all levels of Etsy's search stack, ranging from application back-end technologies (PHP, Java, Python, Scala, SQL) as well as machine learning stack (PySpark, Scalding, Airflow, Tensorflow).
- Work in a cross-functional product team with Product Managers, Data Scientists, and Data Analysts to develop next-generation information retrieval and search systems for Etsy.
- Deploy ML models to production, sometimes including application development for your feature.
- Empathy, communication, and technical skill are valued equally.

### **About You**

- You have solid engineering and coding skills, data structure knowledge and ability to write high performance production quality code.
- Familiarity with machine learning and deep learning solutions across the entire machine learning stack, from data collection to evaluation
- Strong verbal and written communication skills.
- You are an analytical thinker and understand how to wield data to make informed decisions about your work.
- Experience with objective-oriented programming languages: Java, Scala, Python, etc.
- Experience with machine learning frameworks (like Tensorflow, Spark, Scalding, etc.)
- Experience with search technologies such as Lucene, Solr or Elasticsearch.
- Experience with Kubernetes and Cloud Platforms(GCP, AWS, Azure, etc) is a plus.

This individual will serve as a Subject Matter Expert (SME) for helping customers and partners leverage the search services on AWS (Amazon Elasticsearch) to solve their data management needs. Amazon Elasticsearch Service is a fully managed service that makes it easy to deploy, secure, and

operate Elasticsearch at scale with zero down time. The candidate will also acquire expert level knowledge and deliver engagements using the rest of the AWS NoSQL Services (DynamoDB, Neptune, ElasticCache, Timestream and more). AWS Professional Services engage in a wide variety of projects for customers and partners, providing collective experience from across the AWS customer base and are obsessed about customer success. Our team collaborates across the entire AWS organization to get the right solution delivered and drive feature innovation based upon customer needs.

### **Responsibilities Include**

- Expertise - Collaborate with AWS field sales, pre-sales, training and support teams to help partners and customers learn and use AWS services such as DynamoDB, Elastic Compute Cloud (EC2), ElasticCache, S3, ElasticSearch, Neptune, Timestream and more.
- Solution - Deliver on-site technical engagements with partners and customers. This includes participating in pre-sales on-site visits, understanding customer requirements, generating consulting proposals, contributing to internal Area of Depth programs and Technical Field Community, authoring AWS Data Analytics best practice blogs and whitepapers as well as creating packaged data service offerings.
- Delivery - Engagements include short on-site projects to architect, design and build customer's Amazon NoSQL implementations and helping customers to migrate from their existing relational database systems to NoSQL databases.
- Ability to travel to client locations to deliver professional services, as needed

### **Basic Qualifications**

- 5+ years experience in design and implementation of complex distributed systems architectures
- Experience with designing real time and batch log analytics and search solutions using ELK stack
- Experience with design, implementation, deployment and management of large Elasticsearch clusters and ELK solutions
- Experience with performance tuning and optimization of Elasticsearch clusters
- Experience with integration of Elasticsearch with Hadoop, RDBMS, Streaming technologies such as Kafka as well as and Data Science/Machine Learning frameworks at scale
- Current hands-on experience with at least two coding and scripting languages e.g. Python, Java, Scala, Shell Scripting

### **Preferred Qualifications**

- Experience with OLTP and OLAP systems design and performance optimization
- Experience with RDBMS and SQL
- Experience with NonRelational technologies such as Amazon DynamoDB, MongoDB, Cassandra, HBase, Redis
- Experience with non-relational, NoSQL databases and other data analytics applications
- Bachelor's degree, or equivalent experience, in Computer Science, Engineering, Mathematics or a related field

- Masters or PhD in Computer Science, Physics, Engineering or Math
- AWS Associate level certifications or AWS Certified Cloud Practitioner
- Industry leadership in the fields of database, Analytics or data sciences
- Implementing AWS services in a variety of distributed computing, enterprise environments
- Understanding of database and analytical technologies in the industry including MPP databases, NoSQL storage, BI reporting and Dashboard development.
- Ability to think strategically about business, product, and technical challenges in an enterprise environment
- Ability to earn customer trust and influence decision making at the strategic (CxO, VP) and the technical (Architect, Engineer) level
- Experience driving discussions with senior personnel regarding trade-offs, best practices, project management and risk mitigation
- Experience consulting for optimal design of database environments, analyzing complex distributed production deployments, and making recommendations to optimize performance
- Experience developing innovative solutions to complex business and technology problems

The Amazon Elasticsearch Service team designs, develops and operates software that allows customers to index, search and analyze documents at scale in a secure, responsive, and reliable environment. The team is tackling tough data, search and analytics problems.

As a Software Development Engineer on the Amazon Elasticsearch Service team, you will:

- Design, develop and support a world-class search platform serving individuals and businesses of all sizes
- Produce bullet-proof code that is robust, efficient and maintainable; our primary languages are Java, Python, and C/C++
- Work at the core of Elasticsearch and Apache Lucene open source software with opportunities to contribute to open source
- Work on challenging problems in areas such as data storage, query optimization, JVM performance optimization, security, machine learning and more.
- Continually challenge what exists and explore what should be changed to best meet evolving customer needs
- Possess expert knowledge in large scale distributed system design and engineering best practices
- Participate in setting a vision and objectives for Search Services in alignment with customer needs and market opportunities
- Drive and work on algorithm and architecture design, execute and deliver results
- Invent the future of search and log analytics in the cloud
- Join a great group of motivated, top-notch, people and work with them to solve challenging problems in a fun, collaborative environment

## **Basic Qualifications**

- 4+ years of professional software development experience
- 3+ years of programming experience with at least one modern language such as Java, C++, or C# including object-oriented design
- 2+ years of experience contributing to the architecture and design (architecture, design patterns, reliability and scaling) of new and current systems

## **Preferred Qualifications**

- Master's Degree in Computer Science or related engineering degree
- 6+ years of experience with public cloud infrastructure
- Experience with Elasticsearch, Apache Solr, or Apache Lucene
- Experience building customer centric enterprise products

## **Qualifications**

- Minimum of two years of experience leading work streams with at least two data scientists, engineers, and other data & analytics professionals, including innovation, quality management, utilizing analytics and software development processes for natural language processing, machine learning on unstructured data, and/or information retrieval; Multidisciplinary backgrounds
- Master's degree from an accredited college/university in Computer Science, Engineering, or related STEM fields. PhD from an accredited college/university is preferred
- Ability to apply artificial intelligence techniques to achieve concrete business goals while managing limited resources and constraints around data; Ability to discuss mathematical formulations, alternatives, and impact on modeling approach and understanding of development practices (testing, code design, complexity, and code optimization)
- Solid experience performing data science from data discovery, cleaning, model selection, validation, and deployment; experience coding artificial intelligence methods using object-oriented programming in a software development process, and ability to reuse, restructure, refactor and optimize code for efficiency
- Fluency in Python; Proficiency in AI related frameworks (NLTK, Spacy, Scikit-Learn, Tensorflow, PyTorch); Experience with leveraging pre-trained models and transfer learning; Experience with platforms (Google Cloud, Azure, and AWS); Ability to pick up new languages and technologies quickly and to work efficiently under Unix/Linux environment with experience with source code management systems like Git/GitLab; Ability to work with a variety of databases (SQL, ElasticSearch, Solr, Neo4j)

## **Responsibilities**

- Identify business problem, select appropriate performance metric, develop data science modeling/algorithmic approach, and evaluate success of that approach within constraints of data and timeline
- Work in multi-disciplinary and cross-functional teams to translate business requirements into artificial intelligence goals and modeling approaches
- Rapidly iterate models and results to refine and validate approach working across different areas (risk management, financial services, mergers and acquisitions, and public policy) Work in a fast-paced and dynamic environment with both virtual and face-to-face interactions utilizing structured approaches to solving problems, managing risks, documenting assumptions, communicating results, and educating others through insightful visualizations, reports and presentations
- Build ingestion processes to, prepare, extract, and annotate a rich data variety of unstructured data sources (social media, news, internal/external documents, images, video, voice, emails, financial data, and operational data) Leverage a variety of tools and approaches to solve complex business objectives, from Statistical Natural Language Processing, Information Retrieval/Extraction, Machine Learning/Deep Learning, Image Processing, Rules Engines, Regular Expressions, Knowledge Graphs, and Semantic Search.
- Deploy and validate models; work with clients iteratively to validate performance metrics, and sample output to drive towards a business-first solution; utilize APIs, platforms, containers, and distributed processing to achieve throughput goals

Alexa is the name of the Amazon cloud service and the brain that powers Echo, the award-winning and groundbreaking new Amazon device designed around your voice. Echo connects to Alexa, to provide information, answer questions, play music, read the news, check sports scores or the weather, and more—instantly. It's hands-free, and always on. All you have to do is ask. To achieve this, we blend of a variety of disciplines (such as NLP, data mining, machine learning, big data, semantic web, graph stores, cloud computing) in an effort to understand our customers and the things they're excited about.

Amazon is looking for creative Applied Scientists to tackle some of the most interesting problems on the leading edge of Machine Learning (ML), Natural Language Processing (NLP), and Information Retrieval (IR) with our Alexa search team. Alexa search is part of our ongoing Alexa Information efforts focused on reinventing information extraction and retrieval for a voice-forward, multi-modal future.

If you're working to improve your leadership capability, what exactly should you be trying to develop? The experience of the 2020 pandemic offers a powerful lesson: A critical skill a leader must bring to the table is the ability to figure out *what kind of thinking* is required to address a given challenge. Bring the wrong kind of thinking to a problem and you'll be left fruitlessly analyzing scientific data when what's desperately needed is a values-informed [judgment call](#). Or, just as bad, you'll trust your instincts on a matter where a straightforward data analysis would expose how off-base your understanding is.

Mistakes like this happen all the time, because different kinds of human effort require different kinds of knowledge. This is no novel claim of our own — it's only what Aristotle explained more than 2,000 years ago. He outlined distinct types of knowledge required to solve problems in three realms. *Techne* was craft knowledge: learning to use tools and methods to create something. *Episteme* was scientific knowledge: uncovering the laws of nature and other inviolable facts that, however poorly understood they might be at the moment, "cannot be other than they are." *Phronesis* was akin to ethical judgment: the perspective-taking and wisdom required to make decisions when competing values are in play — when the answer is not absolute, multiple options are possible, and things *can* be other than what they are. If you're a farmer designing an irrigation system or a software engineer implementing an agile process, you're in the *techne* realm. If you're an astronomer wondering why galaxies rotate the way they do, you're in the *epistemic* realm. If you're a policymaker deciding how to allocate limited funds, you're in the *phronesis* realm.

The reason that Aristotle bothered to outline these three kinds of knowledge is that they require different styles of thinking—the people toiling in each of these realms tend toward habits of mind that serve them well, and distinguish them from the others. Aristotle's point was that, if you have a *phronetic* problem to solve, don't send an *epistemic* thinker.

But imagine that you're a leader of a large enterprise that has challenges cropping up regularly in all three of these realms. There are plenty of *techne* problems as you work to adopt effective methods and tools in your operations. You also have *epistemic* challenges; anything you approach as an optimization problem (like your marketing mix or your manufacturing scheduling) assumes there is one absolutely right answer out there. And firmly in the realm of *phronesis* would be anything you label a "strategic" matter — decisions on mergers and new product launches, for example, involving trade-offs and recognizing that the future holds various possibilities. As a leader presiding over such a multifaceted organization, it's a big part of your job to make sure the right kinds of thinking are being marshaled to make those different kinds of decisions. This means that you personally need to have some facility with all the different modes of thinking — at least enough to recognize which one is the best fit to a given problem, and which people are particularly adept at it.

That's all the more true for the largest leadership challenges in the modern world, those that are scoped so broadly and are so complex that all these kinds of thinking are called for by one problem, in one facet or another. Think, for example, of a corporation facing a liquidity crisis. Its leaders need to marshal *epistemic* expertise to discover the optimal resolution of loan covenants, issuance restrictions, and complex financial instruments — and the *phronetic* judgment of where short-term cuts will do least damage in the long run.

This brings us to the Covid-19 global pandemic and the challenges it has presented to leaders at all levels — in global agencies, national and local governments, and businesses large and small. To be sure, almost all of the world was blindsided by this catastrophe and early missteps were unavoidable, particularly given misinformation at the outset. Still, it has now been 10 months since patient zero. How can the devastation still be running so rampant — and have segued, unchecked, from deadly disease to economic disaster?

Our diagnosis, not as medical experts but as students of leadership, is that many leaders stumbled in the fundamental step of determining the nature of the challenge they faced and identifying the different kinds of thinking that had to be brought to bear on it at different points.

In the early weeks of 2020, Covid-19 presented itself as a scientific problem, firmly in the epistemic realm. It immediately raised the kinds of questions to which absolute right answers can be found, given enough data and processing power: What kind of virus is it? Where did it come from? How does transmission of it happen? What are the characteristics of the worst-affected people? What therapies do most to help? And that immediate framing of the problem caused leaders — and the people they influence — to put enormous weight on the guidance of epistemic thinkers: namely, scientists. (If one phrase should go down in history as the mantra of 2020, it is “follow the science.”)

In the U.K., for example, this translated to making decisions based on a model produced by researchers at Imperial College. The model used data collected to date to predict how the virus would spread in weeks to come (quite inaccurately, unfortunately). At the frequent meetings of the Scientific Advisory Group for Emergencies there was one government official in attendance, and early on, he tried to inject some practical and political considerations into the deliberations. He was promptly put in his place: He was only there to observe. Indeed, members expressed shock that someone from the world of hashing out policy would try to have influence on “what is supposed to be an impartial scientific process.”

But the reality was that, while scientific discovery was an absolutely necessary component of the response, it wasn't sufficient, because what was happening at the same time was an escalation of the situation as a social crisis. Very quickly, needs arose for tough thinking about trade-offs — the kind of political deliberation that considers multiple dimensions and is informed by different perspectives (Aristotle's phronetic thinking). Societies and organizations desperately needed reliable processes for arriving at acceptable balances between factors of human well-being too dissimilar to plug into neat equations. Pandemic response was not, as it turned out, a get-the-data-and-crunch-the-numbers challenge — but since it had been cast so firmly as that at the outset, it remained (and remains) centered in that realm. As a result, leaders were slow to begin addressing these societal challenges.

What was the alternative? What should a great leader do in such a crisis? We believe that the right approach with the Covid-19 pandemic would have been to draw on all the relevant, epistemic knowledge of epidemiologists, virologists, pathologists, pharmacologists, and more — but to ensure that the scope of the problem was understood as broader than their focus. The tendency of the epistemic habit of mind is to go narrow, into pockets of science where it is possible to arrive at absolute, can't-be-otherwise answers. The right approach would have been to factor those contributions into what was understood from the outset to be a sprawling, complex system of a challenge that would also call on holistic thinking and values-balancing decisions. If leaders had from the outset framed the pandemic as a crisis that would demand the highest level of political and ethical judgment, and not just scientific data and discovery, then decision-makers at all levels would not have found themselves so paralyzed — regarding, for example, mask mandates, prohibitions on large gatherings,

business closures and re-openings, and nursing home policies — when testing results proved so challenging to collect, compile, and compare.

We admit we are painting with a broad brush here, undoubtedly some leaders balanced competing priorities and managed the calamities of 2020 more effectively than others. Our objective here is not to point fingers but simply to use the extremely prominent example of Covid-19 to underscore a fundamental but under-appreciated responsibility of leadership.

Part of your job as a leader is to frame the problems you want people to apply their energies to solving. That framing begins with comprehending the nature of a problem, and communicating the way in which it should be approached. Calling for everyone to weigh in with their opinions on a problem that is really a matter of data analysis is a recipe for disaster. And insisting on “following the science” when the science cannot take you nearly far enough is a way to paralyze and frustrate people beyond measure.

This ability to size up a situation and the kinds of knowledge it calls for is a skill you can develop with deliberate practice, but the essential first step is simply to appreciate that those different kinds of knowledge exist, and that it’s your responsibility to recognize which ones are called for when. Aristotle’s efforts notwithstanding, most leaders haven’t thought much about realms of knowledge and what problems they can solve. Expect that to change as enterprises, and societies, take on increasingly complex and large-scale challenges — and leaders are increasingly judged on the thinking that goes into them.

### **What You'll Bring**

- 4 – 7+ years’ experience in supply chain or operations positions, 3 years in capacity planning, time series forecasting, supply and demand forecasting (ideally working with Anaplan)
- Proven leadership skills with strong written and verbal communication skills to work internally and externally at all levels of management and with peers
- Self starter - seeks the problem, doesn't wait for the problem to find them. Can see around corners and mobilizes themselves and others to act on proactively improving the data consumption experience
- Analytically minded with experience working on large scale projects with complex forecasting models, capacity management models, load balancing products an advantage
- Ability to work in a fast-paced, ambiguous environment while prioritizing and managing multiple responsibilities
- Highly proficient in SQL, Tableau, and Excel; experience in a scripting language strongly preferred but not required
- Analytical bachelor’s degree required (Economics, Finance, Engineering, Math, Statistics, Computer Science), Master’s degree in a related field preferred

## **How You Will Lead**

- Serve as the Leader for OICS, building standardizing and operating procedures and systems for an integrated end to end planning process across all product lines.
- Analyze, deep dive, and collaborate with stakeholders to understand supply and demand forecast drivers.
- Create a long-term supply and demand plan.
- Cultivate relationships with other functions critical to the team's mission (e.g., data science, digital platform team, expert network team, and customer success leaders) to ensure a harmonized forecasting process.
- Conduct demand and supply gap and collaborate with stakeholder to mitigate financial risk.
- Create a short and long-term roadmap to automate across cross-BU supply forecasting.

## **What You'll Be Doing:**

- Developing, implementing, managing, and validating statistical-based custom analytics for pharmaceutical client engagements to help answer complex business questions
- Assisting the IQVIA Real World Insights and Commercial Services teams with use of appropriate data assets, methodologies, statistical techniques and delivery options to meet client information and analyses needs
- Designing/documenting analytical plans and developing detailed programming specifications for the execution of the analysis plan
- Coordinating with off-shore statistical programmers throughout the project lifecycle to ensure accurate and timely delivery
- Collaborating closely with project managers to create timelines for the project and to ensure that project results and conclusions are presented accurately and without bias
- Understanding the contracted scope of work, proactively identifying potential out-of-scope activities and bringing to the attention of the project leader
- Working with consulting principals and sales team on business development effort by providing ad-hoc feasibility reports, providing estimations of effort and developing methodologies that address client needs
- Managing the development work for urgent and/or complex projects requiring programming and statistical models in Python, R or other software packages

(Sam's input) Meeting student, teachers, employee, and parents combine formula and calculator needs

## **What We're Looking For**

- Bachelor's degree in a relevant field including statistics, mathematics, computer science, business analytics or other quantitative field. Master's degree or doctorate preferred.
- Two to five years of prior experience in operations research, market research, business analytics or applied statistics including manipulating larger datasets, conducting statistical analysis and deriving insights. Healthcare industry experience preferred. Job title commensurate with experience/education

- Experience using statistical programming languages (SQL, Python, R and/or SAS) to manipulate data and build statistical models. Experience with distributed data/computing tools such as MapReduce, Hadoop, Hive, Impala, Spark, etc. is preferred
- Knowledge and experience with statistical and data mining concepts including one or more of the following: multivariate analysis, significance testing, regression, decision trees, clustering, forecasting, sampling, scenario analysis, simulation, advanced modeling and machine learning techniques
- Prior experience with healthcare data analytics leveraging patient-level/longitudinal healthcare claims data, electronic medical records (EMR) or related data is highly desired
- Ability to problem solve and develop innovative approaches along with a drive to learn and master new techniques and technologies
- Strong organization skills and ability to work on multiple tasks simultaneously while achieving quality standards and meeting deadlines
- Excellent written and verbal communication skills. Strong interpersonal skills and ability to work collaboratively across teams
- Experience visualizing/presenting data for internal stakeholders and clients

ETSs Research & Development division is seeking a highly qualified candidate to serve as a Senior Director of the Personalized Learning and Assessment (PLA) research laboratory, one of three inaugural ETS research laboratories. The innovative and market-focused individual will lead ETSs strategic research agenda focused on **prototyping adaptive and personalized capabilities with compelling user interfaces and experiences**. Prototypes will be built on a foundation of learning and cognitive science principles that **leverage interactive task design, machine learning**, and data sciences to be **integrated in various teaching, learning, and assessment solutions**.

As a core member of the ETS Research Laboratory leadership team, the Senior Director of PLA will be responsible for **setting a clear and impactful research agenda and developing**, in close partnership with cross-functional business partners, **roadmaps for emerging capabilities** and functional prototypes. The individual will lead a highly talented team of scientists and associates with expertise in cognitive and learning science, natural language processing, and educational measurement, as well as product owners, developers, and designers. The Senior Director will be responsible for cultivating a culture of collaboration, respect, empathy, and productivity within the lab.

The Senior Director is expected to have a well-established reputation as a thought leader, a team leader, and as **an accomplished scientist in the field of learning science and/or personalized learning**. This individual will report to the General Manager who oversees three research laboratories, the Foundry, and an Enabling Technologies team.

The collaborating laboratories are: **AI in Workforce and Education** and Language Learning, Teaching, and Assessment. Other teams under the General Manager include Enabling Technologies (a team of research engineers that supports the three labs) and the Foundry (an internal incubator).

### **Basic Functions And Responsibilities**

Provide vision and strategic direction in support of ETSs immediate and long-term objectives around

the ideation, research, and development of personalized teaching, learning, and assessment capabilities and product concepts .

Oversee the development and implementation of a strategic and impactful personalized learning and assessment multi-year research and development agenda that supports and advances existing products and services, and new product development efforts and initiatives . The agenda is expected **to identify customer challenges and address their needs** as well as address measurement-, learning- and policy-related issues, challenges, and needs for domestic and international populations .

Cultivate close partnerships with cross-functional units throughout ETS including the research institutes, new product development, information technology, strategy, business development, marketing, and the strategic business units to identify opportunities for commercialization of capabilities, support go-to-market strategies , and align on continued research and optimization of core capabilities, products, and services.

Provide leadership in the design and execution of market-facing, user centered research studies including market needs analyses, user validation studies, usability testing, and ongoing user experience optimization. Support the members of the lab in their agile processes and introduce new methodologies where appropriate.

Provide leadership in the design and implementation of complex research projects involving the coordination of interrelated tasks performed by cross-functional teams of scientists, associates, and experts from other areas within ETS (e.g., psychometricians, statisticians, test developers, information technology specialists), and monitor all research activities and projects for the lab.

Act as a thought leader internal and external to ETS sharing new ideas through various communication outlets including formal and informal publications, conference presentations, and other speaking engagements; maintain active engagement with and leadership in relevant professional organizations .

Serve as a primary liaison between ETS and external groups such as policy and/or advisory boards, technical advisory committees, government agencies and foundations; establish and maintain close collaborative relationships with recognized leaders in the field of learning science , personalized learning and assessment , and educational technology.

Establish and support a research climate and culture that expects high-quality scholarship, fosters and encourages collaboration among scientists and associates both within the PLA lab and across other labs and research institute and demonstrates a commitment to increasing diversity and representation .

Mentor and develop a team focused on addressing a wide range of PLA and educational measurement issues. Provide guidance in all stages of conducting research including formulation of research questions, framing of successful grant proposals, design of research projects, developing problem statements, identifying target user groups, engaging with users, analysis of data, and publication .

Develop scientists and associates in various stages of their careers . Guide their work priorities and assignments; provide counsel and career advice; provide opportunities for all staff to growth and development and to take appropriate initiative; provide constructive feedback to all lab staff .

Direct and administer fiscal, operational, personnel and policy implementation activities. This includes, for example: recruiting and selecting scientists and associates; conducting performance reviews and evaluations; reviewing and approving proposal and project budgets, and approving expenditures against budgets; developing, monitoring, and revising center budgets; and monitoring and approving research and consulting expenditures

### **Required Experience**

#### **EDUCATION**

A doctoral degree in Educational Research or Measurement, Cognitive or Learning Science, or a closely related field is required. Strong background in educational measurement is also required. A masters degree with relevant experience would also be considered.

#### **Experience**

Twelve years of experience leading research and development efforts in the area of personalized learning and assessment (formative and summative , cognitive and non-cognitive ), and evidence of independent scholarly research . Demonstrated experience managing teams is also required.

#### **Other Requirements**

Passionate about educational opportunities and equity in education

Experience in the research and development of assessment and learning solutions in various educational contexts (PK, K-12, HED, Language Learning, Professional training)

Application of agile development, user centered design and experience with user centered research

Experience with educational technology

Proven record of establishing relevant and impactful research priorities and agendas

Strong evidence regarding strategic thinking and problem solving

Established ability to interact successfully with colleagues in the field on substantive issues, and to communicate clearly and effectively with a range of other stakeholders

Experience in successfully managing and meeting budgets and relevant financial metrics

Strong administrative skills, including the ability to prioritize needs and resources

Handle multiple tasks, and establish and meet deadlines

Broad political and technical understanding of current education and assessment trends

Proven skills and abilities in building, leading, and facilitating research teams

Demonstrated ability to support the professional and scientific growth and development both of experienced and less experienced colleagues

### **Description**

Voice-driven AI experiences are finally becoming a reality and Amazon's Alexa cloud service and Echo devices are at the forefront of this latest technology wave. We deliver world-class products on aggressive schedules that are used every day, by people you know, in and about their homes. At the same time, we obsess about customer trust and ensure that we build products that respect customers. The Alexa Sensitive Content Intelligence (ASCI) team builds policies, services, machine-learning models and tools to detect and mitigate sensitivity content across Alexa. We protect our customers from getting exposed to profanity, offensive and sensitive content. We are looking for an experienced, and technically adept analytical leader who can help shape the business strategy, and influence roadmap to deliver products and services that customers love.

As a BIE, you will have an enormous opportunity to impact the customer experience. A successful candidate will be a self-starter, willingness to learn new things, comfortable with ambiguity, paying attention to details, you should be comfortable dealing with large and complex data sets, and have experience building self-service dashboards and using visualization tools. You should have strong analytical and communication skills and be able to work with Product managers, Applied Scientists, and Engineers to define key business and performance indicators, build data sets and models and extracts key insights from them.

### **Key Tasks Include**

- Develop new and innovative analyses to inform business strategy. Those analyses will determine approaches and roadmap for key strategic initiatives.
- Analyze relevant business information and uncover trends and correlations to develop insights that can materially improve our product and strategy decisions across our team and with partner teams.
- Establish and manage new, scalable, efficient, automated processes for tracking and reporting on progress of initiatives and uncovering areas of opportunity.
- Formulate and present clear communications for recommended actions.
- Collaborate with product, technical, and operational leaders to gather data and metrics requirements.
- Manage and execute entire projects from start to finish including project management, data gathering and manipulation, synthesis and modeling, problem solving, and communication of insights and recommendations.
- Scope, build and own technical data warehouse processes to help the business scale.

### **Basic Qualifications**

- 5+ years of experience as an analyst or engineer in the data/BI space
- Experience working directly with business stakeholders to translate between data and business needs
- Experience with data visualization using Tableau, Quicksight, or similar tools
- Experience with SQL
- Bachelor's degree in Engineering, Statistics, Computer Science, Mathematics, or a related quantitative field
- Advanced skills in data mining using SQL, ETL, data warehouse as well as Excel

### **Preferred Qualifications**

- Master's degree or higher in Statistics, Data Science, or an equivalent quantitative field
- 10+ years of experience working as a BIE in a business environment
- Experience using R, Python, etc.
- Experience with S3, Redshift, EMR and RDS
- Strong written and verbal communication skills

At Adobe, you will be immersed in an exceptional work environment that is recognized around the world. You will also be surrounded by colleagues who are committed to helping each other grow through our unique Check-In approach where ongoing feedback flows freely. If you're looking to make an impact, Adobe's the place for you. Discover what our employees are saying about their career experiences on the Adobe Life blog and explore the meaningful benefits we offer.

### The Opportunity

Machine Learning is a critical part of Adobe's Cloud offering. Adobe Clouds enable customers to build and manage digital content, such as assets, composites, 3D, documents etc., and digital experience and transformations.

Creative Cloud is focused on visual imagination and creation, and includes such well-known products as Photoshop, Illustrator, Lightroom, and Adobe Stock. Document Cloud is centered around the creation and management of textual documents, including Acrobat and Adobe Sign. Experience Cloud is the set of offerings for the large-scale enterprise, covering marketing, advertising, and analytics.

Adobe Sensei powers machine learning and artificial intelligence across all of these Adobe Cloud product lines. This platform enables thousands of applied researchers, millions of users, and billions of content pieces. The objective is to make machine learning offerings a world-class, leading-edge, differentiating product in Adobe Cloud ecosystem. We match the pace, innovation and excitement of a startup, backed by the resources and infrastructure of Adobe!

Data is critical piece of developing machine learning solutions. ML data can include the datasets that train algorithms, but also large-scale evaluation datasets which give insights into algorithm behavior that helps to refine and evolve ML products.

Training data – Adobe's training datasets often contain digital art, photos, videos, text, or audio files, along with some type of additional knowledge data (user behaviors, annotations, manipulations) to

enable meaningful machine learning. How do we build these datasets to maximize performance and accuracy for the customer? How do we ensure that our models are robust and unbiased?

Evaluation - How do we assess the quality of our algorithms and models? What is the ground truth we use to judge them? Where do they succeed and how do they fail? These problems are even more subtle in the complex, creative domains of Adobe products – for example, how should we judge the quality of similarity search, where a user finds new images with an image as the query?

We're looking for data scientists to define, drive, and coordinate training data construction and model evaluation for the Applied Machine Learning team at Adobe. This will involve thinking hard about product quality, the role of machine learning in those products, and the capabilities of large-scale human-judgment tasks to support scalable solutions that generate the fuel for success of our AI/ML algorithms.

### **Responsibilities**

- Work closely with product, research, and engineering leaders to understand ML applications and define success.
- Interact with APIs to effectively sample raw data to optimize for ML training and evaluation.
- Design tasks and guidelines for human judgment jobs to annotate images, videos, text, audio; and also to measure the performance of machine-learned and other advanced algorithms.
- Help design A/B tests for our cloud offerings, and use human judgment vs. end-user A/B tests as appropriate
- Create a winning culture built on collaboration and shared accomplishments- have fun along the way!

### **Qualifications**

- BS or MS in a technical field (Computer Science, Physics, Math, Statistics) OR in a human-centered field such as Psychology, Linguistics, Human-Computer Interaction.
- Exposure to applied machine learning in an enterprise setting.
- Proven experience in validation and evaluation of machine learned models.
- Strong quantitative and analytical orientation. Experience in evaluation metrics, Python or R, JSON parsing, custom HTML for visualization.
- Strong qualitative skillset. Experience in taxonomies, survey design.
- Understanding of issues around ground truth and training/evaluation data for ML, including human judgment and A/B testing
- Hands-on experience using third-party judgment services such as Figure 8, Appen, or Amazon Mechanical Turk.

As the Technology and Products Group (TPG) Product Engineering Data Science Director, you will enable a broad focus across smart technology development initiatives exploring capabilities with artificial intelligence, advanced analytics, cognitive computing, machine learning, etc. This position reports into the TPG Sr. Director, Data Science, and requires strong partnership with key stakeholders in the TPG Product Engineering group and peers in TPG and Manufacturing.

## **The Team Will Have Two Focus Areas**

- Enabling sophisticated modeling and algorithm development across a broad spectrum of problems to accelerate technology solutions and decision making. Identify solutions for advancement for test, probe, burn, and trim solutions to be automated with predictive and prescriptive algorithms.
- Using vast streams of data (mostly unstructured) and developing intelligence around these data streams to help engineers develop semiconductor solutions faster.

We are looking for a senior-level leader, comfortable working in a multifaceted, iterative environment that also affords the stability of a global, well-established technology company.

## **Primary Responsibilities Include**

- Execute the smart process ecosystem vision within TPG using artificial intelligence, cognitive computing, physics-based modeling, and data analytics
- Lead an internal Big Data and Analytics team, to drive overall enterprise value
- Interact with functional subject matter experts from the Product Engineering and Systems teams, to identify and deliver smart development solutions across NAND and DRAM technologies, and discover areas of the business that can be automated through machine learning
- Apply statistical or machine learning knowledge pertaining to the use cases of specific business problems and data
- Identify data streams, knowledge base, and work with data engineering teams to create the required pipelines that can be used by data science and functional engineers to develop solutions.

## **Requirements**

- PhD or Master's degree in an Engineering or Science field; additional informative experience in Data Science preferred
- 5+ years of related experience in management or senior-level data scientist positions with excellent knowledge in modeling and data analytics
- Experience in large semiconductor company in product technology, or systems level development
- Expert knowledge of two or more statistical programming languages such as R, Python, SQL
- Familiarity with common data modeling approaches and good understanding of how to deal with various datatypes, larger data sets and parallel computing problems
- Experience leading projects that span the fields of data science and data engineering using cluster computing environments such as Spark, Hadoop, other
- Experience with machine learning and AI algorithm development. Applied experience in Deep Neural Network (DNN) solutions.

## **Preferred Skills**

- Results-oriented, with a growth mindset and strong dedication to identify and implement improvement opportunities
- Excellent written and verbal English-language communication and presentation skills
- Proven track record to perform in an environment characterized by volatility, uncertainty, complexity, and ambiguity (VUCA)
- Strong influencing skills and the ability to build strong interpersonal relationships
- Ability to assume high exposure responsibilities and interact with senior leadership
- Strong project management and organizational change skills and experience
- Ability to execute requests with strong attention to detail and strong time-management skills
- Passion to teach others about data science and continue to learn new techniques

Title: Data Scientist

Location: Remote (SF/CLT/MN/AZ/NY/WI)

Number:- Multiple Openings (20 plus)

Duration: 12 Months

**MUST:- 2 plus years of Financial services experience is a MUST**

### **Job Responsibilities**

As an AI/NLP Data Scientist you will be responsible for building AI and Data Science models with a main focus on data extraction and insights from form or any text corpora. You will need to rapidly prototype various algorithmic implementations and test their efficacy using appropriate experimental design and hypothesis validation.

Responsible for big data/analytics projects that gather and integrate large volumes of data. Specializes in developing and programming methods, processes, and systems to consolidate and analyze unstructured, diverse big data sources to generate insights and solutions for client services and product enhancement. Acquires data from multiple data sources to perform analysis. Implements and validates predictive models as well as create and maintain statistical models with a focus on big data. Identifies, analyzes and interprets trends or patterns in complex data to provide answers to business questions as well as provide recommendations for action. Interprets data and analyzes results using various advanced statistical techniques and tools. Presents data and analysis in a clear and concise manner allowing the audience to quickly understand the results and recommendations and make data driven decisions. Collaborates with various partners to prioritize requests/needs and provide a holistic view of the analysis. Measures and monitors results of applied recommendations and present adjustments. Ensures all data acquisition, sharing and results of applied recommendations are compliant with company standards.

### **Basic Qualifications**

- Bachelor's degree in a quantitative field such as statistics, computer science, engineering or applied mathematics, or equivalent work experience
- 7 plus years of relevant experience

**Preferred Skills/Experience:**

- PhD or MS in Computer Science, Computational Linguistics, Artificial Intelligence with a heavy focus on NLP/Text mining with 5 years of relevant industry experience.
- Creativity, resourcefulness, and a collaborative spirit.
- Knowledge and working experience in one or more of the following areas: Natural Language Processing, Clustering and Classifications of Text, Question Answering, Text Mining, Information Retrieval, Distributional Semantics, Knowledge Engineering, Search Rank and Recommendation.
- Deep experience with text-wrangling and pre-processing skills such as document parsing and cleanup, vectorization, tokenization, language modeling, phrase detection, etc.
- Proficient programming skills in a high-level language (e.g. Python, R, Java, Scala)
- Being comfortable with rapid prototyping practices.
- Being comfortable with developing clean, production-ready code.
- Being comfortable with pre-processing unstructured or semi-structured data.
- Experience with statistical data analysis, experimental design, and hypothesis validation.
- Project-based experience with some of the following tools:
  - > Natural Language Processing (e.g. Spacy, NLTK, OpenNLP or similar)
  - > Applied Machine Learning (e.g. Scikit-learn, SparkML, H2O or similar)
  - > Information retrieval and search engines (e.g. Elasticsearch/ELK, Solr/Lucene)
  - > Distributed computing platforms, such as Spark, Hadoop (Hive, Hbase, Pig), GraphLab
  - > Databases ( traditional and NOSQL)
    - Proficiency in traditional Machine Learning models such as LDA/topic modeling, graphical models, etc.
    - Familiarity with Deep Learning architectures and frameworks such as Pytorch, Tensorflow, Keras.

## **The Role**

We are looking for a Data Scientist to join our Data and Insights team. In this role, you will define metrics used to track product engagement, feature usage, and user-centric outcomes. You will use data to uncover user preferences and quantify product experiences, all with an aim of guiding the Product team to build more relevant and impactful experiences for our users.

All of this means balancing longer-running data exploration and analytical projects; conducting experiments; bridging the gap between Product managers and Data Engineers to assure that the necessary data is accessible and easy to use; regularly presenting findings to the Data and Insights team, Product team, and the company.

## **Skills We're Looking For**

### **Data manipulation**

In our opinion, things that can be reasonably expressed in SQL, ought to be. We expect our Data Scientist to have strong analytical SQL skills. This means a fluidity constructing statements that rely

on a combination of joins, aggregate functions, subqueries, and window functions. Our data volume also warrants the ability to write performance-optimized queries.

## **Analysis**

Right now, our bias is toward models that can be interpreted to drive human action. We're seeking an individual who enjoys experimentation and statistical analysis—someone who can translate what they see in the data into useful policy suggestions. A thorough understanding of statistical inference is required.

## **Modeling**

You should have hands-on experience building machine learning models (supervised and unsupervised) and know how to incorporate your models into production workflows and product experiences. At the outset, this role will largely focus on experimentation and more foundational product analysis. In time, some degree of specialization in either preference learning and recommendations, text processing and search, segmentation and clustering, or price optimization is desirable.

## **Tooling expectations**

- Regular usage of a programming language typically used for statistical analysis and machine learning (ideally Python).
- Strong experience with analytical SQL (ideally BigQuery, Snowflake, or a similar MPP data-warehouse technology).
- Hands-on experience with self-service product-analytics tools (*e.g.*, Looker, Mixpanel, Amplitude, Heap).
- Training in statistics, econometrics, or machine learning, with plenty of real-world experience applying these methodologies.
- Exposure to data sets used by Product teams. Chiefly, large-scale event data (*e.g.*, Mixpanel, Segment, Snowplow, server logs) and normalized transactional databases (*e.g.*, e-commerce and subscription datasets).

## **What You'll Do:**

- Leverage Phreesia's massive and ever-growing dataset to build data products that provide actionable business insights
- Optimize targeted engagement strategies through modeling, forecasting, and evaluation
- Develop methods to efficiently classify and characterize patient populations
- Navigate and use diverse machine learning stacks in Python and R
- Use NLP techniques to parse, process, and structure textual data
- Quickly prototype ideas and solve complex problems by adapting creative approaches
- Build customized dashboards for internal and external clients
- Take ownership of data products and ensure they are properly tracked throughout their lifecycle

- Write clean, well-tested, code that will stand the test of time
- Be an expert communicator: you could summarize your daily progress in a tweet

### **What You'll Bring:**

- 2+ years of experience in an operational Data Science role.
- Professional command of Data Science and Machine Learning toolsets such as Python (Numpy, Scipy, Pandas, Scikit-learn), R (dplyr, tidyverse, ggplot).
- MS/MA in a quantitative field such as data science, computer science, engineering, mathematics, statistics, computational linguistics, physics, or relevant equivalent professional experience
- Experience in using statistical principles to inform decision making (experimental design, significance tests, a/b testing)
- Excellent interpersonal and communication skills, both written and verbal
- Ability to organize, visualize, and present complex data in a way that tells a compelling story and drives decision making
- Strong SQL skills
- Experience contributing professional-level code using version control

### **Nice to Have:**

- Experience using web frameworks such as Python flask or R shiny
- Experience in collaborating with Data Scientists and Data Engineers to propose, test, validate, evaluate, and deploy Machine Learning models
- Experience using Apache Spark
- Experience using Graph and/or search Databases (e.g. neo4j, elasticsearch)
- Healthcare experience and a basic understanding of clinical terms

### **Who We Are:**

At Phreesia, we're committed to helping healthcare organizations succeed in a fast-changing landscape—and we need smart, passionate people to help us do it. Our innovative SaaS platform offers our clients a suite of applications to manage the intake process, giving them the tools to engage patients, improve efficiency, optimize staffing and enhance clinical care.

*BI Platform/Viz:*

Looker, Tableau, PeriscopeData, SAP Lumira, Plotly, ThoughtSpot, Alteryx, Salesforce Einstein, Qlik, Atscale, Arcadia Data, GoodData, Birst, Sisense, Amazon AWS Business Analytics, etc.

*Data Analyst Platform:*

Microsoft Analytics Platform, Hitachi Pentaho, Alteryx, Digital Reasoning, Guavus, Ayasdi, ATTIV/O, Datameer, incorta, inter | ana, Mode Analytics, Endor, Ascend.io, Sisu, Switchboard, Starburst, etc.

*Data Science / ML Platform:*

Amazon SageMaker, IBM Watson Studio, Databricks, Daitaku, rapidminer, TIBCO, anaconda, Altair, KNIME, SAS Viya, Data Robot, H2O, Snowflake, Domino Data Lab, LabelBox, Explorium, Dataiku, , Gamalon, ViSENZE, Element AI, Deepsense.ai, etc.

*Hyperscale AI:*

Google Cloud Platform ML, Google Cloud AutoML Vision, Google Cloud BigQuery, Microsoft Azure ML, etc.

*Large-scale internal ML teams:*

Twitter, Uber, Facebook, Apple, Pinterest, Lyft, Nvidia, Google, Amazon, etc.

The Internet of Things revolution is gaining traction now. There are will millions of devices and systems generating enormous streams of data. We are developing multiple IOT Applications and an IoT platform that will connect and manage millions of devices and store, process and analyze device and contextual data in real-time and provide predictive analytics for better business outcomes. We are looking for highly accomplished software engineers to join the "Internet of Things" software development team. You will design and implement new SaaS offerings for LOB specific IOT insight applications to better bridge the IT-OT bridge and solve the business outcomes easily and efficiently. You will be working with state of art and cutting edge technologies like Machine Learning/Artificial Intelligence, NoSQL, ATP, Big Data technologies etc.

Design, develop, troubleshoot and debug software programs for databases, applications, tools, networks etc.

As a member of the software engineering division, you will take an active role in the definition and evolution of standard practices and procedures. Define specifications for significant new projects and specify, design and develop software according to those specifications. You will perform professional software development tasks associated with the developing, designing and debugging of software applications or operating systems.

Provide leadership and expertise in the development of new products/services/processes, frequently operating at the leading edge of technology. Recommends and justifies major changes to existing products/services/processes. BS or MS degree or equivalent experience relevant to functional area. 7 or more years of software engineering or related experience.

## **Candidate Should Have Proven Ability To**

- Design, configure, and implement server features for IOT Cloud Service and Applications
- Code analytics features, web services, and other components Write unit tests
- Write unit tests
- Support cloud operation activities to build and configure maintainable, resource-efficient systems
- Develop a cloud service that would be processing billions of events a day
- Contribute ideas for continually improving the team's productivity, job enjoyment, and code quality.
- Actively mentor junior developers to develop their technical expertise. Provide technical leadership for other engineers

Work is non-routine and very complex, involving the application of advanced technical/business skills in area of specialization. Leading contributor individually and as a team member, providing direction and mentoring to others.

## **Essential Skills**

- Extensive hands-on experience as a technical lead as part of a complex software enterprise product development working on architecture, design and implementation
- Extensive experience with Java, Java EE, RESTful & Web Services, Oracle DB & Oracle Weblogic
- Experience developing Software as a Service on a public cloud
- Excellent written and verbal communication skills
- Organized, good attention to detail, able to work both independently and with a team
- Experience working with distributed teams located around the world on multiple time zones
- Excellent problem solver, analytic thinker, and quick learner
- BS or MS degree in computer science, with a solid foundation in complex and distributed software system design, development, implementation, and quality assurance.
- Experience in Machine Language and Artificial Intelligence is a plus
- Experience with Big Data software technologies is a plus

BlackBerry is a cybersecurity company that uses artificial intelligence-based threat detection systems to protect industrial and governmental infrastructure from cyberattacks. We've patented and published dozens of state-of-the-art machine learning security techniques. We own one of the world's richest cybersecurity data sets for model training, and our models are run on millions of endpoints as well as in the cloud.

The Senior Machine Learning Engineer will work with a team of 20 scientists and engineers to build the machine learning infrastructure at the core of BlackBerry's business model. Working extensively in Python and AWS, you will be responsible for writing well-tested, scalable code to automate the

training and evaluation of models underlying all of BlackBerry's security products. This position will partner with various engineering, product, and research groups to understand and define requirements and to deliver insights, so written and in-person communication skills are extremely important.

### **What You Will Do**

- Design, build, and maintain scalable, automated machine learning training systems in Python and Scala
- Design, build, and maintain analytics tools and services for use within our AWS cloud environment
- Communicate with internal teams and stakeholders to understand project requests and requirements
- Lead design and code reviews
- Regularly contribute to documentation of our tools and services

### **Who We Are Looking For**

- Experience writing and debugging production Python code in a large, collaborative environment
- Experience writing and shipping distributed programs in Scala for Apache Spark
- Experience building and deploying supervised and unsupervised machine learning algorithms
- Solid theoretical understanding of machine learning algorithms, linear algebra, and statistics
- Experience automating solutions and writing code enabling faster iteration by the whole team
- Experience with software build and release processes, unit testing, version control, and tools
- Familiarity with standard project scheduling and documentation tools
- Excellent written and verbal communication
- Solid understanding of the \*nix command line

### **ABOVE AND BEYOND**

- Experience managing Apache Spark clusters
- Experience writing parallel Python code
- Experience using AWS (S3, EC2, ECS, ECR, Batch, Lambda, Data Pipeline, Step Functions)
- Experience building and using Docker containers
- Familiarity with components of microservices, e.g., configuring and launching web servers, REST APIs
- Experience creating data visualizations for reporting
- Proactivity in finding and reducing technical debt within large distributed code bases
- A desire to automate solutions and write code enabling faster iteration by the whole team

### **Staff Machine Learning Engineer**

### **What You Get To Do In This Role**

- You will be required to assess Business Problems, Technical problems, and come up with best fit solution, develop the solution and deploy the solution using the next generation concepts like AIOps, APM monitoring.
- You will be required to work with IT Operations team and deliver these solutions at scale and deploy this for multiple teams You will be required to assess Business Problems, Technical problems, and come up with best fit solution and deploy the solution using the next generation concepts like AIOps, APM monitoring.
- You will be required to work with IT Operations team and deliver these solutions at scale and deploy this for multiple teams

### **Job Responsibilities**

- Research and develop machine learning algorithms for IT Operations
- Run experiments to measure algorithms effectiveness and performance
- Optimize algorithms for real-time performance
- Involve in full stack software development for AIOps projects/products including data collection, data process, big data, machine learning services and visualization technologies by using state-of-art technologies including development/deployment in cloud, containers, microservice, large scale messaging systems, machine learning services, and visualization of big data
- Write documentation and tests for code
- Work in a team environment by following Agile software development process
- Provide mentoring and training to peers and other colleagues in the organization.

### **Requirements For Position**

- Nine plus years of overall industry experience in one of the tools- NLP (Any tools), OR Cloud (Either AWS OR Azure) with Infra experience, ML (minimum 2 years of experience)
- Experience in designing, developing, scalable and distributed system
- Solid Python programming experience
- Experience in designing and development of data collection and pipelines
- Experience in designing and development of big data systems
- Experience in development on cloud platform
- Experience with standard machine learning frameworks
- Strong communication skills (both written and verbal)
- Bachelor's degree and/or an MS in Artificial Intelligence, Computer Science, Information technology, or related field experience in developing software system with machine learning services

### **Role Summary**

CommonSpirit Health (CSH) is looking for an experienced VP of Software Architecture, reporting to the Chief Technology and Product Officer (CTPO), who can help CSH to achieve its ultimate objective of creating "healthcare of the future" in an increasingly digital world. One which leverages best in class technology to **improve the service** it provides to its business partners, customers and patients. Partnering closely with the CPTO, VP of Cloud, Infrastructure, and Cybersecurity Strategy, and the

rest of the CTPO team, the VP of Software Architecture will be responsible for leading a team of Software Architects, team of health platforms architects, and a team of data and analytics architects to set the combined software architecture vision and strategy that will enable CSH to achieve its strategic goals.

This role will report to the Chief Technology and Product Officer, Shaung Liu -

### **Direct Reports**

- Software Architecture Team Lead
- Health Platforms Architecture Team Lead
- Data and Analytics Architecture Team Lead

### **Peers**

- VP, Cloud, Infrastructure, and Cybersecurity Strategy
- Tech Lab Director

### **Stakeholders**

- SVP, Infrastructure
- SVP, Data and Analytics
- CISO
- SVP Software and Applications Engineering
- SVP Digital
- SVP Division Health Technologies
- SVP, ITD Performance & Effectiveness
- SVP, Merger Integration

### **Specific Responsibilities Of The Role Include**

- **Technical vision and strategy:**  
Develop a technical vision and strategy that addresses CSH's mid to long term approach to enterprise software architecture, including data and analytics, AI, and health system platforms. Collaborates closely with the CTPO and other IT&D leaders to create a multi-year roadmap, communicates and delivers on the strategy.
- **People/Talent leadership**  
attracts, hires and builds high-performing teams in enterprise software architecture and empowers people and rewarding results; achieved through clearly articulated goals, discernment, priorities and a belief in the positive intentions of our employees. Takes an active role in developing talent. Builds and enables a high engaged high performing team. Strong communicator.
- **Technical leadership**  
demonstrates breadth and depth of professional/technical skills and capabilities in enterprise software architecture, data and analytics, and health platforms such as EHRs; shares knowledge;

sets or contributes to the organization's direction. Influences with fluency on technology related change.

- **Operational leadership**

is responsible for agility and high performance of team which models the willingness, leadership, and courage to challenge the status quo; fosters creativity; and problem solves/acts quickly to activate change, innovation and resilience. Delivers a highly stable, robust environment for CSH and enables our business. Thinks "human first" in operational experiences delivered. Shows discipline of execution and delivery.

- **Financial leadership**

understands the organizations financial processes. Prepares, justifies and administers his/her budget. Oversees procurement and contracting to achieve desired results. Monitors expenditures and uses cost benefit thinking to (re)set priorities. Focuses on value creation for CommonSpirit Health - this includes IT centric cost management and business results for CSH. Drives a fiscal disciplined behavior in her/his team. Thinks long term and short term while managing finance and value creation.

- **Mission centric value creation:**

Be a thought leader obsessed with creating value for CSH, our communities, our consumers/patients, physicians, employees. Be willing and committed to changing the game of technology, for CSH, disrupt the industry while being obsessed about value created for our mission and ministry.

- **Innovation:**

help to create an environment that fosters innovation and risk taking and rewards execution and results. The ideal candidate will have a natural curiosity for staying abreast of global technology trends and their applicability to CSH's capabilities. Exemplifies out of the box thinking while adhering to the team's mission and objectives.

- **Evangelist:**

The VP of Software Architecture will be responsible for evangelizing an enterprise software architecture culture; one that embraces the latest design patterns such as RESTful APIs, Cloud Platform As a Service, reusable containers and micro services and data and AI concepts; articulating the team's strategy to all key stakeholders;

## **Qualifications**

- A minimum of 15+ years of progressive experience operating in enterprise software architecture and management roles;
- A minimum of 7+ years of progressive experience operating in software architecture using cloud platform as a service roles;
- Experience in mobile app architecture with direct development or management experience;
- Experience in data modeling, business intelligence, and AI (or good understanding of AI concepts);
- Proven track record as a VP of software architecture at a large complex company. Therefore, understands how to create software architecture strategies needed to drive a major transformation.
- Natural communicator: comfortable in conveying, inspiring and eventually convincing, key stakeholders of a strategy that will support the CTPO team in driving transformation;
- A natural leader who can lead and motivate a team of architects to achieve key strategic goals;

- Domain: currently operating in a consumer company which is leveraging the latest technologies / platforms and methodologies to deliver world class products; has recently worked in healthcare or has worked in healthcare somewhere along the career path.
- Early career gained in a globally recognized software company. During your career you will have successfully managed software development teams to deliver world renowned consumer, as well as enterprise, applications or services.

Riverbed enables organizations to maximize performance and visibility for networks and applications, so they can overcome complexity and fully capitalize on their digital and cloud investments. The Riverbed Network and Application Performance Platform enables organizations to visualize, optimize, remediate and accelerate the performance of any network for any application. The platform addresses performance and visibility holistically with best-in-class WAN optimization, network performance management (NPM), application acceleration (including Office 365, SaaS, client and cloud acceleration), and enterprise-grade SD-WAN. Riverbed's 30,000+ customers include 99% of the Fortune 100.

Riverbed is seeking a Vice President of Product Management to lead product management functions for Riverbed's full technology portfolio, covering WANOp, Application Acceleration, SDWAN and NPM visibility.

Reporting directly to the Chief Development Officer, the Vice President of Product Management will be a member of the company's senior leadership team and will be responsible for leading all worldwide product management efforts for our world-class Digital Networking solutions – including SD-WAN, NPM-IM, AIOps and Application Acceleration technologies.

In this role, you will lead a talented multi-site, global product management team focused on the management and development of our Digital Networking solutions. You will help shape the vision for our next generation products in collaboration with stakeholders. Being hands on will be critical to success in this position. Importantly, this person must be capable of growing, developing, and managing a large, high performance engineering organization with open communication and transparency.

### **Responsibilities**

- Define product strategy and direction; define and prioritize product requirements, features and functionality, develop product roadmaps, recommend portfolio direction
- Interact with customers, prospects and sales teams to socialize product plans, brainstorm and validate new functionality, and address product issues
- Influence the engineering team and executive management, drive product priorities and lead cross-functional product teams Create technological vision, drive technology strategy and influence stakeholders on strategic product direction
- Collaborate with Chief Development Officer, Product Management teams and leaders across functions to define future product offerings.
- Integrate plans into and drive execution of new product launches and continuous product enhancements. Collaborate with internal Riverbed business units (Marketing and Sales) and

external client groups in pursuit of superior market leading product development to create and enhance products our customers will value.

- Work actively in product development and lead in the trenches as needed, providing innovative solutions to real engineering problems and serving as an example to staff.
- Be an active member of the Riverbed leadership team, participate in setting business strategy, and contribute technical expertise to business decisions.
- Lead product management team that will be creating and delivering field facing technical collaterals
- Lead product definition through teams' customer requirements gathering
- Oversee roadmap planning of individual products and entire portfolio
- Leverage teams' broad knowledge of hardware, software, data and cloud technology to architect technical solutions from business requirements
- Oversee the product lifecycle, interfacing with all other functions of the Business
- Lead engagement efforts with sales and customers to ensure success with major opportunities and deployments
- Create an environment that encourages everyone to maintain a commitment to company culture and values.
- Collaborate and contribute to the long-term engineering vision and roadmap.
- Challenge and inspire engineering leadership to achieve and deliver business results.
- Extensive travel throughout worldwide engineering offices

## **Requirements**

- 15+ years leading product management teams in multiple global locations
- Experience with launching new SaaS products in existing markets but also launching/creating products from the beginning of life
- Excellent portfolio management experience
- Demonstration of taking a single product and building out a complete portfolio.
- Experience working in the Artificial Intelligence and visibility for IT Operations or Network Performance Management space
- Success with defining new products/features from concept through introduction
- Proven ability to learn new technologies and product capabilities and then translate them into value propositions
- Comfortable and passionate about technology with an ability to roll up sleeves as needed
- Combination of Technical experience combined with strong business acumen
- 12+ years' experience managing highly technical engineering teams in multiple global locations.
- Outstanding management capabilities, including the ability to build and lead highly effective team across geographic locations.
- Entrepreneurial and comfortable in a fast-moving, results-driven environment that includes a background in both small and large engineering development organizations.
- Successful track record of defining and executing strategic and innovative development projects which have had major impact on company and market share performance.
- Excellent people skills, working at a global scale with many different cultures

- Excellent leadership abilities along with proven success in building, growing and managing a highly talented and motivated global organization of 100+ engineering, QA, technical writers professionals.
- Experienced and strong supporter of the agile methodology of software development.
- Demonstrates excellent technology leadership, inspires and motivates team, bring new ideas, and leverage new technologies and methodologies to bring value to the company.
- Strong understanding of current and emerging technologies.
- Great written and oral communication skills including the ability to present ideas on both the technical and business sides and at the executive, customer, intercompany and team levels.
- Engaging personal style with strong interpersonal and collaboration skills with a predisposition towards mentoring staff and encouraging their professional career development.
- Strong strategic thinking ability and demonstrated business acumen.
- Strategic (Forward) thinker - Brings ideas to the table that enhance customer performance; ability to grasp vision and objectives of program and build game plan and execute
- Track record of managing product lines, budgets, staffing levels and achieving financial results.
- Strong decision-making abilities. Good judgment, sound logic.
- Strong collaboration skills, works well with teams across the organization
- Excellent organization, project and task management skills
- Advanced technical/engineering degree; MBA is helpful.

Riverbed offers a rewarding experience of working with the best minds in the industry that are changing the world through cutting edge technology and applications. We are proud of our great culture that continuously fosters innovation, collaboration, and diverse work environments. We remain committed to attracting, developing, and retaining the most diverse group of talent to better serve our customers.

### **What You'll Be Doing...**

As a Director of Visible System Engineering, you will be responsible for owning all engineering activities for building and supporting our cloud native digital experience engineering teams including web, apps, APIs, third party software integration as well as the customer care technology stack.

You will lead a staff of talented Sr. Software and Application Development Managers, Subject Matter Experts (SMEs), and Technical Project Managers spanning multiple US locations as well as aligning with India teams. This role will also work closely with our external vendor SOW and T&M partners to build, run and operate existing applications, support platform launches and deliver business-critical projects.

The position requires a senior engineer with experience in End to End architecting in a cloud topology, developing and supporting distributed & scalable systems for high-volume transaction applications and services with hands-on coding experience in modern object-oriented language.

Competency in at least one programming language, such as Java, Python, or C.

The ideal candidate exhibits leadership qualities including excellent judgment and high technical standards. In addition, the candidate must have the ability to dive deep and remain in touch with

business details, drive innovation in the teams, invoke passion in others, think big, and deliver results.

As the Director of our Engineering Management team, you will bring your experience and thought leadership to help drive vision, mission, and strategy around solutions. Together with your team, you will develop new cloud solution initiatives and the materials to support them with a broad cross-functional group of stakeholders, including Product, Engineering, Legal, Operations, external Partners, Marketing, and finance teams, to help define technology solutions and Visible strategic platform strategy. A key responsibility is building a highly motivated and talented Engineering team, coaching and mentoring them to deliver high quality service delivery. This optimal candidate must have excellent communication, project management, and strategic thinking skills along with strong technical experience to give regular reports directly to the Visible executive leadership team.

### **Responsibilities**

- Own and lead full life cycle delivery of cross functional projects spanning teams across Visible.
- Drive development and operational excellence of our flagship solutions.
- Flawless delivery of new products and platforms **to grow revenue and membership.**
- Coach and mentor our high-performing engineers to help them grow their skills, enhance their knowledge of our systems and their ability to get things done.
- Partner with cross-functional teams to imagine, design, develop, test, and launch software that wows our community and inspires our peers.
- Constantly strive to raise the bar on delivery performance and quality in a fast agile environment.
- Manage and schedule multiple projects with tight timelines, balance workload of developers and other professionals across a large team.
- Ensure budget and audit reporting requirements are met and information provided is meaningful, timely and accurate. Monitor defined Key Performance Indicators (KPIs) and implement action plans when metrics fall below agreed KPIs, especially channel mix, order fallouts as well as financial metrics and customer commitments.
- Manage, develop leadership talent and recruit a diverse engineering and delivery organization

### **What We're Looking For...**

- Bachelor's degree or equivalent work experience
- 10+ years of work experience in application development and support or related discipline
- Experience leading full stack development web teams.
- Strong leadership experience in driving and influencing the architecture and technology choices that enable a world-class user experience
- 10+ years experience of software development and deployment of distributed multi-tier applications.
- 7+ years experience managing agile software projects across multiple and geographically distributed teams.

*Even better if you have;*

- A Master's degree in a technical field

- Demonstrated expertise in a variety of web and SOA distributed technologies and platforms such as Java/J2EE.
- Demonstrated experience implementing solutions leveraging GCP capabilities.
- Past experience leveraging machine learning models to deliver insights and enrich customer experiences is highly preferred.
- Action-oriented strategic thinker.
- Be able to thrive in an ambiguous environment - where change is the only constant.
- Detailed oriented to ensure that project success is paramount.
- Strong verbal and communication skills.
- Strong analytical skills and an out of the box thinker.
- Self-starter with the ability to multi-task and work in a very fast paced environment.
- Experienced in leading a highly collaborative environment with a culture of candor and respect
- Track record of defining and delivering cross functional solutions that are innovative and extensible.
- Be able to disagree, yet align, when dealing with different stakeholders.
- Results oriented and with a strong customer focus.
- Highly autonomous. Delivers with little guidance.
- Strong mentor of peers and subordinates.
- Skilled at interacting and negotiating with vendors, and other partners on Application development and technical specifications
- Strong technical knowledge of Wireless Commerce Systems, product, services as well as the associated processes
- Proven leadership with the ability to motivate employees with highly diverse skill sets and work experience
- Experience in Design Thinking to ideate on creative solutions for problems.
- Experience in Engineering Transformation (e.g. DevOps, Microservices, Cloud technologies, etc.)

## **Description**

We are looking for a strategic, innovative science leader within Amazon Fulfillment Technology organization to lead an interdisciplinary team charged with developing new, data-driven solutions to model, optimize and automate decisions in our rapidly growing fulfillment network.

Amazon Fulfillment Technologies (AFT) powers the physical engine at the heart of Amazon. AFT builds and operates software, hardware, and the processes that run the global network of fulfillment centers that move billions of units of inventory, employ tens of thousands of people, and ensure that customers get what they want when promised. We do this by building automated solutions to handle things that technology does well, while relying on people to handle things that humans do well.

In this role you will lead a team of Research Scientists to help solve the following problems:

- i) modeling tradeoffs and solving OR models to automate resource planning in warehouses, while optimizing against multiple variables and constraints
- ii) Own the picking optimization within our warehouses. This includes generating pick paths in a traditional warehouse, and also generating pick plans in robotic warehouses.
- iii) Model tradeoffs between warehouse optimization and "outside the building constraints", for

example, transportation needs, and help design systems that will make the right prioritization decisions in real time on billions of shipments a year, worldwide.

iv) Help automated risk assessment of receiving inventory automatically marrying information from sensors with that we got from our selling partners to help with speed & efficiency.

v) Designing and building simulation systems to measure the cost of decisions we took or we could have taken, while also measuring fairness, safety and optimality.

vi) Work with other engineering leaders, Operations stakeholders & other research teams across Operations to establish the vision, roadmap and strategy for the research group.

Successful candidates will have an established background in data-driven research and experience in managing technical expertise in the field of science, engineering, and proven track record of managing and delivering mission critical large scale programs in areas such as: Supply Chain Management, Economics, Optimization, and Operations Research.

### **Basic Qualifications**

- 8+ years of relevant, broad research science experience after PhD degree or equivalent in a highly quantitative field (e.g. Operations Research, Statistics, Applied Mathematics, Computer Science)
- Experience leading development of complex production models used in business operations
- 5+ year of people management experience
- Effective verbal and written communications skills.

### **Preferred Qualifications**

- Ability to work in a fast-paced business environment
- Experience implementing algorithms, tailored to particular business needs and tested on large data sets.
- Strong research track record
- Practical experience developing large-scale decision support tools based on optimization technology for planning and execution support (e.g., scheduling)
- Familiarity with forecasting and time series analysis

### **Description**

Are you passionate about self-driving vehicles? Are you passionate about developing impactful Machine Learning (ML), novel and rigorous engineering strategy? Are you passionate about engaging the Autonomous Vehicles (AV) community (AI researchers, developers building AV products, roboticists making robots that work, data scientists, and innovative entrepreneurs in hot startups and large enterprises)?

Autonomous Vehicles (AV) have the potential to transform our society and community for generations. Impacting transportation, mobility, telecommunication, energy, healthcare and insurance, rescue and emergency response, hospitality, assistance to the elderly and disabled. Achieving this requires implementing one of the most complex computing systems to-date that we intend to entrust with transporting humans. AWS Autonomous Compute is taking a fresh approach

with providing an end-to-end, scalable cloud environment that simplifies the development of self-driving technology. Including a global cloud footprint, infinitely scalable cloud storage, advanced networking and security, state-of-the-art AI platforms and services, rigorous engineering, and a team with the longest experience building cloud technologies.

Amazon Web Services (AWS) is looking for an experienced and motivated technical leader for the role of Head of Autonomous Vehicles Solutions for our Autonomous Vehicles (AV) computing business. You will help develop the industry's best cloud based solutions to grow the AV computing business. Working closely with our engineering teams, you will help enable new capabilities for our customers to develop and deploy AV workloads on AWS. You will facilitate the enablement of market development, sales and solution architects with specific customer centric value proposition and demos about end-to-end Autonomous Vehicles technologies – data ingestion, ML and computer vision, localization and mapping, simulation and testing, deployment – on AWS cloud.

The ideal candidate will possess a business and technical background that enables them to drive an engagement and interact at the highest levels of startups and large Enterprises. The candidate will have the technical depth and business experience to easily articulate the potential and challenges of AV (different platforms and frameworks in the AWS cloud) to engineering teams and C-Level executives. This requires deep familiarity with classical state-of-the-art approaches to AV, as well as target AV use cases using High Performance Computing (HPC), Machine Learning (ML), and robotics in the cloud.

You will need to be a technically deep thought leader in your own right as well as effective in shaping the customer solutions focused skills of your team. You must enjoy learning and introducing new technologies in order to help colleagues and customers embrace and adopt new solutions. Furthermore, thought leadership in terms of looking beyond the technology and considering the value technology creates for our customers, and helping to change how technology is viewed are important aspects of the role. You will need to be adept at interacting, communicating and partnering with other teams within AWS such as services teams, field solutions architecture, sales, marketing, business development, and professional services, as well as representing your team to executive management. You should be passionate about helping companies/partners understand best practices for operating on AWS.

You will be responsible for helping customers understand the value proposition of AV on AWS, creating the most compelling content and demos to help customers understand the use cases and value propositions, and building the right programs to increase awareness and adoption. You will also be a AV trusted advisor to customers and internal teams; helping develop the AV knowledge and skills of Solutions Architects, as well as the technical field community. Additionally, you will work with the AWS Machine Learning and AWS EC2 engineering and product management teams to shape products vision and prioritize features for AV. You will get to work on a leading technology field and growing business; and have a material impact, every day. You will be able to facilitate relationships with senior personnel, as well as easily interact and give guidance to technical experts, researchers, software developers, IT pros, and system architects. This requires a demonstrated ability to think strategically about business, product, research, and technical challenges.

This is an opportunity to be at the forefront of technological transformations, as a key leader.

## **Roles & Responsibilities**

- Architect advanced solutions leveraging AWS EC2, AWS S3, AWS SPOT, and Amazon ML related services, working closely with our customers to deeply understand their business needs and to design technical solutions that take advantage of the AWS Cloud platform.
- Demonstrate the viability of each solution through mechanisms like proof-of-concepts and/or prototypes.
- Develop best practices documentation, and develop a strong partner go-to-market strategy.
- Craft and develop compelling audience-specific messages and tools (product videos, customer success stories, advanced demos, white papers, presentations, how to guides etc.)
- Evangelize AWS AV architectures and technologies through forums such as AWS Blogs, white papers, reference architectures and public-speaking events such as AWS summit, and user-group events.
- Collaborate with AWS field sales, professional services, training and support teams to help partners and customers learn and effectively use AWS for AV.
- Serve as a key member of the business development and account management teams helping to ensure customer and partner success in AV, on the AWS platform.
- Act as a technical liaison between customers, service engineering teams and support; providing updates on customer progress and ensuring execution by partners.
- Gain recognition and credibility as a regular attendee, panelist and keynote speaker for multiple internal and external events.
- Deliver compelling presentations, product demos, roadmap reviews, sample solutions and discussions to drive adoption of AV on AWS.
- Identify leads for potential engagement needing pre-sales support.
- Collaborate with internal teams to define the product road map, market positioning and developer program initiatives.
- Assess training requirements and coordinating with various training teams on scheduling and delivery of training to both internal and external audiences.

## **Basic Qualifications**

- Bachelor's degree in technical discipline
- 10+ years of technical design/implementation/consulting experience
- 5+ years of leadership experience in a technical, customer-facing role in the AV industry
- 3+ years of product development, or managing technology organizations related to AV
- 3+ years of experience managing and deploying AI/ML products

## **Preferred Qualifications**

- Master's Degree or PhD in Engineering or related STEM field
- 10+ years of pre-sales engineering, technical business development, enterprise sales, strategic partnerships, or program/product management experience
- Thorough understanding of self-driving technology stacks
- Deep hands-on understanding of deep learning and other ML algorithms and infrastructure
- Experience writing technical articles, speaking at technology conferences, or contributing to open source

- Experience with cloud computing and or related fields.
- Exceptional people-management skills; able to inspire and foster the right behaviors in others through leading by example (Player/Coach)
- Experience with one or more general purpose programming languages, including but not limited to: C/C++, C#, Objective C, Python, JavaScript, Go, Scala
- Experience with one or more ML frameworks (MxNet, PyTorch, Tensorflow, etc.)
- Solid enterprise communication skills, and business and financial acumen
- Strong analytical skills, and demonstrated ability to turn detailed data analysis into useful strategic insight in order to drive customer adoption and make appropriate recommendations to the business
- Experience with, and detailed knowledge of managed services market and insights related to cloud computing
- Strong verbal and written communications skills are a must, as well as leadership skills
- Demonstrated ability to work effectively across internal and external organizations is key

## **The Opportunity**

In this highly visible, strategic, technical role reporting directly to the Chief Analytics Officer, you will be responsible for creating strong working relationships & influence across executive leadership, product management, engineering and other functional groups to execute Analytic Innovation strategy while also remaining hands-on with customer deliverables. The role will also support direct sales in the communication and demonstration of the analytic differentiation of FICO's analytic capabilities and showcase its unique analytic innovations. This position will require both domestic and international travel.

## **What you'll contribute**

- Own impactful innovation initiatives focused on key analytic deliverables. Drive analytic innovation and research working effectively with cross functional teams (i.e. Pre-sales, Product Management, Development) and drive analytic thought leadership in research initiatives.
- Work across internal Analytics leadership to rapidly develop new analytic innovations and be able to present them to clients in a compelling way, demonstrating value and differentiation, and drive the implementation within production software.
- In partnership with the Chief Analytics Officer, bring external communication to our customers offering more visibility to the analytic innovations and process behind innovation, including speaking engagements, collateral development, presentations, and social medial messaging.
- Partner with VP Analytic Model Strategy to leverage portfolio and product strategy helping to create detailed analytics plans tailored for balancing internal productivity and customer facing requirements and be responsible for continual readouts on analytic innovation plan progress.
- Be a trusted advisor on use of analytic technologies and listen to client's current business challenges to drive FICO's innovation funnel.
- Participate in developing intellectual property and creating patents contributing to the innovation of FICO analytic solutions. Ensure that this new intellectual property solves current

and future customer needs, and that it is deployable in product software and in successful analytics and software proof of concept systems.

- Work directly with client's executive leadership to envision solutions and support analytic teams delivery to production.
- Meet development and deployment timelines for customer analytic deliverables

## **What we're seeking**

- PhD degree in a relevant technical field such as statistics, physics, engineering, mathematics, computer science with a substantial proven track record of analytic development including a list of patents and publications.
- Technical hands-on experience will include employing machine learning, mathematical/statistical modeling, neural networks, pattern recognition, or data mining on real world problems and prefer knowledge of Java for analytic innovations integration into production software.
- Prior experience (partnering with internal cross functional teams like product management, model strategy, sales) driving high quality/on-time analytic development programs and driving analytic innovation into business process/offerings.
- Proven experience working directly with clients and various levels of client organizations.
- Excellent communication skills both written and verbal with examples of published work and conference presentations.
- Must be willing to travel up to 50% of the time in the US and globally to attend customer meetings and participate in speaking engagements and presentation

We are looking for a proven, seasoned engineering leader to set the vision for our future software products, drive and execute the software roadmap, motivate the team, continue cultivating innovations, and support our division's mission in providing NGS solutions for clinical diagnostic use. You will lead the software R&D team to identify unmet needs and create software solutions for instrument control, data acquisition, data analysis, and reporting; you will lead the creation and release of software products for on-instrument, on-premise, and in-cloud deployment. Your team will be responsible for managing the life cycle of new and existing software products.

## **Responsibilities**

- Collaborate with customers, internal stakeholders, other functions and leadership to develop and implement a cohesive and impactful software product strategy.
- Lead a highly talented, globally distributed team, effectively execute a broad portfolio of software products.
- Drive the technical direction of platform and application software.
- Lead by example, strengthening our culture of innovation, diversity and inclusion, customer focus, operational excellence, and continued process improvement.
- Drive the software engineering culture of design excellence and agile development practice.
- Continue to recruit and develop software engineering talents and leadership, driving software R&D effort forward on ever stronger footing.
- Manage all aspects of financial performance of the software R&D group

## **Experience & Qualifications**

- Minimum Bachelor's Degree, preferably in Computer Science, Life Sciences, Bioinformatics, or related fields.
- Minimum of 8 years of supervisory experience, preferably of increasing responsibilities with a variety of software products in NGS, Genomics, or related fields.
- Track record of delivering software solutions for complex instrumentation platforms and analysis applications, involving software, hardware, chemistry, and biology.
- Experience in taking software products through FDA and/or global regulatory approvals.
- Excellent written and verbal communication skills required.
- Experience or at least working knowledge with Java web technology, C++, Python, Linux environment.
- Experience with cloud-based software.
- Experience or at least working knowledge with bioinformatics tools and common Genomics software applications.
- Artificial Intelligence and Machine Learning experience is a plus.
- Comfortable working in a dynamic, fast-paced environment.

Relocation assistance will be considered.

## **Description**

Do you buy groceries? Are you passionate about working on disruptive ideas? Are you obsessed with finding and building the most innovative and customer-friendly user experiences? This is a unique opportunity that combines the ability to build exciting, new grocery shopping user experiences for Amazon's customers, with the opportunity to work with Big Data, Machine Learning, and other advanced techniques to enable the best personalized experience for hundreds of millions of Amazon's customers.

We are seeking a Senior Applied Science Manager who has a solid background in applied Machine Learning and AI, deep passion for building data-driven products; ability to communicate data insights and scientific vision, and has a proven track record of leading both applied scientists and software engineers to execute complex projects and deliver business impacts.

## **In This Role, You Will**

- Lead a group of both applied scientists and software engineers to deliver machine-learning and AI solutions to production.
- Advance team's engineering craftsmanship and drive continued scientific innovation as a thought leader and practitioner.
- Work closely with product and technology leaders across Amazon.
- Develop science and engineering roadmap, run Sprint/quarter and annual planning, and foster cross-team collaboration to execute complex projects.
- Perform hands-on data analysis, build machine-learning models, run regular A/B tests, and communicate the impact to senior management.
- Hire and develop top talents, provide technical and career development guidance to both scientists and engineers in the organization.

Amazon is an Equal Opportunity-Affirmative Action Employer – Minority / Female / Disability / Veteran / Gender Identity / Sexual Orientation / Age

### **Basic Qualifications**

- B.S. in Computer Science, Information Retrieval, Machine Learning, Natural Language Processing, Statistics, Mathematics, or related discipline
- At least 5 years of experience in managing a team of applied scientists and/or engineers as a tech lead or manager
- At least 5 years experience in building large-scale machine learning and AI solutions at Internet scale
- At least 5 years of experience with, at least, one model programming language such as Java, Python, Scala, C++
- Strong ability to earn the trust of peers and deliver results within a cross-functional team including product managers, program managers and software developers.
- Excellent oral and written communication skills, with the ability to communicate complex technical concepts and solutions to all levels of the organization

### **Preferred Qualifications**

- M.S. or Ph.D. in Computer Science, Information Retrieval, Machine Learning, Natural Language Processing, Statistics, Mathematics, or related discipline
- Experience in building large-scale machine-learning models and infra for online recommendation, ads ranking, personalization, or search, etc.
- Experience with Big Data technologies such as AWS, Hadoop, Spark, Pig, Hive, Lucene/SOLR or Storm/Samza
- Published research work in academic conferences or industry circles
- Experience in recommender systems and neural networks

### **Job Description**

The **IT Director - Data & Analytics** will drive rapid transformation at Milwaukee Tool through data engineering, data analytics, and data science initiatives across the enterprise. A successful Director will create a data strategy that demonstrates the art of the possible and elevates analytical capabilities across the company to enable digital capabilities and future competitiveness. The data and analytics team will be expected to develop and execute a multi-phased roadmap and broad portfolio of initiatives - not only will the Director lead these efforts, but they will be responsible for selecting, implementing, or developing new technologies to enable this vision. They will be expected to serve as the go-to expert on data and analytics capabilities across the business and will work closely with business leaders to identify opportunities and implement solutions.

### **Duties And Responsibilities**

- Establish Data & Analytics vision, strategy, and roadmap for the enterprise. Rapidly expand traditional data warehousing and operational reporting capabilities and develop strategy for

capturing and capitalizing on big data, driving predictive analytics, establishing data science, and stewarding IoT capabilities as examples.

- Help establish data governance, data quality, and master data management practices.
- Create a common data framework and enterprise data architecture, democratizing data across the enterprise.
- Build a service model that meets the non-homogeneous needs of the business -- full-service to self-service across the entire data landscape.
- Provide daily guidance to IT Data & Analytics team as it applies to the services provided, including daily coaching and mentoring to IT staff.
- Serve as a member of IT Leadership team reporting to the CIO setting overall direction, establishing standard processes across IT organization, and balancing budgets, resources, and priorities to focus on key initiatives.
- Build, lead and grow a team that can quickly identify and develop solutions to business problems, learn new technologies, and serve as data and analytics experts for the business.
- Identify and scope projects and ensure the successful execution of a portfolio of initiatives leveraging both agile and waterfall project methodologies.
- Partner and collaborate with all functions of the company to ensure data needs are addressed and the required data is modeled and available to analysts and end-users.
- Negotiate contracts and service agreements with vendors and suppliers for appropriate IT technologies and services.
- Facilitate effective communication with individuals at all levels to deliver business value and adoption.
- Manage overall resources and develop and attract best-in-class IT talent to support organization's rapid growth and increasing investment in technology. Help make Milwaukee Tool an IT employer of choice.

### **Education And Experience Requirements**

- Bachelor's degree with IT concentration required. MBA, or other Master's degree in related field preferred.
- Minimum 10 years IT experience required, with a minimum of 5 years of data and analytics experience and 5 years of IT leadership.
- Deep expertise working in analytics with large volumes of data and experience with "big data", predictive analytics, visualizations, IoT, artificial intelligence (AI), and machine learning (ML).
- Experience with both on premise and cloud-based tools and solutions. Experience with Azure related technologies (such as Data Bricks, Data Factory, Analysis Services, etc.) as well as SQL, Power BI, and ETL tools.
- Experience with data modeling and data warehouse/data lake design for the enterprise.
- Experience as change agent and data expert elevating the use of data within a business and developing a state of the art data practice.
- Experience working with large, global manufacturing business applying data to solve business problems in supply and demand planning, inventory, distribution, quality, service, sales, marketing, production, and finance.
- Proven experience in formulating global IT strategies and developing multi-year roadmaps, especially for data and analytics.

- Strong financial skills and excellent communication skills.
- Experience with both Agile and Waterfall project management methodologies.

Reporting to the Sr. Director, Analytics & Data, the Director of Data Science will direct the selection, planning and completion of all data science opportunities that involve high impact, customer-affecting tactics and strategies working in partnership with various functional and business partners.

The decisions made by this position have a profound impact on the organization through the development of analytical work that influences overall company direct marketing, catalog, eCommerce, branch, and sales force strategies and enhances the success of tactical initiatives. The role is critical to company's continued transformation to an increasingly digital and data-driven organization.

### **Principal Duties & Responsibilities**

- Work with internal senior leaders and business partners to identify key areas for Data Science to impact customer experience and demand generation across domains that include sales force, marketing and website
- Create and align on a roadmap to execute against the priorities
- Research and recommend data science solutions for improved effectiveness and delivery of demand generation initiatives
- Direct the design, development, and delivery of data science initiatives across the organization
- Partner with internal senior leaders to ensure these business initiatives are executed with optimal chance of success and adoption
- Direct, coach, and mentor a growing talented team of data scientists, while creating an inclusive environment
- Provide thought leadership around the data and computing environment necessary for optimal success
- Appropriately communicate and represent the work performed by the team to senior leadership within the company

### **Preferred Education & Experience**

- Bachelor's degree in statistics, economics, mathematics, or related field. Master's in statistics, economics, data science, or analytics preferred
- 10+ years equivalent work experience required.
- Experience directing a Data Science program in a company, that includes demonstrable impact via development and implementation of Data Science based products and product roadmaps
- Experience with linear regression, logistic regression, cluster analysis, time series analysis, and machine learning/ AI techniques
- Experience with SAS, R, Python, and SQL
- Knowledge of artificial intelligence systems, including image recognition
- Ability to assume high exposure responsibilities and interact with senior leadership
- Strong business acumen and a strategic mindset
- Excellent and proven communication skills

- Ability to establish and sustain strong business relationships and effectively prioritize business needs

### **The Job**

The Sr. Director, Machine Learning and Artificial Intelligence will grow and lead a team of talented Machine Learning (ML) and Artificial Intelligence (AI) researchers and engineers to develop innovative machine learning algorithms, scalable ML system, and AI applications for HBO Max. This role will be focused on developing and deploying personalization and recommender system, search, experimentation, audience, and content AI solutions to drive user experience and growth.

The Sr. Director will partner closely with product, engineering, content, marketing, and research stakeholders across WarnerMedia to identify ML opportunities, accelerate AI innovation, and to ensure delivery of impactful solutions for the business.

### **The Daily**

- Develop innovative data science solutions that utilize machine learning and deep learning algorithms, statistical and quantitative modeling approaches to support product, engineering, content, and marketing initiatives.
- Build and lead a world-class team of ML and AI scientists and engineers.
- Be a hands-on leader to mentor the team in latest machine learning and deep learning approaches, and to introduce new technologies and processes.
- Work with ML engineers to design solution architecture and develop scalable machine learning system to accelerate learning cycle.
- Identify data science opportunities that deliver business value.
- Develop ML/AI roadmap, and educate both internal and external stakeholders at all levels to drive implementation and measurement.
- Provide thought leadership to enable ML/AI applications.
- Manage projects priorities and ensure timely delivery.
- Develop and evangelize best practices for scoping, building, validating, deploying, and monitoring ML/AI products.
- Prepare and present ML modeling results and analytical insights that help drive the business to senior leadership.

### **The Essentials**

- PhD in Computer Science, Mathematics, Physics, Engineering, Statistics, Operations Research, or other equivalent quantitative fields
- 8 + years of work experience in Machine Learning, AI and Data Science with a proven track record to drive innovation and business impacts
- 3 + years of managing a team of data scientists, ML and AI researchers and engineers

- Strong machine learning, deep learning, and statistical modeling expertise, such as causal inference modeling, ensembles, neural networks, reinforcement learning, NLP, and computer vision
- Advanced knowledge of SQL and experience with big data platform (AWS, Snowflake, Spark, Google Cloud etc.)
- Proficiency in machine learning and deep learning languages and platforms (Python, R, TensorFlow, Keras, PyTorch, MXNet etc.)
- Experience in deploying machine learning algorithms and advanced modeling solutions
- Experience in developing advanced analytics and ML infrastructure and system
- Self-starter and self-motivated with the proven ability to deliver results in a fast-paced, high-energy environment
- Strong communication skills and the ability to explain complex analysis and algorithms to non-technical audience
- Works effectively cross functional teams to build trusted partnership
- Working experience in digital media and entertainment industry preferred
- Experience with Agile methodologies preferred

The Amazon Search team creates powerful, customer-focused search solutions and technologies. Whenever a customer visits an Amazon site worldwide and types in a query or browses through product categories, Amazon Search services go to work. We design, develop, and deploy high performance, fault-tolerant distributed search systems used by millions of Amazon customers every day.

We are looking for a tenured researcher to lead an inter-disciplinary team with scientists and engineers to build large scale machine learning (deep learning) models to improve search for our customers. These models will be trained on a variety of textual and visual features, and will improve both recall and precision of our search results. These models will scale to multiple languages and countries, and will provide inference within a few milliseconds latency. This is a rare and exciting opportunity to be a trailblazer at the intersection of cutting edge science and engineering to impact millions of customers. As a hands-on leader of this team, you will be responsible for defining key research questions, identifying relevant data, adopt or propose innovative machine learning solutions, conduct rigorous experiments, publish results and work with the engineering team to deploy these solutions. As a strategic leader, you will identify investment opportunities, develop long term strategies, and propose, prioritize and deliver on goals. You will also participate in organizational planning, hiring, mentorship and leadership development. You will be technically fearless and build scalable science and engineering solutions.

Joining this team, you'll experience the benefits of working in a dynamic, entrepreneurial environment, while leveraging the resources of Amazon.com (AMZN), Earth's most customer-centric company one of the world's leading internet companies. We provide a highly customer-centric, team-oriented environment in our offices located in Palo Alto, California.

### **Basic Qualifications**

- PhD in Mathematics, Statistics, Machine Learning, or a related quantitative field

- 10+ years industry experience building successful production software systems
- 7+ years of applied research experience
- Experience with machine learning technologies, Deep Learning, Natural Language Processing (NLP), information retrieval and/or related applications
- Proven ability to implement, operate, and deliver results via innovation at large scale
- Experience in modern programming languages (Python, Java, C++, C)
- Experience communicating with executives and non-technical leaders
- Strong Computer Science fundamentals in data structures, algorithm design, statistics and system design

### **Preferred Qualifications**

- Significant peer reviewed scientific contributions in Natural Language Processing, Speech Recognition, Computer Vision or relevant field.
- Extensive experience applying theoretical models in an applied environment
- Expertise on a broad set of ML approaches and techniques, ranging from Artificial Neural Networks to Bayesian Non-Parametrics methods
- Expert in more than one more major programming languages (C++, Java, or similar) and at least one scripting language (Perl, Python, or similar)
- Strong fundamentals in problem solving, algorithm design and complexity analysis
- Strong personal interest in learning, researching, and creating new technologies with high commercial impact
- Experience with defining organizational research and development practices in an industry setting
- Proven track in leading, mentoring and growing teams of scientists (teams of five or more scientist)
- 10+ years of industry experience in applying Machine Learning/Deep Learning to Information Retrieval or related fields.

As a developer on a Full Stack Web and API team at Udemy, you'll be responsible for improving and expanding our learner assessments, and how we measure and encourage learner progress. We want to find the best way to measure student learning, to direct students towards appropriate courses and content, and to ensure that students are motivated and excited about the educational paths that they choose.

You'll be performing experiments with the team and professional educators in all these areas in a dynamic, market-based environment with literally millions of students. Developers at Udemy work in close collaboration with product owners, designers, user researchers, and other development teams at Udemy. Our most important goal is improving lives through learning, whether it's through obtaining a career-changing IT certification or getting your puppy to come when called.

### **Here's What You'll Be Doing**

- Working on full-stack development in Python, Django, React, and MySQL.
- Developing, testing, documenting, and releasing full-stack, end-to-end features for Udemy's web application that supports over 50 million students worldwide and more than 150,000 courses

- Participating in sprint planning and getting work done in two-week sprints
- Participating in code reviews as well as post-deployment site monitoring
- Contributing to a team culture that values quality, robustness, and scalability while fostering innovation
- Researching and evaluating new technologies that may improve our processes or code bases

### **We're Excited About You Because You Have**

- A passion for education
- 4+ years of professional software development experience
- Knowledge of object-oriented design and computer science fundamentals (data structures, algorithms)
- Experience with web application development using modern framework ORMs (e.g. Django, Rails, Symfony, CodeIgniter, etc.)
- Experience with web application technologies including HTTP, HTML, CSS, and JavaScript
- Experience with Relational Databases (e.g. MySQL, PostgreSQL)
- Experience with Python
- Knowledge of modern JS libraries/frameworks (e.g. React, Angular, JQuery, etc.)
- Knowledge of testing methods, including back-end and front-end unit and integration tests.

### **NICE TO HAVE**

- Experience working on enterprise-level websites at a global scale
- Experience with Java, Kotlin, or any modern object-oriented language
- Experience in edtech
- Experience with AWS, Docker, Kubernetes, or Mesos
- Experience with Linux/Unix
- Passion for board games or trivia

### **About Udemy**

We believe anyone can build the life they imagine through online learning. Today, more than 50 million students around the world are advancing their careers and passions by exploring and mastering new skills on Udemy, and expert instructors are able to share their knowledge with the world. Through our global marketplace and our solutions for businesses and governments, we connect people everywhere with the skills they need for success in work and life. We're a close-knit bunch that enjoys problem-solving and collaboration, and we share a serious belief in the power of learning and teaching to change lives. Udemy's culture encourages innovation, creativity, passion, and teamwork. We also celebrate our milestones and support each other every day.

Founded in 2010, Udemy is privately owned and headquartered in San Francisco's SOMA neighborhood with offices in Denver (Colorado), Dublin (Ireland), Ankara (Turkey), Gurugram (India), and São Paulo (Brazil).

We are looking for a Data Scientist to join Pearson's AI Products and Solutions team. Our mission is to enable the development of AI-first, outcome-driven products to improve learning experiences. The position provides the opportunity to engage in cutting-edge research on a cross-functional team and contribute to developing products that have an impact on millions of learners around the globe.

Our primary focus is currently Aida™ Calculus ( <https://www.pearson.com/us/higher-education/products-services-teaching/learning-engagement-tools/aida.html> ).

### What You'll Do

- Be responsible for defining, developing and leading a small team (2-3 direct reports) of highly skilled data scientists in collaboratively tackling an ambitious R&D agenda.
- Provide technical and scientific leadership when designing a plan of execution and addressing unforeseen challenges and problems.
- Lead by example and excel as a senior scientific contributor through active hands-on participation.
- Collaborate and communicate effectively with both technical and non-technical stakeholders and partners as well as senior management and leadership.
- Assist in the creation and execution of an R&D strategy focused on developing AI capabilities that enable pioneering educational products. Help define project scope, priorities, and appropriate distribution of resources.
- Accomplish results by communicating honestly; setting expectations, monitoring, and appraising job results; coaching, counseling, and disciplining employees; developing, coordinating, and enforcing systems and policies.

### **Qualifications**

#### Who You Are

- You have an advanced degree in a relevant field such as computer science, statistics, and data science.
- You have 5 years relevant experience.
- Ideally, you have prior experience leading a team.
- You have strong technical and scientific prowess and experience showcasing strong coding skills using Python. Preferred experience includes git version control in shared team repositories, cloud technologies (e.g. Amazon AWS, Google Cloud Platform), containers (Docker), and web application development (including API, REST, JSON).
- You have a passion for and demonstration of conducting research while maintaining an end-product vision.
- You are skilled at Agile project planning and oversight.
- You have a knack for creative problem solving, willingness to learn new technologies and skills, and ability to mentor peers.

### **About Pearson**

Pearson has one defining goal: to help people progress in their lives through learning. We champion innovation and we invest in models for education that deliver on our promise for effective, accessible, and personal learning from early literacy, college and career readiness to professional

education, through data informed instruction and inventive applications for mobile and digital learning.

### **The Who, What, Why And Where**

**The Twilio AI/ML business unit is looking for a Senior Product Manager for our search and speech recognition contact center products. Reporting directly to Twilio AI's Director of Product, you will be responsible for understanding our contact center customers' needs and working with the ML engineering team to define and build the products. Who? Twilio is looking for a product leader who lives the Twilio Magic and has a demonstrated track record of Product Management. They also have:**

- Ability to set a strategic vision for Twilio's Speech Recognition and Search Contact Center products aligned with the company's long term goals and deliver on it.
- Experience building and delivering products for developers. Strong empathy with developer customers from various backgrounds and levels of sophistication.
- Experience with NLU, Speech Recognition or and applied ML use cases.
- Experience with contact center, customer engagement or customer service products.
- Ability to understand customer problems, gather requirements from many - often competing - sources, prioritize, and work with engineering and design to deliver.
- Ability to leverage data to understand customer behavior at scale and interpret metrics about your products.

### **What? As a Staff Product Manager, you will**

- Own the product roadmap for Twilio's Speech and Search contact center products, including our APIs, ML models and User Interfaces.
- Run customer discovery sessions with target customers to uncover big business problems that can turn into big product opportunities
- Write product specifications including customer stories, API specifications and collaborate with UX design on wireframes
- Plan and execute product launches working cross-functionally across engineering, marketing, sales, and other product teams.
- Report on both the business and operational performance of your products and customers

### **And live the Twilio Magic values:**

- **WEAR THE CUSTOMER'S SHOES:** Talk with customers and listen to their problems. Talk to cross-BU teams and understand the problems they've heard from customers.
- **WRITE IT DOWN:** Create clear, written documentation of the problems you seek to solve (and associated risks). Collaborate with other Product Manager's to finesse your documentation. Present those plans to your team, business unit leads and leadership.
- **RUTHLESSLY PRIORITIZE & DRAW THE OWL:** Ruthlessly prioritize the incremental path to solving customer problems, delivering concrete customer value at each stage. Work closely with customer design partners to deliver experiences they love and value.
- **BE AN OWNER & BE BOLD:** Think creatively about the unique advantages of Twilio's communication breadth and scale. We have vast amounts of engagement data across our business units - but it is not yet centralized or utilized. This team will help shape the future of Twilio.

- **EMPOWER OTHERS:** Collaborate extensively with other PMs, other functional teams and Business Units within Twilio on their initiatives. Be an advocate and coach for other PMs. Help engineering teams focus on what is needed to create a great product experience. Facilitate quarterly planning, execute sprints in agile/scrum, manage the backlog and sprint prioritization. Collaborate with GTM teams on product launches (marketing, support, sales enablement), and dev experience teams on documentation.

Zymergen is hiring an Associate Director (AD) to lead our Automation Platform team in designing, developing, and deploying automation solutions to our labs. The breadth of responsibilities is great, covering biological, chemical, and material science labs; off-the-shelf solutions and novel integrated systems of our own design. The team is multidisciplinary, including ~14 automation, software, and mechanical engineers. The AD will report to the Head of Automation and work closely with other Automation managers as well as group leads and subject matter experts in other scientific and engineering departments.

Zymergen is building the technology for a scalable, reconfigurable, highly automated industrial microbe factory. Backed by automated chemical synthesis and properties testing, the microbial strains this factory creates will produce new chemicals with properties unlike anything that can be derived from petroleum.

### **About The Job**

This is a challenging position at the intersection of engineering (mechatronic, software, and automation), process (biological and chemical), team leadership, and stakeholder engagement.

As the head of a highly effective multidisciplinary team, you will have the opportunity to shape Zymergen's automation architecture and direct the introduction of new technology within a growing company. Zymergen's Automation Platform team has designed and developed the most advanced system for integration of biological lab automation in the industry. Your efforts will ensure this system reaches its full potential - namely, the automation of >80% of our biological lab work. In our chemistry and material science labs, there is even more basic ground work to be laid as we automate in a space that has seen limited innovation to date. Zymergen is not just a synthetic biology company; it's a products company. Many of the products we make have never been made before, and automation in chemistry and material science will accelerate our success.

You will spend most of your energy guiding the team: Understanding the broader context of your team's work. Turning context into strategy by setting goals for the year and translating those goals into prioritized quarterly objectives. Helping managers and engineers on the team accomplish their tasks by listening, providing advice, and clearing blockers. Giving feedback, both directional and developmental. Communicating with the team so they know everything they need to do their job as well as everything that's coming their way. Communicating with other teams so that they know what we're doing and not doing and when.

Your management will keep the team running smoothly. Among other things, you will: Run team meetings. Have regular one-on-ones with your team members. Give strategic, tactical, and career guidance. Think about team structure and long term group needs. Guide the hiring process for new

engineers or managers. Establish and improve relationships and boundaries with other teams. Keep team members productive and happy. Work closely with managers and tech leads to define project scope and ensure access to necessary resources. Work with your managers to match projects with engineers. Contribute to yearly and quarterly project and CapEx planning for the department. Work with Site Operations to plan new labs and buildings. Negotiate contracts with outside vendors. Think about patent strategy. Keep abreast of new technologies. Participate in due-diligence efforts. Work with Purchasing, Legal, Marketing, HR, and other groups to get things done and allow your team members focus on building the Zymergen automation platform.

## **About You**

*Note that this section describes a nearly ideal candidate. Hopefully it does so in a way that gives insight into what this job entails. Please don't hesitate to apply even if you don't feel like you're a perfect match! Humility itself is a good sign....*

You have several years of management experience, ideally 5+. You have managed medium or even large-sized teams, ideally managing managers. You have managed highly technical teams and projects.

You approach your job with humility. You listen to others and are always ready to have your mind changed. Moreover, you can think of several times in the recent past when your mind *has* been changed. You have a growth mindset, aware that both you and others will always have things to learn and ways to improve. You are both interested in the details and ready to trust that your team members know best. You enjoy working with people and helping them work through difficult situations, whether they be technical or interpersonal. You don't get flustered easily, and you naturally look for ways to make progress despite hurdles or setbacks. You are up to the task of managing a team that is mixed on-site and remote. You are thoughtful about increasing diversity, in all its forms, in our field.

You have familiarity with laboratory automation. You know a Bravo from an Echo; VWorks from Cellario. You're interested in learning about new industries and new instruments. Polymerization and doctor blade in addition to miniprep and NGS; chemical reactors in addition to bioreactors.

You aren't necessarily an expert python programmer or wizard in Solidworks, but you know enough about modern software development and the realities of making a physical product that you can provide meaningful guidance to professional software developers and mechatronics engineers alike. You have thoughts about how to balance waterfall planning with agile development. Ideally, your software knowledge extends beyond desktop software to cover some typical elements of a cloud stack. AWS, relational databases, time series data, and the IIoT are all familiar. You have thoughts on when to spend time on DfX (Design for X) in different circumstances. You know what Solidworks PDM is and what PLC stands for.

As the Director of Content Strategy and Partnerships on the Content team, you and your team will establish the vision and execution for new learning content that prepare students for jobs in growing technical fields like software development, data science, artificial intelligence, cloud computing, business technical skills, and more. You will

cultivate industry content partners aligned with the overall strategy and evaluate proposals along with Content team leadership.

**Responsibilities include, but not limited to:**

- Define and own the overall strategy & vision for Udacity's content portfolio and roadmap
- Combine industry research, global employment & skills trends, and enterprise demand analysis to identify, explore, and constantly validate areas of opportunity for Udacity's learning portfolio
- Develop an analytical framework and data-driven approach for your roadmap recommendations
- Perform extensive competitive analysis and benchmarking, and identify and report on trends in the market
- Define and own the partnership strategy & execution for Udacity's content portfolio which entails sourcing top industry partners and executing with them on a variety of content initiatives
- Lead executive level discussions with partners and prospects to mutually define the winning partnerships.
- Align and motivate cross-functional team to deliver best-in-class learning experience
- Foster a collaborative and positive culture of accountability, integrity, teamwork and open communication across the organization
- Evangelize learning products internally and externally, building support for direction inside the company and community outside the company
- Maintain an external mindset, including staying on top of consumer, competitive, and macroeconomic trends

**What We Value**

- 10+ years' experience in content strategy, product management, business development or strategy consulting
- Excellent understanding of the technology landscape, how it all fits, and industry trends
- Demonstrated experience working with corporate executives and external partners to execute on complex, multi-year partnerships
- Demonstrated ability to effectively prioritize and execute on multiple projects simultaneously in a dynamic environment
- Demonstrated ability to work collaboratively with technical and non-technical team members in all levels of the organization
- Experience making effective fact-based decisions with data, and the ability to obtain data from market and customer research to make those decisions

Amazon Web Services (AWS) is the pioneer and recognized leader in Cloud Computing. Our web services provide a platform for IT infrastructure in-the-cloud that is used by hundreds of thousands of developers and businesses around the world. These customers range from start-ups to leading web companies to Global 2000 companies in financial services, pharmaceuticals, and technology. AWS customers are looking for ways to change their business models and solve complex business challenges with machine learning (ML) and deep learning (DL) technologies in the cloud and AWS is leading the way in providing customers with a powerful machine learning platform. An important part of our deep learning platform are the GPU instances available in Amazon Compute Cloud (EC2) for training deep learning models such as TensorFlow, MXNet, Caffe2, CNTK, Pytorch and more.

AWS is seeking a Business Development Manager (BDM) to support our Accelerated Computing Business. This business is the primary infrastructure for Artificial Intelligence and Machine Learning workflows, along with Graphics intensive workloads. The BDM will be responsible for defining, building and deploying effective and targeted programs to accelerate broad based sales and business development activities for Artificial Intelligence and Machine Learning workloads on AWS. The BDM will facilitate the enablement of business development, sales and solution architecture with specific customer centric value propositions and will directly interface with product management and development teams regarding customer and partner requirements for deep learning, HPC and other workloads. The BDM will work closely with AWS business development, sales, marketing and partner teams to position the AWS GPU platform for customers and partners, and provide guidance on the value proposition and benefit those customers and partners can achieve with our services, platforms, frameworks and infrastructure for deep learning and HPC workloads.

In addition, the BDM will define and drive a process that the organization will follow to accelerate sales and partner-management engagement on Accelerated Computing based customer and partner opportunities. The BDM will synthesize data and information gathered from these engagements into succinct findings, derive strategic insights, and persuasively communicate findings and perspectives to product and sales teams, including senior management.

The BDM will work with business development, sales and solution architect teams to track, prioritize and close customer engagements that would benefit from running on AWS EC2 GPU instances, and collaborate and coordinate cross-functional teams around these engagements where appropriate.

The ideal candidate will possess a business and IT background that enables them to drive an engagement and interact at the highest levels of large Enterprises and Enterprise partners. The candidate will have the technical depth and business experience to easily communicate the benefits of machine learning and deep learning services, platforms and frameworks in the AWS cloud to IT architects, engineering teams, and C-Level executives. The ideal candidate will have a demonstrated ability to think strategically and long-term about the needs of complex global businesses. The ideal candidate will also be deeply familiar with complex legacy IT environments, managed enterprise IT infrastructure services, Enterprise applications, and has done market analysis, deal negotiation and construction, business operations, and has a background that enables them to create scalable programs that apply holistic approaches to selling to Enterprises and Enterprise Partners.

### **Roles & Responsibilities**

- Defines, builds and deploys enterprise focused sales and business development campaigns around the AWS EC2 GPU offering;
- Engages, supports and scales business development and sales teams across AWS to be capable of delivering the AWS GPU and machine learning / deep learning value proposition to enterprise customers and partners;
- Engages and drives scale at engaging enterprise customers and partners about the AWS GPU and ML/DL value proposition;
- Exhibits proactive ability and expertise in setting customer discussions via AWS sales and partner teams;

- Exhibits cloud managed services, GPU or ML/DL expertise and experienced handling and scaling sales campaigns with enterprises and enterprise partners;
- Exhibits expertise and drives field and partner readiness for enterprise customers;
- Engages in senior level customer meetings to discuss customer's business issues and explores how the AWS GPU platform can help address and resolve these issues;
- Serves as an evangelist for the AWS GPU and ML/DL platform within AWS, and externally;
- Develops a standard market intelligence framework and dynamic analytic model to be utilized by the AWS Sales, Business Development and marketing teams;
- Bring the various stakeholders together to help build collective mindshare in augmenting the AWS EC2 GPU platform;
- Establish ways to measure and track metrics related to adoption of the AWS GPU platform, and to make improvements to the approach based on those measurements;
- Prepare and give business reviews to the senior management team regarding progress and metrics.

### **Basic Qualifications**

- The right person will be analytical, and possess 5-10 years enterprise selling outsourcing or managed services, preferably cloud, hosted and managed services in technology industry;
- Solid enterprise negotiation skills, and business and financial acumen;
- Strong analytical skills, and demonstrated ability to turn detailed data analysis into useful strategic insight in order to drive customer adoption and make appropriate recommendations to the business;
- Experience with, and detailed knowledge of managed services market and insights related to cloud computing and IT;
- Strong verbal and written communications skills are a must, as well as leadership skills.
- Demonstrated ability to work effectively across internal and external organizations is key

### **Preferred Qualifications**

- 5+ years of business development, enterprise sales, strategic partnerships, or program/product management experience;
- Experience selling to Fortune 1000 and/or Global 2000 organizations;
- Experience with cloud computing and or related fields (IT, software, etc)
- Experience with GPUs.
- Experience with machine learning and deep learning software platforms.
- MBA or equivalent relevant business experience.

We are looking for a passionate and talented Principal Applied Scientist who will collaborate with other scientists and engineers to leverage machine learning methods and algorithms for the modeling and analysis of data.

You'll design and run experiments, research new algorithms, and find new ways of optimizing customer experience. Besides theoretical analysis and innovation, you will work closely with talented engineers to put your algorithms and models into practice. Your work will directly impact the trust customers place in Amazon.

You are the ideal candidate if you are passionate about delivering experiences that delight customers

and creating solutions that are robust. You thrive in ambiguous environments that require to find solutions to problems that have not been solved before. You leverage your exceptional technical expertise, a sound understanding of the fundamentals of Computer Science, and practical experience to creating reliable, scalable, and high performance products. Your strong communication skills enable you to work effectively with both business and technical partners. You have hands-on experience making the right decisions about technology, models and methodology choices. You strive for simplicity, and demonstrate significant creativity and high judgment backed by statistical proof.

### **Responsibilities Include**

- Design, implement, test, deploy and maintain innovative data and machine learning solutions to further the customer experience.
- Create experiments and prototype implementations of new learning algorithms and prediction techniques
- Collaborate with scientists, engineers, product managers and business stakeholders to design and implement software solutions
- Use machine learning best practices to ensure a high standard of quality for all of the team deliverables

### **Basic Qualifications**

- MS in Computer Science, Machine Learning, Operational Research, Statistics or a related quantitative field
- 5+ years of practical experience applying ML to solve complex problems
- 2+ years hands-on experience programming in R, Java, C#, C++ or other similar programming languages
- Proficiency in algorithm and model development, model validation and model implementation for large-scale applications
- Experience distilling customer requirements into problem definitions, dealing with ambiguity and competing objectives
- Strong communication and data presentation skills

### **Preferred Qualifications**

- PhD in Computer Science (Machine Learning, AI, Statistics, Mathematics, or equivalent)
- 5+ years of relevant work experience
- Extensive experience applying theoretical models in an applied environment
- Strong fundamentals in problem solving, algorithm design and complexity analysis
- Maintain an understanding of industry and technology trends in area of research.
- Contribute to Amazon's Intellectual Property through patents and/or external publications.
- Understand business context to decisions made within and across groups.
- Strong personal interest in learning, researching, and creating new technologies with customer impact
- Superior verbal and written communication and presentation skills, ability to convey rigorous mathematical concepts and considerations to non-experts.
- Proven track record in technically leading and mentoring scientists as well as engineers

Startups are the large enterprises of the future. These companies are founded by ambitious people who have a desire to build something meaningful and to challenge the status quo. To address underserved customers, or to challenge incumbents. HCLS Startups are among the most innovative and fastest moving players in the technology space. They frequently break new ground in areas like machine learning, computational workflows, data analytics, database techniques, and visualization.

The AWS Startup Solutions Architecture team is dedicated to working with these early stage startup companies as they build their businesses. We're here to make sure that they can deploy the best, most scalable, and most secure architectures possible – and that they spend as little time and money as possible doing so. You'll also play an important role as an advocate with our product teams to make sure we are building the right products for the startups you work with. And for the customers you don't get to work with on a 1:1 basis you'll get the chance to share your knowledge more broadly by working on technical content and presenting at events.

Our team is made of engineers with a very diverse skillset united by their passion for innovation and the excitement of turning wildly disruptive ideas into products that impact the industry at large. We are building Cisco's next-generation technological innovation by combining machine learning and distributed software with networking technologies.

We love designing and implementing large-scale machine learning pipelines. Our technology stack includes Python, Scala, Go as well as a wide range of internal tools built on top of Apache Spark, TensorFlow, PostgreSQL and the Hadoop ecosystem.

### **Who You Are**

An agile, pragmatic, and hardworking engineer with hands-on experience in providing simple and intuitive visualization of complex and intricate datasets for web and mobile applications. You love technology, innovation, and building products at scale.

You hold a Ph.D. or M.S. in computer science, Machine Learning, Statistics, or other data-science related field. You can demonstrate a strong track record in the following areas

- Strong background in **statistics and machine learning** is required, preferably with 5 to 10 years of **industrial experience**.
- Ability to explore large datasets and find key descriptive and inferential properties in large and diverse datasets. **Identify patterns and interactions** in the data, and to clearly **articulate impact** of such data properties on proposed usecases.
- Strong **programming skills** in Python, with an ability to manipulate large and complex datasets using distributed computing technologies (e.g., Apache Spark).
- Expertise in **time-series forecasting** is appreciated.
- Excellent **quantitative, analytical, and communication skills**; past experience working with other mathematicians, scientists, or engineers is required.
- **Software development** methodologies and tools (unit and system testing, code reviews, Git).
- Excellent **English** spoken and written skills (C1 level) is required.

## **We Are Cisco**

#WeAreCisco, where each person is unique, but we bring our talents to work as a team and make a difference. Here's how we do it.

We embrace digital, and help our customers implement change in their digital businesses. Some may think we're "old" (30 years strong!) and only about hardware, but we're also a software company. And a security company. An AI/Machine Learning company. We even invented an intuitive network that adapts, predicts, learns and protects. No other company can do what we do – you can't put us in a box!

But "Digital Transformation" is an empty buzz phrase without a culture that allows for innovation, creativity, and yes, even failure (if you learn from it.)

Day to day, we focus on the give and take. We give our best, we give our egos a break and we give of ourselves (because giving back is built into our DNA.) We take accountability, we take bold steps, and we take difference to heart. Because without diversity of thought and a commitment to equality for all, there is no moving forward.

Our customers rely on us for the best network and customer experience. You are responsible for helping to grow and optimize our multi-modal AI Automation experiences through our Digital Assistant ChatBot / Voice Bot experiences integrated in the IVR, website, and app. As part of the National Customer Service Consumer Group, you will work on identifying the strategic direction, planning, and execution of digitally connected experiences powered by AI/ML driven insights and leading technologies. The work you'll do every day will help us create simple, customer-centric, digitally oriented customer and employee experiences for our Home and Mobile customers.

You oversee the team that monitors the pulse of the Digital Assistant, website, app and Systems of Insight impact to the business. While being responsible for monitoring, reporting, analyzing and communicating the performance, you will work with our Analytics partners (Digital, Customer Service, Customer Experience) providing requirements and partnering to develop all necessary reporting, dashboards / tools to derive insights, and analytics. Your goal is to ensure data/performance reporting is accurate, understand and communicate performance and trends, and complete analyses to determine root cause(s) behind performance. In order to create the best experience for all stakeholders, your expertise in the areas of data processing, formatting, analytics, and NLP will be essential to optimize this important technology. You will also work with our partners within the Omni-channel Customer Experience and Digital Operations organization, Customer Service Operations, and Global Technology Solutions teams. Your team will partner with multiple disciplines including: Content development & UI/UX design, systems development & integration and experience. Based on findings through reporting and analytics trends, your team will provide both ongoing monitoring / review / testing of experiences as well as insights on root causes & optimization recommendations to the appropriate teams via daily operations touch point meetings that review and prioritize the necessary fixes/enhancements.

- Effectively communicate strategies and business objectives to employees and stakeholders and provide regular progress updates to leadership appropriately escalating issues when necessary.

- Leverage your analytical approach & customer experience focus to foster an environment of continuous improvement for all existing experiences (managing performance in order to meet and exceed all KPIs and business financial goals).
- Collaborate project managers, marketing, Digital Operations (app/vzw.com), and platform / AI solution vendors to create & execute personalization solutions.
- Lead cross-functional teams and manage the execution of detailed project plans.
- Work closely with onshore and offshore teams in design, development, testing, and product release as well as leading ongoing quality/experience audits.
- Build executive communications / presentations for SVP, VP's, and Directors and present to and/or support leaders with materials and talk points.
- Build relationships with stakeholder teams, collect and analyze data, identify opportunities based on analytics insights and customer feedback, and partner with internal teams and key stakeholders to develop improvement plans to ensure program(s) success.
- Provide strategic recommendations to senior leaders on key business decisions.

### **What We're Looking For...**

You're highly analytical and you turn complex and large volumes of information into easily understood insights and simple customer experiences. You are the one who can look at a process and see how it can be made more efficient and automated. You're no stranger to a fast-paced environment and can adapt to changing priorities with ease. Skilled at developing and nurturing strong business relationships, you are able to persuade and motivate others to achieve optimal outcomes that are mutually beneficial. You've got exceptional critical thinking skills and like solving problems. You are flexible, dependable and work well on a team.

### **You'll Need To Have**

- Bachelor's degree or four or more years of work experience.
- Six or more years of relevant work experience.
- Knowledge of Digital app/web and Chat/Voicebot user interfaces.
- Experience leading a team of Artificial Intelligence / Machine Learning data science professionals in reporting, analytics and systems delivery experience.
- Experience tagging and processing large amounts of data to mine and drive experience optimization.
- Experience developing and creating the architecture for analytics tools such as Sentiment Analytics, VBA Excel, and Tableau and API often extracting data directly from sources in raw form. The task can often lead to producing executive level deliverables.
- Willingness to work a flexible schedule, including evenings, weekends when needed.
- Willingness to travel up to 25% of the time.

### **Even Better If You Have**

- Master's degree.
- PMP: Project Management Professional and/or Six Sigma.
- PMI-ACP: PMI Agile Certified Practitioner with approaches on SCRUM, XP, LEAN, and Kanba.
- Principles of computer programming languages (Python, JavaScript, Ruby, C++, and VBA).

- Experience creating short and long term strategies.
- Ability to Predict AI and use case performance in a 'run and operate' methodology utilizing automated solutions and predictive modeling and take necessary steps to align forecasted performance versus actual.
- Experience developing executive-level presentations and visualizations (Google & Microsoft applications).
- Customer Service (Digital or Contact Center) experience with knowledge of improved processes and organizational efficiency. Ideally, with a focus on customer experience.
- Experience with any Artificial Intelligence development tool such as AIM2.0, Dialog flow, IBM Watson, RASA Stack, and/or Chatter.
- Experience in Program/Project Management.
- Analytics and reporting experience.
- Knowledge of SQL, VBA/Excel, sentiment and AI analytics tools, Teradata and Tableau with the ability to develop reporting architecture with ability to extract data from data sources such as Hadoop and enterprise data warehouses.

The Amazon Search team creates powerful, customer-focused search solutions and technologies. Whenever a customer visits an Amazon site worldwide and types in a query or browses through product categories, Amazon Search services go to work. We design, develop, and deploy high performance, fault-tolerant distributed search systems used by millions of Amazon customers every day.

We are looking for a tenured researcher to lead an inter-disciplinary team with scientists and engineers to build large scale machine learning (deep learning) models to improve search for our customers. These models will be trained on a variety of textual and visual features, and will improve both recall and precision of our search results. These models will scale to multiple languages and countries, and will provide inference within a few milliseconds latency. This is a rare and exciting opportunity to be a trailblazer at the intersection of cutting edge science and engineering to impact millions of customers. As a hands-on leader of this team, you will be responsible for defining key research questions, identifying relevant data, adopt or propose innovative machine learning solutions, conduct rigorous experiments, publish results and work with the engineering team to deploy these solutions. As a strategic leader, you will identify investment opportunities, develop long term strategies, and propose, prioritize and deliver on goals. You will also participate in organizational planning, hiring, mentorship and leadership development. You will be technically fearless and build scalable science and engineering solutions.

Joining this team, you'll experience the benefits of working in a dynamic, entrepreneurial environment, while leveraging the resources of Amazon.com (AMZN), Earth's most customer-centric company one of the world's leading internet companies. We provide a highly customer-centric, team-oriented environment in our offices located in Palo Alto, California.

### **Basic Qualifications**

- PhD in Mathematics, Statistics, Machine Learning, or a related quantitative field
- 10+ years industry experience building successful production software systems

- 7+ years of applied research experience
- Experience with machine learning technologies, Deep Learning, Natural Language Processing (NLP), information retrieval and/or related applications
- Proven ability to implement, operate, and deliver results via innovation at large scale
- Experience in modern programming languages (Python, Java, C++, C)
- Experience communicating with executives and non-technical leaders
- Strong Computer Science fundamentals in data structures, algorithm design, statistics and system design

### **Preferred Qualifications**

- Significant peer reviewed scientific contributions in Natural Language Processing, Speech Recognition, Computer Vision or relevant field.
- Extensive experience applying theoretical models in an applied environment
- Expertise on a broad set of ML approaches and techniques, ranging from Artificial Neural Networks to Bayesian Non-Parametrics methods
- Expert in more than one more major programming languages (C++, Java, or similar) and at least one scripting language (Perl, Python, or similar)
- Strong fundamentals in problem solving, algorithm design and complexity analysis
- Strong personal interest in learning, researching, and creating new technologies with high commercial impact
- Experience with defining organizational research and development practices in an industry setting
- Proven track in leading, mentoring and growing teams of scientists (teams of five or more scientist)
- 10+ years of industry experience in applying Machine Learning/Deep Learning to Information Retrieval or related fields.

The focus of Discovery at Pinterest is the user. Enabling our users through recommendations and search are core to the product and key use cases. The Discovery organization enables this functionality through a deep understanding of our content and sophisticated machine learning systems for Personalized Search and Recommendations. Machine Learning is a cornerstone strategy for achieving this and is integrated into almost every product.

### **What You'll Do**

- Design and architect machine learning solutions, models and systems that are modular and easily extendible
- Provide technical vision and strategy based on deep insights to chart the course for machine learning at Pinterest.
- Lead product development and solve complex technical challenges. Lead technical efforts while effectively managing stakeholder relationships and balancing priorities. Utilize effective communication skills and a strong ability to collaborate.
- Lead the team. Be a talent magnet and collaborate with our existing leaders while nurturing our junior ML engineers
- Be the face and voice for Pinterest ML strategies both internally and externally

## **Who You Are**

- 12+ years of experience in software engineering, Including at least 8+ years working on machine learning.
- Expert in machine learning with deep understanding in a specific area such as deep learning, active learning, machine perception or natural language processing.
- Experience building real-world systems at internet-scale for solving problems in recommendation systems, search, computer vision or content understanding.
- Strong passion for research and development with experience in solving hard analytical problems

## **What Experience You'll Bring**

- A compelling and inspiring vision to help shape and define our long term ML technical strategy and roadmap for large complex machine learning initiatives
- Strong cross-functional partnerships and proven ability to work across diverse engineering teams supported by product management. Demonstrated ability to translate business needs into engineering roadmaps while considering technology trade-offs
- Thought leadership with publications and patents in machine learning, AI, data science, data analytics, statistics, or related fields
- Strong influencing skills to build and direct the Pinterest's ML community, who is passionate about speaking and presenting at various conferences
- Excellent communication skills with the ability to explain complex technical concepts to both technical and non-technical audiences.
- Builder of innovation engineering culture. Mentor and coach junior team members by promoting the best engineering practices.

News and social media move financial markets. Bloomberg is one of the largest producers of news in the world and we ingest millions of news stories every day from over 70,000 external news feeds and social media such as Twitter. This data keeps our clients informed, and our team's insights help make sense of it for our customers.

Who are we? Bloomberg's Artificial Intelligence (AI) group: researchers and engineers who have a passion for solving complex problems. Our charter: to extract and identify relevant, meaningful, tradable, and actionable information (such as pricings, earnings, recommendations and major events) from data (including news, web, social media, and structured data) in real-time. Since our customers rely on this information to make swift financial decisions, we guarantee precision, accuracy, and latency numbers beyond most academic and industry standards.

We aren't just building customer-facing products, as the infrastructure and algorithms

we develop are themselves used across the company. We also publish papers, attend conferences, organize workshops, and contribute back to the larger data science community whenever we can (see <https://www.techatbloomberg.com/nlp/> and <https://bloomberg.com/company/d4gx/>).

Who are you? A research scientist and engineer who wants to work in the areas of machine learning, natural language processing, information extraction, reinforcement learning, graphical models, recommender systems, and/or knowledge graphs. You want to join a close-knit group and make a big impact.

We'll trust you to:

- Work with others in the AI group and the company on production systems and applications
  - Publish research findings in leading academic venues and represent Bloomberg at industry conferences
  - Write, test and maintain production-quality code Design, experiment, and evaluate algorithms, and models
- You'll need to have:
- 5+ years of experience in AI, NLP, ML, Optimization, or related fields
  - 5+ years of experience programming in C++, Python or Java
  - A master's degree (PhD preferred) with industrial experience
- We'd love to see:
- A quantitative background (Probability, Statistics, Linear Algebra, etc.)
  - Experience with distributed computational frameworks (YARN, Spark, Hadoop, Kubernetes, Docker)
    - 3+ publications in top-tier conferences or journals (such as ACL, AACL, SIGIR, KDD, EMNLP, ICML, NeurIPS or equivalent)

If this sounds like you, apply! In addition, do check out our blog, [TechAtBloomberg.com/NLP](http://TechAtBloomberg.com/NLP), to learn more about our publications and projects in data science.

**WinPlus Education & Technology Inc.** is a leading global education and technology company based in China and is expanding its international market to North America. WinPlus' business ventures include Yingding Education Group, an established international education company with 1000+ study centers and 200,000+ students around the globe. Other WinPlus services and products include overseas study consultancy and YiDianMa, an intelligent learning machine that efficiently prepares Chinese high school students for the National College Entrance Examination in China. WinPlus aspires to promote education equity by providing customized and affordable online courses and services empowered by artificial intelligence and Internet-of-Things technologies. We are recruiting highly motivated and passionate individuals who would

like to gain experience and knowledge in the fast-growing and dynamic EdTech industry.

Company Website: <http://www.yingding.com/>

**Benefits: Harvard Square Location, Harvard & MIT Network, Global Perspective, Career Agency**

WinPlus Education & Technology Inc. is located in the center of Harvard Square, a vibrant location of history, ideas, and learning on Harvard University's main college campus. WinPlus' business ventures in education and technology have attracted a team of talents from Harvard, MIT, and other top universities in the US. Not only will you have the opportunity to collaborate and network with some of the brightest minds in the world, but you will also develop global perspectives and invaluable experiences through working directly with the CEO of WinPlus. The benefits of striving in a tight-knit, fast-growing international company include the opportunities to initiate and oversee the development of projects in your business areas of interests, including, but not limited to, K-12 curriculum development, educational technology, and product development of intelligent learning machines. The immense potential for personal growth and career advancement within the company in the EdTech industry is extraordinary for individuals who are self-driven and welcome challenges.

To compensate for your talents and hard work, a competitive hourly rate is offered based on expertise and experience..

**Job Summary:**

WinPlus is seeking recent top US university graduates for the Data Scientist position at our Boston Global Office located in the heart of Harvard Square. Data scientists clean our data of international education into standardized forms, and construct the international education database. They also translate analytical findings into insights and reports for students and parents. The ideal candidates should be highly responsible and motivated, with advanced data skills.

**Responsibilities**

- Wrangle structured and unstructured data from diverse sources into a standardized form
- Construct international education database using the standardized data and codes
- Summarize the insights derived from the database using various data visualization techniques
- Prototype new ways of visualizing and interacting with our data
- Utilize tools/programming languages including SAS, R, and Python

- Enhance performance by applying advanced mathematical modeling, data analytics, optimization, and machine learning techniques
- Work with internal teams (educational content, counseling service, data operations) to translate analytical findings and model prototypes into insights and reports for students (and parents)

## **Qualifications**

- Graduated from, or currently studying at a top US university
- Degree or experience in data science or a related discipline, e.g. applied statistics, mathematics, natural or social science research, computer science
- Advanced skills in data cleaning and database construction
- Desire to work with and sort out unstructured data
- Practical experience with SAS, ETL, data processing, database programming and data analytics
- Extensive background in data mining and statistical analysis
- Able to understand various data structures and common methods in data transformation
- Excellent pattern recognition and predictive modeling skills
- Comfortable explaining principles and common problems to audience without a technical background
- Ability to communicate professionally with customers and engage in stakeholder discussion

IBM Research Scientists are charting the future of Artificial Intelligence, creating breakthroughs in quantum computing, discovering how blockchain will reshape the enterprise, and much more. Join a team that is dedicated to applying science to some of today's most complex challenges, whether it's discovering a new way for doctors to help patients, teaming with environmentalists to clean up our waterways or enabling retailers to personalize customer service.

### Your Role and Responsibilities

We are seeking a Research Scientist to conduct novel research on the topic of foundations of machine learning and optimization, which includes the specific topics of computational and statistical efficiency of learning algorithms, optimization theory and algorithms, novel parallel and decentralized machine learning optimization techniques over multiple GPUs and/or CPUs, robust training procedures in presence of uncertainty, ambiguity, and unreliability such that learned models can be more adaptive to unseen tasks/data.

We are seeking a leader who is motivated by addressing fundamental AI problems and is committed to interdisciplinary engagement and collaboration with the scholarly community, with business units within IBM, and with external partners and clients. In this unique role, you will interact with the brightest minds in AI and will help bring AI research ideas into scalable, robust systems. We want to bring out the best in you and expect you to do the same to us. Your can-do approach to creative problem solving will be critical to the success of your team and the company.

### **Responsibilities**

- Create new technologies to make ML and AI more effective, robust and scalable.
- Publish results and file patent disclosures as appropriate.

- Develop solutions to tackle real-world societal problems.
- Apply software engineering skills, design skills, and creative thinking to build cutting edge AI systems.
- Be an active member of the research community, by validating and contributing to advances in ML.
- Identify and refine project requirements and solutions to potentially abstract AI challenges.
- Work in high intensity, joint teams of software engineers and research scientists.

#### Required Technical and Professional Expertise

- PhD degree in mathematics, physics, computer science, electrical engineering, statistics, or related technical field
- Deep knowledge in mathematical sciences and AI, including optimization theory and algorithms, parallel and decentralized machine-learning optimization
- Experience with one or more general purpose programming languages and machine learning packages
- Publication record in top-tier journals or conferences

#### **Preferred Technical And Professional Expertise**

- Knowledge of or experience with one or more of the following: automated theorem proving, information theory, graph algorithms, meta-learning, reinforcement learning

#### **About Business Unit**

With more than 3,000 researchers in 12 labs located across six continents, IBM Research brings together hundreds of researchers who possess unparalleled industry expertise to address some of the world's most challenging problems. Join us as we do pioneering work in areas such as cognitive computing, augmented intelligence, quantum computing, and blockchain, to name a few

Most major organizations recognized the need to reskill employees long before the pandemic. In 2019, the [ILO Global Commission on the Future of Work](#) stated, "Today's skills will not match the jobs of tomorrow, and newly acquired skills may quickly become obsolete." The commission strongly recommended that governments, employers, and workers invest in education and training. The ILO has since adopted the [Centenary Declaration for the Future of Work](#), calling upon its member states to establish lifelong learning systems as a joint responsibility of governments, and employers' and workers' organizations.

Today, we believe this need is no longer just a recommendation, but a necessary step to economic recovery. The good news is that some investments in reskilling are already in the works. In the last year, many of the world's largest employers have made pledges to help their workforces build new skills. Amazon announced a [\\$700 million fund to reskill 100,000 workers](#). Orange, the French telecoms giant, announced an investment of [€1.5 billion for a](#)

[similar initiative](#). And PwC, the global professional services firm, tops those with an investment pledge of [\\$3 billion](#).

As initiatives like these become increasingly common, human resources leaders, governments, and educators must work together to design a shared toolkit with clear definitions for the pressing parameters of reskilling. The answers to these three questions are critical if such investments are to reach those who need them most:

## 1) What Does Reskilling Really Mean?

In the last few years, a number of respected organizations have aimed to better understand what reskilling really means in terms of content, format, and financial investment.

**Content.** To begin, let's call out what's unique about reskilling: "It's not just about a medium of learning but rather about learning in service of an outcome, which is usually the successful transition into a new job or the ability to successfully take on new tasks," according to Glenda Quintini, a senior economist at OECD, who recently wrote a [paper](#) on the topic. As such, reskilling refers not only to learning job-specific technical skills but also to acquiring core competencies such as adaptability, communication, collaboration, and creativity.

**Format.** Quintini and her colleagues define three formats in which reskilling can take place:

- *Formal learning* involves going back to college, university, or a training institution.
- *Non-formal learning* involves learning activities organized by a training provider or by an employer not leading to or counting towards a recognized qualification or a certificate.
- *Informal learning* involves learning from colleagues and supervisors or even during leisure activities.

Choosing the format that's right for any one employee, employer, or government depends on the desired outcome and situation. For example, in the current economic crisis, speed, accessibility, and a clear pathway to employment are the most pressing factors for many workers, meaning that short informal learning experiences will likely be the most effective. However, in a recovered economy, one may value deep expertise and the prestige of a degree, in which case a formal learning experience would be best.

**Financial Investment.** Last year, a [paper](#) from the World Economic Forum and Boston Consulting Group found that the cost of reskilling is approximately \$24,800 per person in the United States. When set against a larger context of the cost of hiring, severance, and onboarding, [research by Josh Bersin](#), a leading expert in the human resources field, that was commissioned by General Assembly and Whiteboard Advisors, found "it can cost as much as six times more to hire from the outside than to build from within." While this calculation varies significantly based on the occupation and job function, it presents a strong case for employers and governments to consider reskilling costs from a holistic perspective.

This is an investment that should be jointly borne by employees, employers, and governments, as each entity benefits from the return. However, the current breakdown is

uneven, at a time when the need for such investment is greatest. Employees have demonstrated their willingness and interest; online courses have [reported](#) a massive surge of demand since the pandemic. On the employer side, while some companies are leading the way, Deloitte reports that only 17% of companies have made “meaningful investments” in reskilling initiatives. Particularly as we respond to the long-term effects of the pandemic, more must be done to coordinate and increase these investments.

## 2. How Long Does Reskilling Take?

The well-popularized (and criticized) answer to this question is from psychologist K. Anders Ericsson, who states that it takes [10,000 hours of deliberate practice](#) to achieve expertise. Dan Coyle, author of *The Talent Code*, alternatively, talks about the value of a conscious, long-term time commitment. Those who make one need significantly less practice to learn a new skill than those who don't.

We believe that the answer may vary from person to person. But it is safe to say that those who wish to successfully reskill should be ready to commit significant time to the endeavor. As just one example, we can look at General Assembly's “Immersives,” full-time courses that are designed to help participants gain skills to get jobs in technology, data, and other digital roles. While most participants have a university education, they typically have little to no prior experience in the field they're hoping to enter. These courses typically take 480 hours of live instruction, either online or in a physical classroom, and are often delivered over an intense 12-week period.

General Assembly has found that this is enough time for students to complete and receive feedback on multiple projects that simulate what it's really like to have the job for which they're preparing. It's also a long enough time for them to form strong bonds with their classmates — bonds that serve as a support system and continued source of learning as they get started in their careers. Between 2018 and 2019, [about 90%](#) of graduates from this program secured a job within six months of graduating, suggesting that 480 hours is a good benchmark for building new skills.

As another benchmark, consider the six-month bootcamp run by [Laboratoria](#), a nonprofit located in Latin America. They teach web development, user experience design, and other in-demand technology skills to women. The organization claims to place 80% of their graduates in new roles that generate a threefold increase in their income, on average.

## 3. How Can We Make Reskilling a Reality for All?

Given what we know about reskilling, its various formats, costs, and how long it can take, we believe there are three concrete policies governments and labor organizations can deploy to make it available to all.

**Create and empower tripartite sector skills councils (SSCs).** SSCs are non-profit organizations focused on helping a single industry sector define and close its skills gaps.

These groups typically collaborate with relevant government bodies to provide representatives from employers' and workers' organizations with critical information about newly critical skills. For example, in the technology sector, [Tech Partnership Degrees](#) in the United Kingdom is an SSC that brings employers and universities together to "improve the flow of talent into the digital workforce." Similar groups are in Denmark, the Netherlands, South Africa, Singapore, and Argentina.

**Support small businesses.** Small to medium enterprises (SMEs) often need more financial and technical resources to reskill their employees. Support from the public sector is vital. In Austria, for example, groups of SMEs are able to apply for funding through the [Impulse Qualification Network](#), a national grant for companies funded by the Federal State and managed by the Austrian Public Employment Service. The grant is meant to help SMEs identify skills needs throughout their organizations, as well as design coordinated training plans.

**Make reskilling more accessible to individual employees.** All employees should have access to some kind of career development support, funded through a mix of personal contributions, employer investment, and state sponsorship. Some countries are already leading the way. In France, "personal learning accounts," managed by the Caisse des Dépôts et Consignation and implemented by employment services and social partner organizations at regional level, allow workers, both employed and unemployed, to receive up to [€500 per year with a lifetime ceiling of €5,000 euros for reskilling](#). The program is co-funded by employers, employees, and the state.

Further, in response to the economic crisis, French employers who furlough their employees as part of the Ministry of Labor's "partial activity" program are able to claim back up to €1,500 (and more in some cases) per employee for funds that are used for training purposes while the person is not working. The idea is to use the period of forced downtime as a way to sharpen and improve skills, thereby contributing to a more robust economic recovery.

Singapore is another country that has long led the way in government-funded pathways for reskilling. "Skills Future Credit" (funded by a mixture of government funds), as well as "[Skills Development Levy](#)" and "Skillsfuture Jubilee Fund" (financed through donations from employers and unions) allow all Singaporeans of 25 years of age and older to [receive the equivalent of \\$370 per annum](#) in their personal learning accounts for reskilling. The credit does not expire and individuals can accumulate credits as the government provides periodic top-ups.

In addition, a program offered through Infocomm Media Development Authority (IMDA), a statutory board of the Singapore government, helps mid-career Singaporeans with funds and connections to training providers to reskill and find new jobs in the tech sector. Take the story of Arif Rahman, a hairdresser who became a software engineer by completing a course funded partly through IMDA. As quoted in his [profile](#), Rahman says, "If I go to a [traditional university], I have to study for three years before I can start work." Rahman felt as though he didn't have that kind of time and was able to benefit from a shorter, more intensive course which led to him successfully landing a job at a startup.

Meanwhile, in Louisville, Kentucky, a coalition of partners including the mayor's office, Microsoft, the health insurance company Humana, and General Assembly have come together to launch a "[30-Day Upskilling Challenge](#)," offering free courses in areas such as data analytics, software engineering, digital marketing, and more, with a pathway for employment at local companies.

**Location:** Scottsdale, AZ

**Position Type:** Contract (6 Months)

**Hourly/Salary:** BOE

**Residency Status:** US Citizen or Green Card Holder ONLY

Our client is looking for a Data Scientist to join their team!

### **Job Description**

#### **Scope:**

- Data Scientist to help build **classification, regression ML models** for predictive analytics and **anomaly detection**
- You will be responsible for transforming data and generating actionable insights into our customer behavior
- Communicate key results with self-serve tools (dashboards, analytics tools) for the Customer Success team

#### **Must have DS skills:**

- Data cleaning, Data wrangling, Data Visualization, Intellectual Curiosity, Business acumen, Communication Skills, Probability and Statistics, Machine Learning
- Experience building (from scratch) Machine Learning (ML) models that can be put to production (with the support of data engineering and S.W engineering teams)
- Professional experience building machine learning models (candidates will need to articulate detail project experience from research, model selection, action and results)
- Statistics knowledge

#### **Tools/Environment must have:**

- Azure Data-bricks environment/environment experience,
- Python Programming skills – 3 years (In-depth knowledge of Python, Pandas and its open-source ecosystem or similar)
- SQL – 2- 3 years
- Spark ML – domain knowledge
- Visualization tools: Power BI or similar

#### **Responsibilities:**

- Build machine-learning models
- Create regression, classification models; Work with engineering teams to deploy robust, highly available decision pipelines based on your models.
- Analyze large amounts of information to discover trends and patterns
- Combine models through ensemble modeling
- Present information using data visualization techniques

- Processing, cleansing, and verifying the integrity of data used for analysis. Undertake preprocessing of structured and unstructured data

### **Qualifications:**

- Business acumen and communication skills to gather the data requirement from the business
- 3+ years of related professional work experience
- Theoretical and execution background of Data Science with specific focus on Machine Learning
- Experience testing and validating models and assessing the trade-offs between different modeling techniques and specifications
- Comfort manipulating and analyzing complex, high-volume, high-dimensionality data from varying sources
- Strong analytics and problem-solving skills needed. Can take the data and come up with a solution specific to the use case
- Experience in applying statistical learning methods to solve business problems
- Experience working with complex and/or large data sets
- Practical ability to visualize data, communicate the data, and utilize it effectively
- Programming skills – 2 years (In-depth knowledge of Python, Pandas and its open-source ecosystem or similar)
- Proficiency in using query languages such as SQL, Hive, Pig, Sqoop.
- Experience with NoSQL databases, such as MongoDB, Cassandra, Hbase and SQL databases and unstructured data stores
- Excellent understanding of machine learning techniques and algorithms, such as k-NN, Naïve Bayes, SVM, Random Forests, etc.
- NLP / NLU experience preferred.
- \$95/hr. for 6 months

Udacity's mission is to power the enterprise through next-generation technology education. We're an immersive online learning platform, powering corporate technical training in fields such as Artificial Intelligence, Machine Learning, Data Science, Autonomous Systems, Cloud Computing and more. We are backed by some of the best-known investors: Andreessen Horowitz, Charles River Ventures, Bertelsmann and Drive Capital, among other leading VC firms. Udacity is helping the enterprise market bridge the talent shortage and skills gaps during their digital transformation journey. We are providing a powerful and differentiated solution inside of a \$32b total addressable market opportunity. If you are inspired to be a core component of this transformational opportunity... read on!

Collaborate with our customers while providing consulting services and technical support to help them leverage their use of our products for maximum impact.

### **Summary**

The Technical Customer Success Manager (TCSM) is responsible for supporting and scaling the Enterprise Customer Success team by building tools that a) automate manual tasks; b) generate meaningful customer data analytics and c) improve workflows. You will be the primary technical contact for high-touch Enterprise accounts and the expert in our customers' student data, and you will work with Udacity's engineering, product and Enterprise sales teams to improve the Enterprise product by surfacing customer needs.

As the primary owner of the technical relationship with our Enterprise customers, you will broker and arbitrate meetings in order to understand the customer's technical needs, and manage business critical issues impacting either the customer's business or Udacity's relationship with the customer.

Internally, you will create and iterate on data visualizations, pipelines, dashboards, and other tools to empower the Enterprise Customer Success team to provide meaningful insights to their customers. You will develop and maintain a strong relationship with product, engineering, and operational teams to inform product and process development as an expert on the needs and experience of Enterprise customers.

This position is an Individual Contributor position and reports to the Senior Technical Customer Success Manager.

### **Responsibilities:**

- Manage and cultivate the technical relationship and communication with Udacity Enterprise accounts
- Build and maintain data visualizations and tooling to enable Enterprise teams to make meaningful, data-driven decisions and unlock improvements to the customer experience
- Identify and automate repetitive CS workflows to scale team
- Perform in-depth analyses of customer data to provide actionable insights to enable renewal and account expansion
- Acquire and maintain knowledge of existing and new systems in order to provide accurate assistance and training to customers and the Enterprise CS team
- Act as a liaison between customer success and product, engineering, and operational teams to advocate for Enterprise customer needs
- Define and strategically prioritize CS and customer reporting needs and product enhancement requests
- Participate in special projects, as required, that enhances the quality or efficiency of the CS team and support service
- Travel as necessary (10-20%)

### **What We Value:**

- 3+ years of experience in technical customer support or data analysis
- 3+ years of experience using SQL required, additional fluency in data visualization or BI tools preferred
- Startup experience and ethos
- Strong analytical skills with the ability to gather and clean complex data, perform detailed analysis, and effectively communicate results
- Excellent written and oral communication skills
- Experience managing cross-functional collaboration, with proven interpersonal and conflict management skills
- Proficient in managing multiple competing priorities simultaneously
- Self-motivated, able to work independently, and welcoming to new challenges

**Pluses:**

- Knowledge of Udacity product preferred
- Experience using Salesforce, Gainsight, or another CRM a plus
- Experience with account or customer relationship management a plus

Are you passionate about developing impactful, novel Machine Learning (ML) technology strategy and taking it to large-scale production? Are you passionate about engaging the AI community (AI researchers, developers building AI products, roboticists making robots that work, data scientists, and innovative entrepreneurs in hot startups and large enterprises)?

Artificial Intelligence (AI) has the potential to transform our society and community for generations. Impacting transportation, mobility, telecommunication, energy, healthcare and insurance, rescue and emergency response, hospitality. Achieving this requires implementing one of the most complex computing systems to-date at unprecedented scale. AWS Autonomous Compute is taking a fresh approach with providing an end-to-end, scalable cloud environment that simplifies the development, scaling and production deployment of AI technology. Including a global cloud footprint, infinitely scalable cloud storage, advanced networking and security, state-of-the-art AI platforms and services, rigorous engineering, and a team with the longest experience building cloud technologies.

AWS Autonomous Computing is seeking a Solutions Architect (SA) for our Autonomous Computing business. The SA will be responsible for defining, building and deploying effective and targeted technology strategy to accelerate broad pre-sales engineering activities. The SA will facilitate the enablement of solutions architecture with specific customer centric value proposition and demos about end-to-end AI technologies – data ingestion, data preparation, model development including architecture optimization, model validation, large-scale orchestration, deployment and model lifecycle management – on the AWS cloud. The SA will directly interface with the AWS product and software development teams regarding customer and partner requirements. The SA will work closely across multiple internal and external organizations – AWS product engineering, business development, sales, marketing, partners, and machine learning research communities – to position the AWS platform for customers and partners; and provide guidance on the value proposition and benefit to those customers and partners.

The ideal candidate will possess a deep technical background combined with business acumen that enables them to drive an engagement and interact at the highest levels of startups and large Enterprises. The candidate will have the technical depth and business experience to easily articulate the potential and challenges of AI (different platforms and frameworks in the AWS cloud) to engineering/research teams and C-Level executives. This requires deep familiarity with state-of-the-art approaches to AI, as well as target AI use cases using distributed computing systems in the cloud.

As the ideal candidate, you will be the thought leader responsible for helping customers understand the value proposition of production-grade AI on AWS, creating the most compelling content and demos to help customers understand the use cases and value propositions, and building the right programs to increase awareness and adoption. You will also be a trusted advisor to customers and internal teams; helping develop the AI knowledge and skills of Solutions Architects, as well as the technical field community. Additionally, you will work with the AWS Machine Learning and AWS EC2

engineering and product management teams to shape product vision and prioritize features for AI products and solutions. You will get to work on a leading technology field and growing business; and have a material impact, every day. You will be able to facilitate relationships with senior personnel, as well as easily interact and give guidance to technical experts, researchers, software developers, IT pros, and system architects. This requires a demonstrated ability to think strategically about business, product, research, and technical challenges.

This is an opportunity to be a thought leader in the emerging space of autonomous computing and make a significant contribution to enable transformation across several industries.

### **About AWS**

Amazon Web Services (AWS) is the pioneer and recognized leader in Cloud Computing. Our web services provide a platform for IT infrastructure in-the-cloud that is used by hundreds of thousands of developers and businesses around the world. These customers range from start-ups to leading web companies to Global 2000 companies in financial services, pharmaceuticals, and technology. AWS customers are looking for ways to transform their businesses and solve their own complex business challenges with machine learning (ML) technologies in the cloud. AWS is leading the way in providing customers with powerful, end-to-end machine learning platforms such as Amazon SageMaker.

### **Roles & Responsibilities**

- Architect advanced solutions leveraging AWS services like EC2, S3, SPOT, and ML related services, working closely with our customers to deeply understand their business needs and to design technical solutions that take advantage of the AWS Cloud platform.
- Demonstrate the viability of each solution through mechanisms like proof-of-concepts, prototypes and pilots including applied research activities that bring early-stage products to market.
- Develop best practices documentation, and develop a strong go-to-market technical strategy.
- Craft and develop compelling audience-specific messages and tools (product videos, customer success stories, advanced demos, white papers, presentations, how to guides, etc.)
- Evangelize AWS AI architectures and technologies through forums such as AWS Blogs, white papers, reference architectures and public-speaking events such as AWS summit, and user-group events.
- Collaborate with AWS field sales, professional services, training and support teams to help partners and customers learn and effectively use AWS for AI.
- Serve as a key member of the business development and account management teams helping to ensure customer and partner success in AI on the AWS platform.
- Act as a technical liaison between customers, service engineering teams and support teams.
- Gain recognition and credibility as a regular panelist and keynote speaker for multiple internal and external events.
- Deliver compelling presentations, product demos, roadmap reviews, sample solutions and discussions to drive adoption of AI on AWS.
- Identify leads for potential engagement needing pre-sales support.

- Collaborate with internal teams to define the product road map, market positioning and developer program initiatives
- Assess training requirements and coordinating with various training teams on scheduling and delivery of training to both internal and external audiences.

### **Basic Qualifications**

- MS in Engineering (or related STEM fields)
- 3+ years experience working with a few of these technologies: advanced machine learning, probabilistic modeling, optimization, sensor fusion and scalable computing systems.
- Demonstrated ability to work with multiple technical and stakeholder groups to bring a complete solution to production.
- Strong track record of publications in peer-reviewed journals, conferences and/or curated blogs.
- Deep knowledge and extensive experience building and deploying one or more of these technologies in production: Deep learning (e.g. CNN, RNN, LSTM, GAN, etc.), Reinforcement Learning, Accelerated compute (e.g. GPU, FPGA, ASICs, etc.), ML Frameworks (e.g. TensorFlow, PyTorch, etc.), ML engineering (e.g. Containers, Kubernetes, Kubeflow, etc.), Probabilistic Modeling (e.g. Bayesian modeling, Probabilistic Deep Neural Networks, Probabilistic Graphical Models, etc.), Global non-convex optimization (e.g. Genetic Algorithms, Particle Swarm, etc.) and non-linear estimation techniques (e.g. Unscented Kalman Filters, Particle filters, etc.) and time series forecasting.
- Experience with one or more general purpose programming languages, including but not limited to: Python, Go, C/C++, JavaScript, Java.
- Solid enterprise communication skills, and business and financial acumen.
- Strong analytical skills, and demonstrated ability to turn detailed data analysis into useful strategic insight in order to drive customer adoption and make appropriate recommendations to the business.
- Strong verbal and written communications skills are a must, as well as leadership skills.
- Demonstrated ability to work effectively across internal and external organizations.

### **Preferred Qualifications**

- Ph.D. in Engineering (or related STEM fields)
- Experience developing, deploying and managing AI products at scale.
- 5+ years of engineering, development, data science and modeling experience.
- Demonstrated experience solving end-to-end large-scale problems in aerospace, transportation, energy, manufacturing, telecommunications, genomics, healthcare and/or robotics with proven AI technologies deployed at scale.
- Experience with cloud computing and distributed computing.

Are you passionate about taking on challenges that have potential to disrupt the industry? Are you energized by a start-up like environment that requires collaboration with likeminded individuals across Azure Compute, Azure Networking, and Azure Storage organizations? If so, this is for you!

Microsoft Azure provides customers an on-demand, scalable infrastructure and platform to build, host, and operate services through Microsoft's global data centers. As part of its continued growth

Azure is pushing to expand beyond the confines of its data centers and move to the customer premises. One of the hottest battlegrounds in the public cloud isn't happening in the cloud at all. Rather, it's playing out in the real world, where the public cloud is being extended to customer locations such as factory floors, hospitals, retail stores, autonomous vehicles etc.

We are the Azure Compute on Edge team with focus on delivering next generation compute stack for addressing bleeding edge scenarios like 5G, Gaming, Artificial intelligence applications etc. This is a rare opportunity to define and drive the next frontier of compute infrastructure that can meet the ever-growing compute demand. We are building the V1 offering of compute on the Edge, for which we are closely working with our partners as talked here:

<https://techblog.comsoc.org/2019/02/27/att-tests-5g-and-edge-computing-with-microsoft-azure/> .

While we are a production team, we work very closely with an applied research team so as to stay abreast of the latest cutting edge research, as well as to participate in research publications.

We are looking for a passionate, confident and self-driven software engineer to help us bootstrap this effort. You will work across the compute stack interacting with several components to facilitate and optimize the edge site bring up. You will interact with Azure Networking, Azure Storage, Azure service teams, and support organizations to define and deliver critical, customer-facing features, and the infrastructure required to support them. This role will have a measurable impact on customer growth and satisfaction for one of the fastest growing businesses at Microsoft. We are looking for a senior software engineer, who thinks strategically, works pragmatically and with enthusiasm in a fast-moving environment with few guardrails. You will need strong customer empathy and an ability to focus our engineering efforts on customer requirements as well as Azure's business priorities.

If you are interested in pushing the envelope on the cloud-scale distributed system technology and building rock-solid platform with 99999 availability - we would love to hear from you!

### **Responsibilities**

Design and develop robust, distributed, scalable and resilient platform for Azure Computing, including services and tools; Live site monitoring, tooling and customer engagement on issues and features that affect customers; proactive live site detections and mitigations.

### **Qualifications**

#### **Required Qualifications:**

- A bachelor's/master's degree in computer science or related discipline, or equivalent relevant work experience
- 5+ years of software development experience in C++, C#, or Java (industry or academia)
- Passionate about writing code and proficient in at least one of the mainstream languages: C++, C, C#
- Excellent problem analyzing and solving skills with ability to quickly adapt to new technology and go deep in new focus areas
- Good team spirit and good oral/written communication skills in English

- Be responsible and proactive

### **Preferred Qualifications**

- Experience with building services for distributed systems
- Experiences with Azure Compute infrastructure.

Alexa is the groundbreaking cloud-based intelligent agent that powers Echo and other devices designed around your voice. Our mission is to push the envelope in Artificial Intelligence (AI), Natural Language Understanding (NLU), Machine Learning (ML), Dialog Management, Automatic Speech Recognition (ASR), and Audio Signal Processing, in order to provide the best-possible experience for our customers. We're looking for a Software Development Manager to help build industry-leading conversational technologies that customers love.

### **Additional Responsibilities Include**

As a Software Development Manager for the Alexa AI team, you will be responsible for leading a team of engineers and driving the design, development, testing, and deployment of distributed systems and big data solutions from AI, ML, Natural Language Question Answering, Personalization, pushing the boundaries of machine intelligence. A successful candidate will have an established background in building services, managing the development of existing code, scaling systems with large data sets, automation, developing customer-facing experiences, and delivering results in a fast-paced environment.

- Hiring, developing, and mentoring engineers, and managing the day-to-day activities of the engineering team in an Agile/Scrum environment
- Working closely with engineers and scientists to architect and develop the best technical design and approach
- Owning the strategic planning and project management for long-term engineering projects, creating value for our customers
- Management of the over-all systems development life cycle
- Communicating effectively with senior management as well as with colleagues from research teams, software engineering teams, and other technical and business teams
- Regular reporting on the status of development, quality, operations, and system performance to management

### **Basic Qualifications**

- 5+ years of experience managing software development teams
- Hands on experience with programming languages such as C/C++, Java, Perl or Python
- Knowledge of professional software engineering practices for the full software development life cycle, including coding standards, code reviews, source control management, build processes, testing, and operations

### **Preferred Qualifications**

- Ability to rapidly prototype and evaluate applications and interaction methodologies

- Experience in building complex, real-time software systems involving AI, ML, NLU, and ASR algorithms that have been successfully delivered to customers
- Knowledge of standard AI and ML fundamentals, concepts and techniques
- Strong experience working effectively with science, data processing, and software engineering teams
- Strong project management experience desired for working on cross-functional projects
- Entrepreneurial spirit combined with strong architectural and problem solving skills
- Demonstrated track record of project delivery for large, cross-functional projects with evolving requirements
- Excellent written and verbal technical communication with an ability to present complex technical information in a clear and concise manner to a variety of audiences
- Graduate degree (MS or PhD) in Electrical Engineering, Computer Sciences, Mathematics, or related technical field

We are looking for a motivated Robotics and AI engineer, who would like to be part of a dynamic team in Berkeley, California!

Siemens Corporate Technology (CT) is seeking a member of its "**Advanced Manufacturing Automation**" Research Group of the vertical "**Future of Automation**" Technology Field in the **Bay Area of San Francisco, California**. In this research group, we shape the innovation roadmap towards the advanced manufacturing of the future; in collaboration with technology **startups**, leading **academic institutions** and **government agencies**. We are a team of automation-enthusiasts, innovators, engineers and scientists with deep technical expertise who are passionate about disruptive technologies in the areas of Machine Learning, Simulation, Engineering, Control, and Optimization. Our deliverables enable the successful transformation of the technology trends in Automation & Control into the business of the future for a multitude of customer products and services.

### **The Challenge**

- Manage and execute scientific and engineering projects including the definition and execution of the technology strategy.
- Calculate/assess risk factors of a project. Anticipate potential problems and demonstrate sophisticated reasoning skills as well as creative, innovative and resourceful approaches to developing solutions to complex problems.
- Provide technical supervision and expertise to achieve project goals.
- Lead, and collaborate with others, both within and outside Siemens, to develop successful research proposals for external funding that align with Siemens strategic direction.
- Scout and evaluate new automation, robotics and artificial intelligence technologies in collaboration with leading academic institutions and government agencies, by working with Siemens Business Units.
- Seek advocacy from appropriate Siemens business units on potential use cases.
- Manage ground breaking research projects with the best universities and professors in the US. Co-develop with top academic partners the Automation Systems of the Future.
- Educate and transfer technologies to Siemens business units for product implementations.
- Assist in project acquisition and project funding.

## **The Candidate:**

### **Qualified Candidates Will Have**

- Masters required in Computer Science Electrical Engineering or Mechanical Engineering.
- Strong software engineering skills. Hands-on experience in C++ and Python. Further experience in C# is a plus.
- 2+ years of Machine Learning work experience, including Reinforcement Learning.
- Strong background in robotics and control. Practical experience with implementation and debugging of algorithms on real-world robotic systems. Solid knowledge of kinematics, dynamics, path planning and perception including calibration of vision-based robotic systems.
- Knowledge of embedded systems development, firmware, operating systems, computer architecture and hardware/software integration.
- Commitment to continuous learning. Willingness to pick up new technologies as needed.
- Experience working with international and multi-cultural teams.
- The ability to multitask and make lead contributions in several projects.

Preferred skills & experience:

- Experience in applying Machine Learning and Artificial Intelligence to industrial problems.
- Demonstrated experience in using ROS (Robot Operating System).
- Knowledge of containerization, docker and Kubernetes.
- Solid knowledge in 3D geometry as well as RGB-D and point cloud processing methods.
- Understanding the business of Siemens to identify and apply use cases for new technologies in the area of Automation & Control, e.g. Industrial Automation, Train Automation, etc.

If you are looking to make a huge impact for Intel across Discrete GPUs for AI, software products including oneAPI and win worldwide AI software ecosystem on our Data Center targeted Discrete GPUs, then read ahead. This is a leadership engineering role in AI within *Ecosystem Engineering team* in IAGS. The role spans working with customers across multiple internal and external stakeholders and customers. As Deep Learning software engineer, you will be involved from early enabling activities to actually undertaking performance tuning and optimization of deep learning models based on TensorFlow and Pytorch for successful deployment by our customers. Additionally, you will be expected to influence Intel Discrete GPU hardware capabilities for AI as well as AI software stack for oneAPI. This is a high impact role working with customers and driving their success, while making Intel a world leader in AI by influencing our discrete GPU and software products.

We are in startup-up environment, you should love ambiguity, be able to juggle multiple-tasks and able to make forward, demonstrable progress that delivers impact. You will have an opportunity to collaborate with Engineering Leaders across Intel and be able influence technical leaders.

### **An Ideal Candidate Would Exhibit Behavioral Skills That Indicate**

- Excellent verbal and written skills are required. Ability to develop high-quality externally publishable collaterals is a plus.

- Ability to work in a dynamic environment and ability to think on your feet is required

## **Qualifications**

You must possess the below minimum qualifications to be initially considered for this position. Preferred qualifications are in addition to the minimum requirements and are considered a plus factor in identifying top candidates.

### **Minimum Qualifications**

- Bachelor's with 9 + years or Master's with 6+ years or Ph.D with 4+ years in Electrical Engineering or Computer Science or Computer Engineering or Physics or Mathematics or a related relevant Engineering discipline
- 5+ years or more experience working in Machine Learning or AI in one of the following roles: Developing, architecture, implementing or performance bench marking AI workloads
- 2 years or more experience in one or more of the following areas: Python, Tensor Flow, Caffe, Pytorch, MXNet
- 2+ years' experience in deploying/optimizing distributed training on CPU/GPU clusters

### **Preferred Qualifications**

- 2+ years of knowledge/experience in Artificial Intelligence solutions applied to segments such as HPC, Cloud, Visual Computing and/or Enterprise.
- Prior experience in deployment strategies , performance optimization, multi node, multi GPU scaling big plus
- Prior experience in Cloud deployment strategies, Cloud Developer Environments and having any cloud certification is a definite plus.
- Knowledge of Intel MKL libraries like MKL-DNN highly desired
- Develop custom data models and algorithms to apply to available data sets, test it and then deploy on big data also help for artificial intelligence is a plus
- Good presentation skills at conferences, industry events, labs, and customer workshops are a plus.
- Experience or training in one or more of the parallel programming methodologies: SYCL, C++, OpenMP\*, MPI, Intel Threading Building Blocks, OpenCL, CUDA is highly desired
- Soft skills needed to work with customers and/or prior engagement with customers is a big plus!

Red Hat's Public Sector Consulting team is looking for an Architect to join us. In this role, you will guide the adoption of Red Hat's solutions in our key enterprise accounts, government agencies and service provider partners. Through a series of both in-person and remote interactions, you'll win the trust and confidence of customer engineering, development, and operations teams by aligning their requirements and use cases with the functional capabilities of our solutions. As an Architect, you'll need to have a solid understanding of artificial intelligence (AI), AI models, and modern platforms and DevOps methodologies, tools, and how they can be applied within an organization. You'll also play a critical role in bringing together cross-functional teams from Red Hat's product business, product engineering, support, professional services, and sales teams to meet the needs of our most

demanding customers. You'll serve as a customer advocate with these teams to architect the right solutions and to ensure that these solutions are implemented and supported in an innovative and reliable way.

### **Primary Job Responsibilities**

- Serve as an expert for architecting high-availability, high-volume infrastructure on Red Hat OpenShift and other Red Hat technologies; develop and manage the Data Hub infrastructure stack, including monitoring and performance metrics
- Ensure that operational systems run reliably and efficiently
- Design and implement disaster recovery processes for big data
- Develop new features, scaling rules, configuration and deployment automation, monitoring, and self-healing processes for high-volume, big data systems; implement high-availability and scalable designs for the Data Hub to ensure high uptime
- Use your excellent communication skills to communicate with other Red Hat's engineers, product managers, and management across the globe
- Prototype ideas and communicate results
- Document code and systems throughout the development life cycle
- Deliver demonstrations and technical presentations to a varied audience
- Work in a fast-paced environment
- Communicate with developers and end users through IRC, forums, and email

### **Required Skills**

- Master's degree or higher in computer science or other related discipline
- 8+ years of relevant development or operations experience
- 6+ years working with big data infrastructure
- Ability to quickly learn and use new tools and technologies
- Experience with source code control tools like Git, Apache Subversion (SVN), GitHub, etc.
- Advanced scripting abilities in Java, Python, shell, Bash, etc.
- Proven experience with the Linux operating system
- Excellent system understanding and troubleshooting capabilities
- Solid innovation skills and a passion for technology
- Ability to work on your own in a fast-paced, ever-changing environment
- Excellent written and verbal communication skills; fluent language skills in English
- Active Secret clearance

### **The Following Are Considered a Plus**

- Experience with big data technologies like Kafka, Spark, Hadoop, and S3
- Technical experience with one or more container, virtualization, and cloud technologies, e.g., Red Hat OpenShift Container Platform, Red Hat OpenStack Platform, Red Hat Virtualization, Kubernetes, Docker, VMware vSphere, Microsoft Hyper-V, Amazon Web Services (AWS), Microsoft Azure, etc.

- Working understanding of Defense Information Systems Agency (DISA), National Institute of Standards and Technology (NIST), Center for Internet Security (CIS), or Security Technical Implementation Guide (STIG) security guidelines and how to adhere to them
- Comfortable working with highly distributed teams, including interaction with open source communities via email and IRC
- Experience working in a quality assurance (QA) role or working with Service Desk, Bugzilla, Jira, ticketing systems, or bug tracking tools
- Familiarity with security fundamentals at the infrastructure (including cloud and hypervisor) and operating system levels
- Advanced scripting abilities in Python, shell, etc.
- Basic understanding of Containers, Kubernetes, or Red Hat OpenShift
- Top Secret clearance

This job posting is for a **Principal Program Manager** working on the area of artificial intelligence and machine learning. The goal is to empower our customers and internal product teams with the most powerful, differentiated, easy-to-use, and cost-effective AI/ML platform by looking at the full stack - across hardware, system software and frameworks/tools.

We are looking for someone with the ability to drive clarity/crispness from ambiguity, and the capability to drive consensus across leaders and concerted progress across multiple teams. Someone with hands on experience on the lifecycle of AI/ML (training, experimentation, deployment, inference) using a range of frameworks (e.g. PyTorch, TensorFlow), platforms (e.g. Azure ML, AWS SageMaker, Google CloudAI) and infrastructure (e.g. hardware accelerators like GPUs and FPGAs). Someone who has an appreciation for systems thinking, who can rationalize the different components of an AI stack, e.g. for parallel training, and the practical implications of model/data/pipeline parallelization. Someone who has developed good intuition for what promotes and impacts the adoption/engagement of AI platforms/frameworks, through practical experience. Someone who likes to stay informed on the latest announcements/updates from these, and the latest news from the research/community (e.g. BERT and GPT2).

### **Responsibilities**

- Help shape the differentiation and innovation strategy for Microsoft's AI/ML Platform and Infrastructure becoming a trusted advisor to the relevant product/research teams
- Coordinate potentially complex cross-team efforts across hardware and software contributing towards the Microsoft AI stack
- Keep close track of, and often play with, a range of AI/ML platforms, frameworks and hardware from Microsoft, the competition, open source community, and startups to identify and prioritize our top issues/opportunities
- Keep close track of the AI/ML research efforts inside and outside Microsoft to identify productization opportunities for further differentiation
- Engage the relevant product/research teams to across the company to educate your point of view on issues/opportunities and together define concrete action plans to tackle these
- Bootstrap and orchestrate company-wide projects requiring collaboration across product/research teams while sharing a common strategic vision

- Generate crisp reading materials for CTO and other Senior Leaders with summations, prioritized lists of issues/opportunities, and concrete plans

Amazon Web Services (AWS) is the pioneer and recognized leader in the Cloud. Our web services provide a platform for IT infrastructure that is used by hundreds of thousands of developers and businesses around the world. These customers range from start-ups to leading web companies to Global 500 companies in financial services, pharmaceuticals, and technology.

The AWS database services organization, provides the broadest range of innovative, purpose-built IT services in the Cloud including Amazon RDS, Amazon DynamoDB, Amazon ElastiCache, Amazon Neptune, Amazon DocumentDB, Amazon Timestream, Amazon QLDB, and Amazon Keyspaces.

Do you share a passion to make customers successful? Do you believe that a deep understanding of customer and business data can change an organization? Are you excited to discover and solve thorny business challenges through data analytics and business intelligence (BI) solutions? Do you thrive in a data driven organization working with diverse teams cutting across functions, organizations, and cultures to achieve a common goal? The AWS databases team is currently seeking a driven, talented, and experienced Data Scientist to support Amazon fully managed databases growth across our various services. This role will focus on Data Analytics, Data Science, and Business Intelligence to support AWS database services growth, requiring deep technical skills, a deep analytical background to provide actionable insights and decision support. As a member of this team, you will harness your strong data extraction, transformation, and load (ETL) skills to create data structures, build machine learning models, create predictive, and prescriptive models, build dashboards and visualization to support business strategy, achieve goals, and drive business and technology transformation initiatives.

### **Responsibilities**

- Develop a deep understanding of business metrics, reporting tools, and data structure in order to identify and drive resolution of issues, provide actionable intelligence with existing metrics or identify, develop, and propose new metrics, dashboards, scorecards or new tools.
- Develop relationships and processes across functional teams to drive business insight.
- Create processes to compile and standardize disparate information that drive standardized reporting and metrics tracking.
- Generate ad-hoc or recurring business and operational performance analysis, based on the needs of the business.
- Provide recommendations through ad-hoc data retrieval and analysis from data management systems.

Create new tools and business processes that simplifies, standardizes and enables operational excellence.

### **Basic Qualifications**

- 7+ years of business analysis experience, based on large volumes of data.

- MS degree in Information Technology Management, Computer Science, Computer Engineering, Mathematics, or Finance.
- Advanced knowledge of Excel, SQL, Tableau or other Business Intelligence tools.
- Experience with statistical tools such as R or SAS and a working knowledge of programming languages like Python.
- Demonstrated expertise in Machine Learning, Forecasting.
- Experience using CRM/ERP/Finance applications, and various data warehouse systems.

Motivated self-starter, proactive and action-oriented, requiring limited supervision.

### **Preferred Qualifications**

- Expertise in AI or Prescriptive Analytics.
- Application Development, expertise in Data Engineering, Data Warehousing, Operational Data Store, etc.
- Expertise in Agile, Scrum, Design Thinking, Mock-up & Prototype design.
- Ability to develop new ideas and creative solutions.
- Advanced problem-solving skills for difficult and complex issues.
- Ability to present complex results in a clear, concise, and actionable manner.
- Experience communicating results to senior business leaders.
- Highly organized and detail oriented, with the ability to plan, manage, and execute multiple priorities in a dynamic environment.

Ability to support business needs by identifying the right approach to balance speed and accuracy that supports decision making in ambiguous situations.

Didi Chuxing (“DiDi”) is the world’s leading mobile transportation platform. We’re committed to working with communities and partners to solve the world’s transportation, environmental, and employment challenges by using big data-driven deep-learning algorithms that optimize resource allocation.

Didi Chuxing’s Autonomous-Driving team was established in 2016, and has grown to a comprehensive research and development organization covering HD mapping, perception, behavior prediction, planning and control, infrastructure and simulation, labeling, hardware, mechanical, problem diagnosis, vehicle modifications, connected car, and security, among others. We’re developing and testing self-driving vehicles in China and the United States.

In August 2019, DiDi upgraded its autonomous driving unit to an independent company to focus on R&D, product application, and business development related to self-driving technologies. The new company will integrate the resources and technology of DiDi’s platform, continue to increase investment in R&D, and deepen collaboration with auto industry partners.

### **Autonomous Driving Research Engineer – Prediction**

We are currently looking for experienced software engineers to join our Mountain View office to develop algorithms and pipelines for DiDi autonomous driving projects. The goal is to apply the state-of-the-art AI algorithms on cars to make driving smarter and safer. The position involves research and development on state-of-the-art behavior prediction algorithms for traffic participants such as vehicles, cyclists and pedestrians. These algorithms will be applied on real vehicles to be

deployed in DiDi's network.

### **Responsibilities**

- Develop and deploy behavior prediction algorithms including intention and trajectory prediction.
- Develop machine learning infrastructure for scalable learning-based prediction algorithms.
- Research on cutting-edge machine learning approaches (decision tree, deep learning, reinforcement learning) to open-ended real-world behavior prediction problems.
- Contribute to DiDi's intellectual property through patents.

### **Qualifications**

- Master or PhD degrees in Computer Science, Robotics or related disciplines.
- Solid programming and proficient in C++ and/or Python.
- 3 years of industrial working experience or equivalence.
- Clear in communication and easy to collaborate in a growing team.

### **Preferred**

- Engineering or research experiences on applying machine learning to solve behavior prediction problems.
- Experience with state-of-the-art deep learning algorithms (CNN, RNN/LSTM, reinforcement learning).

Worldwide, the Volkswagen Group has a long tradition of dramatic innovations. The Volkswagen Group with its headquarters in Wolfsburg is one of the world's leading automobile manufacturers and the largest carmaker in Europe. The Group comprises twelve brands from seven European countries: Volkswagen Passenger Cars, Audi, SEAT, ŠKODA, Bentley, Bugatti, Lamborghini, Porsche, Ducati, Volkswagen Commercial Vehicles, Scania and MAN. Here in the US, we are blending German engineering with American ingenuity.

At the **Innovation & Engineering Center California (IECC)**, we represent the Volkswagen Group in applied research and development. Located in the heart of Silicon Valley, we create bold new ideas for the Volkswagen, Audi, Bentley, Lamborghini, Bugatti and Porsche brands. We're a team of engineers, designers, scientists, and psychologists looking to develop innovations for future generations of cars, and to transfer technologies from many industries and research institutions into the automotive domain. Our mission is to drive change which means we are not only impacting one of the world's largest car makers, but also the lives of millions of people. Are you ready to join us?

### **Dir, Perception & Machine Learning**

### **Role Summary**

This position is responsible for Perception and Machine Learning group at the Innovation Center California (ICC). The purpose of this position is to manage all research and development activities in the area of Artificial Intelligence based functions including autonomous driving, and Network-based next generation machine learning applications. The Perception and Machine Learning group focuses on all aspects of the information and driving experience in and outside of the vehicle, for both the driver and passenger, including path planning, vehicle control, as well as perception and sensing technology concepts. The position's responsibilities include personnel management, multi-million dollar R&D program management, financial planning, internal reporting, network management, support and mentorship of engineering team in engineering related matters, and quality control of automotive grade SW product and innovation deliverables.

## **Role Responsibilities**

### ***Strategy & Planning***

- Define overall mission and strategy for Perception and Machine Learning group.
- Mentor and provide high quality resources for Digital Intelligence and Autonomous Systems cluster research and development activities
- Manage the internal and external budget for the Perception and Machine Learning group
- Regular executive level reporting to VW Group stakeholders (partners, mentors, department heads, and top executives)
- Strategic planning for the ICC project portfolio in the area of artificial intelligence and big data based applications and services

### ***Network***

- Manage the relationships to related departments in all Volkswagen Group brands and locations
- Manage the relationship with technology suppliers and create strategic partnerships to influence the products
- Manage strategic relationships to Silicon Valley companies
- Manage strategic relationships and partnerships with academic and research institutions
- Serve as the VW Group representatives to local Silicon Valley companies

### ***Personnel***

- Supervision of engineers, contractors, interns and FSEs in the team
- Responsible for the recruitment of personnel
- Facilitate research, design, development, and engineering skill development for the team

### ***Research & Development***

- Secure internal project funding for supported projects by Volkswagen Group partners
- Synchronization of ICC AI & Big Data topics with VW Group Global Innovation Ecosystem
- Strategic evaluation of current and developing consumer electronics products and academic research
- Ensure ICC's work in Silicon Valley represented in our products and services through collaboration
- Secure intellectual property from the team (patents and publications)

- Oversee the SW module research and development and releases to global network of VW Group brands

### **Primary Location**

United States-California-Belmont

### **Qualifications**

#### **Years of Experience**

- 15+ years of industry experience or equivalent

#### **Education Required**

- CS, EE, M.S. Engineering (or equivalent); Ph.D in Engineering (or equivalent) preferred.

#### **Skills**

- Analytical and conceptual thinking – using logic and reason, creative and strategic
- Communication skills – interpersonal, presentation and written
- Managing interdisciplinary teams on individual projects
- Integration – joining people, processes or systems
- Influencing and negotiation skills
- Problem solving
- Resource management
- Scouting novel technologies for vehicle Infotainment applications

#### **Required Skills**

- Leadership experience in research, predevelopment and development projects in the field of Perception and Machine Learning, including Robotics
- Long term experience in managing interdisciplinary teams on individual projects and mentoring senior engineers
- Industry experience in designing and developing systems, focused on AI SW with scalable backend infrastructure
- Proven track record of scouting novel technologies for machine learning applications and turning into products
- Expert knowledge in evaluating technology and business models for product applicability
- Management experience in ideating, prototyping, and creating intellectual property
- Industry experience in developing technical specifications, system-level architecture, and other project and process documentation for successful project transfer to the development department.
- Overseeing research teams and projects at partner research institutions
- Developing concept in-vehicle functional prototypes
- Evaluating computing architectures, tools and algorithms

- Establishing business contacts with key industries and academic partners
- Experience tracking automotive and consumer electronics industry
- Experience in creation and maintenance of team and project budget
- Professional experience in presenting engineering topics in trade shows and to executive level audience
- Analysis of new technologies and its feasibility for future implementation
- Estimating costs of proposed technical changes and presenting to top management for acceptance
- Testing software and hardware implementation and oversee feature implementation
- Long-term experience in defining and designing large complex SW systems including definition of system topologies, components, and interfaces
- Expert level experience of different machine learning techniques
- Expert level experience of SW system architecture, Deep Neural Networks, and web framework components and interfaces
- Management experience in shaping and leading a team of hardware and software system experts in computer technologies
- Long-term working experience with management level and ability to communicate at this level
- Project management of large, complex multi-party software projects
- Cost-oriented business and technical skills
- Experience to create and maintain a professional network within the ecosystem of automotive suppliers, and technology partners such as:
  - Computer system technology partners
  - Semiconductor Vendors
  - Mobile communication companies
  - Internet technology companies
  - Startup companies
  - Venture capital firms
  - Corporate research facilities

### **Desired Skills**

- Developed strategic partnerships with consumer electronics companies
- Knowledge of competitors autonomous driving systems
- Designed SW components for next generation Artificial Intelligence applications
- Ability to communicate with partners globally
- More than 10 years of experience in software R&D
- ADAS and A.I. Systems
- Advanced data management technologies and tool chain
- SW/HW development process and industrialization
- VW Group system architecture and roadmap
- Rapid prototyping and validation
- Approaches for cloud oriented mobile internet applications
- Expertise in large scale data analytics applications

Facebook's mission is to give people the power to build community and bring the world closer together. Through our family of apps and services, we're building a different kind of company that connects billions of people around the world, gives them ways to share what matters most to them, and helps bring people closer together. Whether we're creating new products or helping a small business expand its reach, people at Facebook are builders at heart. Our global teams are constantly iterating, solving problems, and working together to empower people around the world to build community and connect in meaningful ways. Together, we can help people build stronger communities - we're just getting started.

Facebook is seeking a Data Scientist to join our AI Data Science and Analytics team in Menlo Park, focusing on NLP and Machine Translation. The NLP team is building advanced language technologies for a better Facebook experience and working to break language barriers to create a world where everyone on Facebook can understand everyone else. In pursuit of this mission, the team has built state-of-the-art NLP models and has created machine translation systems that serve over 2 billion translations every day. However, much work is still needed to improve all aspects of NLP, such as semantic understanding and generating natural language, and to produce human quality translations for all language directions. The ideal candidate will have a strong background as a data scientist working on NLP and/or machine translation systems, have strong technical and analytical skills, and have experience working with massive amounts of data. We are looking for Data Scientists to help the team execute on creating the next generation of state-of-the-art NLP models and products, and expanding machine translation to many more languages and improve translation quality for all languages. This role works closely with both product team and engineering team to help define and execute on opportunities to improve and expand our NLP and machine translation ML systems. Successful candidates for this role will have a background in a quantitative or technical field, will have experience with NLP and/or machine translation and working with large data sets, and will have experience in influencing decision making across different teams through data.

- Apply your strong analytical skills to gain deep insights into the data and ML model performance, and be able to clearly present your results and help guide cross-functional partners.
- Define problems and opportunities in a complex or ambiguous area.
- Inform, influence, support, and execute our product decisions and product launches.
- Partner with Product and Engineering teams to solve problems and identify new levers to improve model performance and user experience.
- Influencing the roadmap and decisions made by the NLP and machine translation team through presentation of data-based recommendations, and clearly communicating the state of the NLP and machine translation effort, experiment results, etc. to product teams.
- Advanced degree in Math/Statistics, Engineering, Physics, Computer Science, Economics, or equivalent practical experience.
- 5+ years experience solving analytical problems using quantitative approaches.
- Experience in SQL.
- Experience in a scripting language.
- Understanding of statistics (e.g., hypothesis testing, regressions, ML systems).
- Experience communicating the results of analyses with product and leadership teams to influence the strategy of the product.
- Experience with NLP and/or machine translation.
- Experience in statistical analysis of machine learning or deep learning performance.
- Experience in a scripting language: Python preferred.

The new year is here, and for many of us, that means resolutions. At work, it often translates into a vague desire to broaden our horizons or learn new things. But to really make consistent progress, we need to make learning a habit. Habits are freeing because they save us from the difficult, draining business of making decisions and exercising our self-control. Because about 40% of everyday life is shaped by habits, if we have habits that work for us we're far more likely to be happier, healthier, and more productive.

In my book *Better than Before*, I identify 21 different strategies that we can use to make or break habits in all facets of life. But there are a few that are especially helpful for making a habit of on-the-job learning.

---

#### FURTHER READING

- [HBR's 10 Must Reads on Managing Yourself](#)  
**Book**

24.95 [View Details](#)

---

### Identify what you need to learn.

1. **Take time to think big.** In the tumult of everyday life, it can be hard to step back and think about what matters most. Maybe you want to take 30 minutes once a week, or take a personal day, or go for a long bike ride. Where do you want to be in two years? How could you develop your skills to make your work more interesting and yourself more valuable? Some people prefer to do this kind of thinking alone, with just a pad of paper; others prefer to talk it out with a few trusted coworkers or an old friend.
2. **Take time to think small.** Sometimes people get overwhelmed when they try to make grand plans or ask huge questions, so it's also useful to focus on small, manageable steps that you can incorporate into your life immediately. To make your work easier or richer tomorrow, what do you need to learn or get better at today?
3. **Ask yourself: whom do you envy?** Envy is an uncomfortable emotion, but it's instructive. If you envy someone, that person has something you wish you had. Do you envy your friend who gets to travel all the time — or the friend who never has to travel? Do you envy your coworker who's taking night classes toward getting an MBA, or who gets to make lots of presentations? Envy can help show us how we want to grow and change. Once you've figured out what you need to learn...

### Make learning habitual.

4. **Be specific about what you're asking of yourself.** Resolutions like "read more" or "learn new things" are too vague. Put your resolution into the form of a concrete, measurable, manageable action, such as "Every month, go to at least two events with learning opportunities" or "Spend two hours every Thursday afternoon reading all the articles I saved during the week." Being specific helps you figure out what to do, and it also makes it possible to...

5. **Monitor your habit.** Monitoring is almost uncanny in its power. Research shows that simply by monitoring a behavior, we tend to do a much better job of it, whether it's how many daily steps we're taking or how many cold calls we're making. The same is true of how many instructional videos we're watching or how often we make time to practice a new skill. Keep track, and you'll push yourself in the right direction.
6. **Schedule time for your habit.** Something like "Research such-and-such" is a goal that can keep getting pushed to the bottom of the to-do list. Even if it's important, it's just not urgent. So schedule a specific time for research and learning. But it's crucial to remember to...
7. **Recognize that working is one of the most dangerous forms of procrastination.** When you schedule time to do certain work, you should do *that work*, and nothing else. No filing, no cleaning, no checking emails. Do the scheduled work, or stare at the ceiling. Otherwise, you may work and work and work, and never get around to doing the very thing you set out to do.
8. **Spend time with people who have the habits of learning that you want to emulate.** Studies show that we tend to pick up habits from the people around us, so choose your company wisely. If you know that some of your coworkers make on-the-job learning a habit, go out of your way to spend time with them, and you'll more easily pick up that habit yourself.

And the most important thing to remember about habit change? We must shape our habits to suit ourselves — our own nature, our own interests, our own strengths. When we understand ourselves, we can apply habit-forming strategies with the greatest chance of success.

## The field of natural language processing is chasing the wrong goal

Researchers are too focused on whether AI systems can ace tests of dubious value. They should be testing whether systems grasp how the world works.

by

- [Jesse Dunietz archive page](#)

July 31, 2020

MS TECH | UNSPLASH

At a typical annual meeting of the [Association for Computational Linguistics](#) (ACL), the program is a parade of titles like "[A Structured Variational Autoencoder for Contextual Morphological Inflection.](#)" The same technical flavor permeates the papers, the research talks, and many hallway chats.

At this year's [conference](#) in July, though, something felt different—and it wasn't just the virtual format. Attendees' conversations were unusually introspective about the core methods and objectives of natural-language processing (NLP), the branch of AI focused on creating systems that analyze or generate human language. Papers in this year's new "[Theme](#)" track asked

questions like: Are current methods [really enough](#) to achieve the field's ultimate goals? [What](#) even are those goals?

My colleagues and I at [Elemental Cognition](#), an AI research firm based in Connecticut and New York, see the angst as justified. In fact, we believe that the field needs a transformation, not just in system design, but in a less glamorous area: evaluation.

The current NLP zeitgeist arose from half a decade of steady improvements under the standard evaluation paradigm. Systems' ability to comprehend has generally been measured on [benchmark data sets](#) consisting of thousands of questions, each accompanied by passages containing the answer. When deep neural networks swept the field in the mid-2010s, they brought a quantum leap in performance. Subsequent rounds of work kept inching scores ever closer to 100% (or at least to parity with humans).

So researchers would publish new data sets of [even trickier questions](#), only to see even bigger neural networks quickly post impressive scores. Much of today's reading comprehension research entails carefully tweaking models to eke out a few more percentage points on the latest data sets. "State of the art" has practically become a proper noun: "We beat SOTA on [SQuAD](#) by 2.4 points!"

But [many people in the field](#) are growing weary of such leaderboard-chasing. What has the world really gained if a massive neural network achieves SOTA on some benchmark by a point or two? It's not as though anyone cares about answering these questions for their own sake; winning the leaderboard is an academic exercise that may not make real-world tools any better. Indeed, many apparent improvements emerge not from general comprehension abilities, but from models' extraordinary skill at [exploiting spurious patterns](#) in the data. Do recent "advances" really translate into helping people solve problems?

Such doubts are more than abstract fretting; whether systems are truly proficient at language comprehension has real stakes for society. Of course, "comprehension" entails a broad collection of skills. For simpler applications—such as retrieving Wikipedia factoids or assessing the sentiment in product reviews—modern methods [do pretty well](#). But when people imagine computers that comprehend language, they envision far more sophisticated behaviors: legal tools that help people analyze their predicaments; research assistants that synthesize information from across the web; robots or game characters that carry out detailed instructions.

Today's models are nowhere close to achieving that level of comprehension—and it's not clear that yet another SOTA paper will bring the field any closer.

How did the NLP community end up with such a gap between on-paper evaluations and real-world ability? In an ACL [position paper](#), my colleagues and I argue that in the quest to reach difficult benchmarks, evaluations have lost sight of the real targets: those sophisticated downstream applications. To borrow a line from the paper, the NLP researchers have been training to become professional sprinters by "glancing around the gym and adopting any exercises that look hard."

To bring evaluations more in line with the targets, it helps to consider what holds today's systems back.

A human reading a passage will build a detailed representation of entities, locations, events, and their relationships—a “mental model” of the world described in the text. The reader can then fill in missing details in the model, extrapolate a scene forward or backward, or even hypothesize about counterfactual alternatives.

This sort of modeling and reasoning is precisely what automated research assistants or game characters must do—and it's conspicuously missing from today's systems. An NLP researcher can usually stump a state-of-the-art reading comprehension system within a few tries. One [reliable technique](#) is to probe the system's model of the world, which can leave even the much-ballyhooed GPT-3 [babbling](#) about cycloptic blades of grass.

Imbuing automated readers with world models will require major innovations in system design, as discussed in [several Theme-track submissions](#). But our argument is more basic: however systems are implemented, if they need to have faithful world models, then evaluations should systematically test whether they have faithful world models.

Stated so baldly, that may sound obvious, but it's rarely done. Research groups like the [Allen Institute for AI](#) have [proposed](#) other ways to harden the evaluations, such as targeting diverse linguistic structures, asking questions that rely on multiple reasoning steps, or even just [aggregating](#) many [benchmarks](#). Other researchers, such as [Yejin Choi](#)'s group at the University of Washington, have focused on testing [common sense](#), which pulls in aspects of a world model. Such efforts are helpful, but they generally still focus on compiling questions that today's systems struggle to answer.

We're proposing a more fundamental shift: to construct more meaningful evaluations, NLP researchers should start by thoroughly specifying what a system's world model should contain to be useful for downstream applications. We call such an account a “template of understanding.”

One particularly promising testbed for this approach is fictional stories. Original stories are information-rich, un-Googleable, and central to many applications, making them an ideal test of reading comprehension skills. Drawing on cognitive science literature about human readers, our CEO [David Ferrucci](#) has proposed a four-part template for testing an AI system's ability to understand stories.

- **Spatial:** Where is everything located and how is it positioned throughout the story?
- **Temporal:** What events occur and when?
- **Causal:** How do events lead mechanistically to other events?
- **Motivational:** Why do the characters decide to take the actions they take?

By systematically asking these questions about all the entities and events in a story, NLP researchers can score systems' comprehension in a principled way, probing for the world models that systems actually need.

It's heartening to see the NLP community reflect on what's missing from today's technologies. We hope this thinking will lead to substantial investment not just in new algorithms, but in new and more rigorous ways of measuring machines' comprehension. Such work may not make as many headlines, but we suspect that investment in this area will push the field forward at least as much as the next gargantuan model.

*[Jesse Dunietz](#) is a researcher at [Elemental Cognition](#), where he works on developing rigorous evaluations for reading comprehension systems. He is also an educational designer for MIT's [Communication Lab](#) and a [science writer](#).*

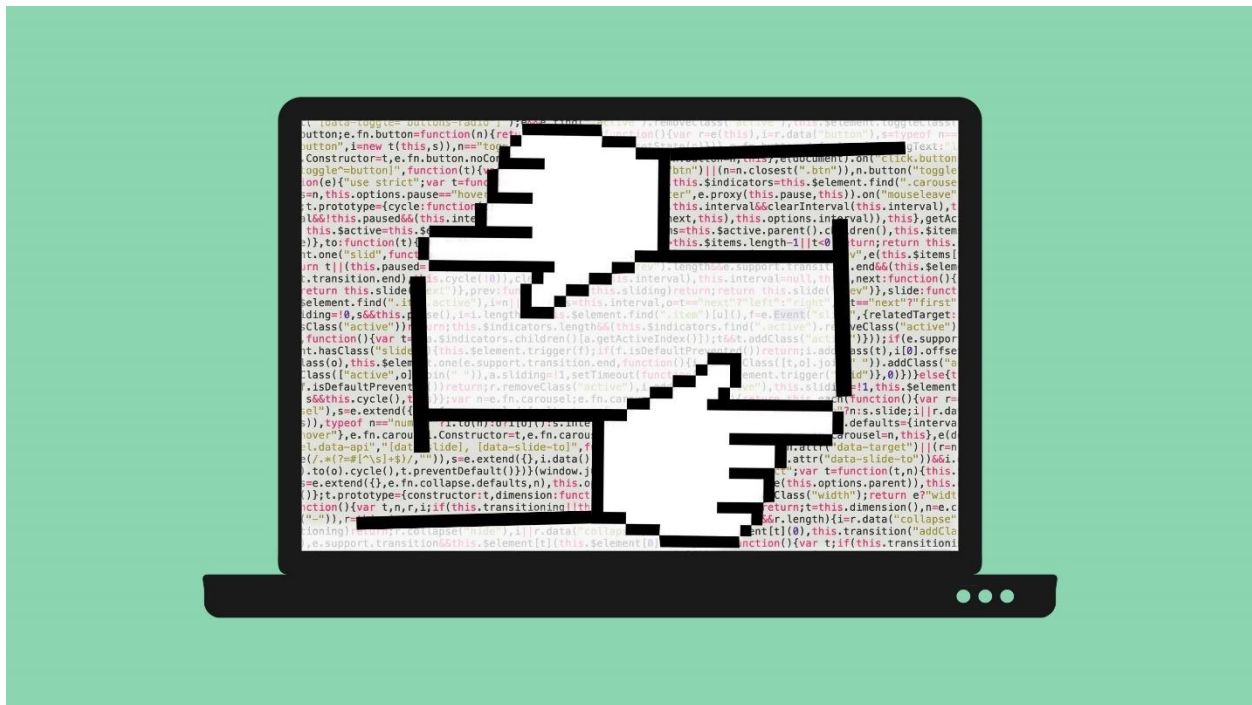
# A new neural network could help computers code themselves

The tool spots similarities between programs to help programmers write faster and more efficient software.

by

- [Will Douglas Heaven](#) archive page

July 29, 2020



MS TECH

Computer programming has never been easy. The first coders wrote programs out by hand, scrawling symbols onto graph paper before converting them into large stacks of punched cards that could be processed by the computer. One mark out of place and the whole thing might have to be redone.

Nowadays coders use an array of powerful tools that automate much of the job, from catching errors as you type to testing the code before it's deployed. But in other ways, little has changed. One silly mistake can still crash a whole piece of software. And as systems get more and more complex, tracking down these bugs gets more and more difficult. "It can sometimes take teams of coders days to fix a single bug," says Justin Gottschlich, director of the machine programming research group at Intel.

## Sign up for **The Algorithm**

- Artificial intelligence, demystified

Sign up

Stay updated on MIT Technology Review initiatives and events?

Yes  No

That's why some people think we should just get machines to program themselves. Automated code generation has been a hot research topic for a number of years. Microsoft is building basic code generation into its widely used software development tools, Facebook has made a system called [Aroma](#) that autocompletes small programs, and DeepMind has developed a neural network that can come up with [more efficient versions](#) of simple algorithms than those devised by humans. Even OpenAI's GPT-3 language model can [churn out simple pieces of code](#), such as web page layouts, from natural-language prompts.

Gottschlich and his colleagues call this [machine programming](#). Working with a team from Intel, MIT and the Georgia Institute of Technology in Atlanta, he has developed a system called [Machine Inferred Code Similarity](#), or MISIM, that can extract the meaning of a piece of code—what the code is telling the computer to do—in much the same way as natural-language processing (NLP) systems can read a paragraph written in English.

MISIM can then suggest other ways the code might be written, offering corrections and ways to make it faster or more efficient. The tool's ability to understand what a program is trying to do lets it identify other programs that do similar things. In theory, this approach could be used by machines that wrote their own software, drawing on a patchwork of preexisting programs with minimal human oversight or input.

MISIM works by comparing snippets of code with millions of other programs it has already seen, taken from a large number of online repositories. First it translates the code into a form that

captures what it does but ignores how it is written, because two programs written in very different ways sometimes do the same thing. MISIM then uses a neural network to find other code that has a similar meaning. In a [preprint](#), Gottschlich and his colleagues report that MISIM is 40 times more accurate than previous systems that try to do this, including Aroma.

MISIM is an exciting step forward, says Veselin Raychev, CTO at the Swiss-based company DeepCode, whose bug-catching tools—among the most advanced on the market—use neural networks trained on millions of programs to suggest improvements to coders as they write.

But machine learning is still not great at predicting whether or not something is a bug, says Raychev. That's because it is hard to teach a neural network what is or isn't an error unless it has been labeled as such by a human.

There's a lot of interesting research being done with deep neural networks and bug fixing, he says, "but practically they're not there yet, by a very big margin." Typically AI bug-catching tools produce lots of false positives, he says.

MISIM gets around this by using machine learning to spot similarities between programs rather than identifying bugs directly. By comparing a new program with an existing piece of software that is known to be correct, it can alert the coder to important differences that could be errors.

Intel plans to use the tool as a code recommendation system for developers in-house, suggesting alternative ways to write code that are faster or more efficient. But because MISIM is not tied to the syntax of a specific program, there is much more it could potentially do. For example, it could be used to translate code written in an old language like COBOL into a more modern language like Python. This matters because a lot of institutions, including the [US government](#), still rely on software written in languages that few coders know how to maintain or update.

Ultimately, Gottschlich thinks this idea could be applied to natural language. Combined with NLP, the ability to work with the meaning of code separately from its textual representation could one day let people write software simply by describing what they want to do in words, he says.

"Building little apps for your phone, or things like that that will help your everyday life—I think those are not too far off," says Gottschlich. "I would like to see 8 billion people create software in whatever way is most natural for them."

## The problems AI has today go back centuries

Algorithmic discrimination and "ghost work" didn't appear by accident. Understanding their long, troubling history is the first step toward fixing them.

by

- [Karen Hao archive page](#)

July 31, 2020

In March of 2015, protests broke out at the University of Cape Town in South Africa over the campus statue of British colonialist Cecil Rhodes. Rhodes, a mining magnate who had gifted the land on which the university was built, had committed genocide against Africans and laid the foundations for apartheid. Under the rallying banner of “Rhodes Must Fall,” students demanded that the statue be removed. Their protests sparked a global movement to eradicate the colonial legacies that endure in education.

The events also provoked Shakir Mohamed, a South African AI researcher at DeepMind, to reflect on what colonial legacies might exist in his research as well. In 2018, just as the AI field was beginning to reckon with problems like algorithmic discrimination, Mohamed penned [a blog post](#) with his initial thoughts. In it he called on researchers to “decolonise artificial intelligence”—to reorient the field’s work away from Western hubs like Silicon Valley and engage new voices, cultures, and ideas for guiding the technology’s development.

Now in the wake of [renewed cries](#) for “Rhodes Must Fall” on Oxford University’s campus, spurred by George Floyd’s murder and the global antiracism movement, Mohamed has [released a new paper](#) along with his colleague William Isaac and Oxford PhD candidate Marie-Therese Png. It fleshes out Mohamed’s original ideas with specific examples of how AI challenges are rooted in colonialism, and presents strategies for addressing them by recognizing that history.

## How coloniality manifests in AI

Though historical colonialism may be over, its effects still exist today. This is what scholars term “coloniality”: the idea that the modern-day power imbalances between races, countries, rich and poor, and other groups are extensions of the power imbalances between colonizer and colonized.

Take structural racism as an example. Europeans originally invented the concept of races and the differences between them to justify the African slave trade and then the colonization of African countries. In the US, the effects of that ideology can now be traced through the country’s own history of slavery, Jim Crow, and police brutality.

## Sign up for The Algorithm

- Artificial intelligence, demystified

Sign up

Stay updated on MIT Technology Review initiatives and events?

Yes  No

In the same way, the paper's authors argue, this colonial history explains some of the most troubling characteristics and impacts of AI. They identify five manifestations of coloniality in the field:

**Algorithmic discrimination and oppression.** The ties between algorithmic discrimination and colonial racism are perhaps the most obvious: algorithms built to automate procedures and trained on data within a racially unjust society end up replicating those racist outcomes in their results. But much of the scholarship on this type of harm from AI focuses on examples in the US. Examining it in the context of coloniality allows for a global perspective: America isn't the only place with social inequities. "There are always groups that are identified and subjected," Isaac says.

**Ghost work.** The phenomenon of [ghost work](#), the invisible data labor required to support AI innovation, neatly extends the historical economic relationship between colonizer and colonized. Many former US and UK colonies—the Philippines, Kenya, and India—have become ghost-working hubs for US and UK companies. The countries' cheap, English-speaking labor forces, which make them a natural fit for data work, exist because of their colonial histories.

**Beta testing.** AI systems are sometimes tried out on more vulnerable groups before being implemented for "real" users. Cambridge Analytica, for example, beta-tested its algorithms on the 2015 Nigerian and 2017 Kenyan elections before using them in the US and UK. Studies later found that these experiments [actively disrupted](#) the Kenyan election process and eroded social cohesion. This kind of testing echoes the British Empire's historical treatment of its colonies as laboratories for new medicines and technologies.

**AI governance.** The geopolitical power imbalances that the colonial era left behind also actively shape AI governance. This has played out in the recent rush to form global AI ethics guidelines: developing countries in Africa, Latin America, and Central Asia have been largely left out of the discussions, which has led some to [refuse to participate in international data flow agreements](#). The result: developed countries continue to disproportionately benefit from global norms shaped for their advantage, while developing countries continue to fall further behind.

**International social development.** Finally, the same geopolitical power imbalances affect the way AI is used to assist developing countries. "AI for good" or "AI for sustainable development" initiatives are often paternalistic. They force developing countries to depend on existing AI systems rather than participate in creating new ones designed for their own context.

The researchers note that these examples are not comprehensive, but they demonstrate how far-reaching colonial legacies are in global AI development. They also tie together what seem like disparate problems under one unifying thesis. "It enables us a new grammar and vocabulary to talk about both why these issues matter and what we are going to do to think about and address these issues over the long run," Isaac says.

## How to build decolonial AI

The benefit of examining harmful impacts of AI through this lens, the researchers argue, is the framework it provides for predicting and mitigating future harm. Png believes that there's really no such thing as "unintended consequences"—just consequences of the blind spots organizations and research institutions have when they lack diverse representation.

In this vein, the researchers propose three techniques to achieve "decolonial," or more inclusive and beneficial, AI:

***Context-aware technical development.*** First, AI researchers building a new system should consider where and how it will be used. Their work also shouldn't end with writing the code but should include testing it, supporting policies that facilitate its proper uses, and organizing action against improper ones.

***Reverse tutelage.*** Second, they should listen to marginalized groups. One example of how to do this is the budding practice of [participatory machine learning](#), which seeks to involve the people most affected by machine-learning systems in their design. This gives subjects a chance to challenge and dictate how machine-learning problems are framed, what data is collected and how, and where the final models are used.

***Solidarity.*** Marginalized groups should also be given the support and resources to initiate their own AI work. Several communities of marginalized AI practitioners already exist, including [Deep Learning Indaba](#), [Black in AI](#), and [Queer in AI](#), and their work should be amplified.

Since publishing their paper, the researchers say, they have seen overwhelming interest and enthusiasm. "It at least signals to me that there is a receptivity to this work," Isaac says. "It feels like this is a conversation that the community wants to begin to engage with."

## **Description**

Amazon Web Service's (AWS) Training and Certification Team is looking for developers, technical trainers or technical instructional designers who want be a part of building exciting and new courses on AWS as a Technical Curriculum Architect.

Customers are rapidly adopting Amazon Web Services (AWS) as a way to build scalable and cost-effective web and IT solutions for their businesses. To do that effectively, they need training, and not just a couple of PowerPoint slides and a long lecture. AWS is developing highly technical courses with extensive hands-on labs (ILT), e-learning courses that can be accessed 24x7, and self-paced labs that get customers deep into AWS technologies. You'll get to teach and play at the same time!

The qualified candidate will have excellent writing skills, a healthy technical knowledge of IT domains and the ability to translate technical content into easy-to-understand training. Additionally, the ideal candidate will have training, instructional design or technical documentation experience. Above all, you will have a passion for learning.

## **Responsibilities**

- Dive deep into AWS technologies, such as Big Data, Web Applications, Security, Networking, High Performance Computing, Storage, Databases, Enterprise Applications, Migration Strategies or other solutions areas to understand the services and develop effective training for our customers.
- Work with audience representatives to understand training needs and collaborate with Subject Matter Experts across AWS (including Developers, Support Engineers, Professional Services, and Solutions Architects) to build technically accurate training that meets the learning objectives.
- Utilize our automated lab and courseware publishing process built on AWS services.
- Build relationships with AWS service teams to understand roadmaps and plan for content updates or new training offerings.
- Respond to changes in products/features by revising content at the pace of innovation.
- Facilitate requirements gathering meetings with curriculum stakeholders to define the appropriate learning objectives, modalities and expectations.
- Earn Trust – Collaborate with multiple cross-functional teams.
- This position may be located in an area other than Seattle, but candidates must be based near an AWS office location (Arlington, Atlanta, Austin, Ballston, Boston, Chicago, Cupertino, Dallas, Denver, Detroit, East Palo Alto, Herndon, Houston, Irvine, Minneapolis, New York City, Pittsburgh, Portland, San Diego, San Francisco, Washington D.C., Tempe, Sunnyvale, Santa Monica)

## **Basic Qualifications**

- Technical degree (e.g. Computer Science, Mathematics) or relevant work experience in programming, systems architecture or systems administration.
- Ability to write and present ideas in a crisp, clear and concise manner.
- Ability to write technical documentations using narratives, charts, graphs and code examples.
- Strong written and verbal communication skills.
- A demonstrated ability to adapt to new technologies and learn quickly.
- Some travel required, primarily for internal meetings and event support (10-25%).
- Experience designing, developing, and delivering instructional materials for technical content.
- A demonstrated ability to work cross-functionally with multiple teams and stakeholders.
- A demonstrated ability to adapt to new technologies and learn quickly.

## **Preferred Qualifications**

- Knowledge and/or hands-on experience with AWS infrastructure services
- Current AWS Certification (Associate or Professional level).
- Hands on experience as a software delivery engineer, manager, system development engineer or developer support engineer
- 3+ years hands on experience working with microservice architectures
- 3+ years hands on experience deploying and operating Kubernetes clusters and workloads within the cluster
- 3+ years design/implementation/deployment experience of advanced compute solutions
- 3+ years experience in one or more of the following areas: Serverless and Container architecture, design or development

- Experience with deployment and operations of workloads on AWS using EC2 Spot, Amazon Elastic Container Service (ECS), Kubernetes or others
- Demonstrated working knowledge of software development methodologies
- Professional experience building systems on Amazon Web Services.
- Experience creating/working with cloud formation templates is a plus.
- Experience working in an Agile environment.

## **Summary**

We are looking for applied scientists with a passion for using machine learning to transform in-the-wild sensor data from the most worn wearable device into intelligent health experiences. You will join a close-knit team of highly accomplished and deeply technical researchers and engineers focused on delivering groundbreaking machine learning technologies to the health space.

As a member of this team, you will use your practical knowledge and experience with data science, machine learning, and artificial intelligence techniques to tackle important technical problems to deliver the next generation of Apple health experiences. You will play a key role in defining, designing, implementing, and evaluating new machine learning models and algorithms for significant problems involving complex data and objectives. In this role, you will collaborate with highly innovative product teams across Apple, and see projects through to deployment on 1 billion Apple devices worldwide.

## **Key Qualifications**

Expertise in at least one area of machine learning, artificial intelligence, or statistics (e.g., health, time series, causal inference, probabilistic modeling, bandits and reinforcement learning, deep learning, optimization, NLP)

Strong interest in applying machine learning to health related problems and data

Ability to distill vague product experiences into concrete problem definitions

Experience using a programming language (Python, R, C/C++ etc.) to manipulate data, draw insights from large data sets, and train machine learning models.

A drive to learn and master new technologies and techniques

A passion for making methods robust and scalable

Excellent verbal and written communication and presentation skills

3–5 years of practical experience applying ML to solve real-world problems or relevant quantitative and qualitative research and analytics experience

## **Description**

- \* Investigating innovative machine learning, artificial intelligence, and statistics techniques for health data challenges
- \* Designing and implementing machine learning pipelines
- \* Modeling complex problems, discovering insights, and identifying opportunities through the use of statistical, algorithmic, and visualization techniques
- \* Processing, cleaning, and verifying the integrity of data used for analysis
- \* Validating your findings using an experimental and iterative approach and effectively presenting back your findings

## **Education & Experience**

- \* MS or PhD in Computer Science, Machine Learning, AI, Statistics, Mathematics, or related quantitative field
- \* Professional certifications

## **Additional Requirements**

- \* 5+ years of practical experience applying ML and/or data science to tackle real-world problems, especially in the health domain
  - \* Proficiency training large scale models using modern machine learning packages (e.g. TensorFlow, PyTorch, autograd), and experience with data analysis stacks (such as NumPy, SciPy, pandas, Spark, etc.)
  - \* Strong fundamentals in problem solving, algorithm design, and model building
  - \* Passion for creating new technologies with high product impact
- Driven by a mission to expand access to higher education through online, competency-based degree programs, WGU is also committed to being a great place to work for a diverse workforce of student-focused professionals. The university has pioneered a new way to learn in the 21st century, one that has received praise from academic, industry, government, and media leaders. Whatever your role, working for WGU gives you a part to play in helping students graduate, creating a better tomorrow for themselves and their families.

## **Position Summary**

Working closely with a team of assessment developers and instructional designers, the senior instructional technologist develops and ensures that online learning product supports the vision and design of WGU courses and learning experiences. The senior instructional technologist works with program owners and the development team to explore technologies which address the needs of the curriculum (e.g., simulations, virtual reality, AI scoring, etc.) and collaborates to recommend technologies that best meet the instructional and assessment practices. The senior instructional technologist is responsible for setting up and building online learning experiences according to the design specifications of the assigned project. This role focuses on troubleshooting, solving technical problems related to delivery of learning and assessment materials, and is responsible for creating a consistent, beautiful learning experience in the selected platform. The senior instructional technologist also ensures that all aspects of the course work properly (hyperlinks, videos, sandboxes, third-party integrations) and collaborates with the standards and practice teams to ensure accessibility, asset management, content delivery, user experience, and universal design practice standards are met. The person in this role is responsible for the success of simultaneous projects, assessing risk, reporting progress, and communicating effectively with stakeholders to promote collaboration and accountability.

### **Essential Functions And Responsibilities**

- Work with instructional designers, assessment developers, and other stakeholders to identify, analyze, test and recommend technologies to best meet instructional and assessment practices
- Proactively engage with accessibility and content teams to prioritize technology product reviews for accessibility and integration standards
- Appraise capabilities, strengths and weaknesses of existing, new, and emerging and innovative e-learning technologies and tools that support college instructional, assessment, and student engagement goals
- Manage the build process for new courses and learning experiences and attend to continuous improvement and technology innovations of assigned projects
- Ensure the quality of the visual and functional design of courses and assessments
- Collaborate with development team members to build superior online courses that are supported by research-based best practices in online learning.
- Work with stakeholders to explore technologies which address the needs of the learner experience (e.g., simulations, virtual reality)
- Serve as consultant, partnering with instructional designers, assessment developers, and other team members to innovatively apply WGU instructional and assessment tools.
- Maintain a complete understanding of all WGU learning and assessment tools and resources.
- Work closely with the accessibility team to ensure that instructional and assessment tools and services are fully accessible to students.
- Work with project managers and other team members to ensure all deadline dates for assigned projects are met throughout the design and development process
- Implement required revisions based on quality assurance reviews
- Assist with identifying and resolving challenges related to technology, to online delivery of content and assessments, and to the student experience
- Stay informed about updates, changes, retiring assets, innovations, and opportunities related to WGU's selected platforms and delivery tools and processes

- Train and mentor team members on assigned WGU technologies

### **Knowledge, Skills And Abilities**

- Current, solid knowledge of instructional design and learning theory
- Current, solid knowledge of instructional technologies or learning platforms
- Troubleshooting and problem solving to leverage platform features and ensure finished products align with the integrity of the learning design
- Build visually engaging content on multiple platforms
- Responsive design of content to be delivered on multiple browsers, platforms, and devices
- Demonstrated ability to learn new technologies, solve emergent technical problems, and share learnings and suggestions with a team to come to a quick, value-driven solution
- Commitment to creating beautiful, friction-free learning experiences for students in competency-based programs
- Strong interpersonal skills and history of positive results achieved collaboratively
- Ability to manage multiple projects at different stages while meeting deadlines and quality standards
- Ability to work independently, under minimal supervision
- Advanced skills in planning, organizing, and self-management

### **Competencies**

- **Problem Solving Skills:** Investigates appropriate resources and involves partners when appropriate; future-oriented; assesses what will help/hinder achieving goals; focuses on what is important.
- **Interpersonal Skills:** Deals with others in a considerate, respectful, and unbiased manner; approaches conflict proactively; solicits and shares feedback openly; listens with empathy and maintains composure.
- **Accuracy:** Draws on factual information garnered from careful cultivation of a broad knowledge of WGU's goals and processes; investigates beyond assumptions.
- **Adaptability:** Course corrects behaviors and communication style to meet the needs of a wide range of situations; tackles obstacles appropriately; is comfortable with ambiguity.
- **Reliability:** Accountable to others; does what it takes to get the job done; actions are consistent with words; follows through on commitments; exhibits exceptional integrity.
- **Attitude:** Displays commitment to the organization and to personal growth; self-motivated and able to motivate and inspire others; asserts self appropriately to champion ideas; tells the truth in a direct and constructive manner.
- **Initiative:** Self-directs with a strong bias for action; leads the way in improvement of performance or processes; displays keen interest in students and organization.

### **Minimum Qualifications**

#### **Qualifications**

- Bachelor's degree
- Two or more years of online university course design or curriculum development experience
- Experience in online learning technologies and pedagogies

- Basic HTML coding skills with additional skills in HTML5, CSS, SML, AWS Cloud, Google Cloud, and Azure
- Background in learner experience design
- Experience with UDL, ADA, and copyright compliance
- Experience with existing quality standards for course design
- Experience with Agile development or rapid prototyping
- Competency in LMS systems and assessment delivery systems such as Blackboard, Canvas, Smart Author, Brightspace, Moodle, etc.
- Competency with educational technology and assessment/testing tools

### **Preferred Qualifications**

- Expertise in competency-based learning
- Superior knowledge of available open educational resources (OERs)
- Quality assurance training and certification (CBEN, OSCQR, other)
- Post-secondary teaching and learning experience
- Proven leadership in developing courses characterized by innovation in instructional design

### **eLearning Specialist**

#### **Description:**

- Under the direction of the Training Design and Development Manager, the candidate will serve as eLearning specialist for the Training Design and Development team in the Systems Training Team. The eLearning Specialist is responsible for the design, development, deployment and maintenance of a catalogue of training materials designed to support our end-users during system upgrades and new system implementations. This role will include the following responsibilities:
- Collaborate with instructional designers and subject matter experts to design, develop and deploy interactive eLearning solutions
- Write scripts, apply graphic design skills, program user interactions, record software simulations, demonstrations, voiceovers, and create all applicable multimedia products to develop eLearning solutions
- Manipulate and edit digital imagery, video and sound
- Create images and animations and develop graphics that identify a concept or convey a message
- Develop online assessment instruments
- Edit and review existing eLearning solutions to keep them current and relevant
- Create and implement designs as needed, including logos, icons, and other graphics that are professional and convey a specific message
- Proactively seek eLearning end-user feedback, and edit materials accordingly
- If consultants are employed to design course materials, review, provide feedback and redesign materials as necessary
- QC the courses and verify every aspect of the learning material works: navigation, spelling, interactions, etc.
- Upload SCORM to our Learning Management System (LMS) and test it to ensure the course meets requirements to pass to production

- Post-production technical assistance to troubleshoot issues, should they occur
- Remain current with technology tools and trends in Digital Learning

**Required Knowledge and Skills:**

- Top 3 skillsets: eLearning design and development, multimedia design, graphic design
- Advanced knowledge and skills on the technical tools and platforms required to achieve the delivery of engaging and media-rich online learning content and of trends in the use and effectiveness of educational technology and learning; skilled in the efficient use of common instructional authoring tools, especially Articulate Storyline and the Articulate 360 suite
- Advanced proficiency and proved experience in eLearning design and development, with a portfolio that highlights a diverse breadth of eLearning course development projects
- Mastery in visual design and usability for eLearning and other types of digital learning
- Ability to independently design and author complex and high-quality instructional content, aligning learning outcomes with course content design guidelines provided by the instructional designer
- Ability to perform multiple, diverse assignments simultaneously while working independently to assure accurate and timely completion of assignments, keeping supervisor advised of progress and problems
- Thorough technical skills in computer applications for web production, image handling, publishing and design, illustration, presentation preparation, video authoring and editing, audio recording and editing, animation and/or other state-of-the-art web communication capabilities
- Expertise on Learning Management Systems
- Ability to communicate effectively with both technical and non-technical clients and to summarize complex concepts in a logically structured, easy to understand manner
- High attention to detail and exceptional written and verbal skills
- Strong problem solving and critical thinking skills
- Ability and desire to work in a fast-paced environment where priorities and projects change frequently
- Knowledge of the technology industry
- Preferred: Coding skills in JavaScript to support eLearning development
- Education and Experience:
  - Bachelor's degree in multimedia design, graphic design, or web design and development.
  - 3+ years of demonstrated experience as an eLearning developer

worldwide, is seeking an Engineering Manager to lead its mobile development. The IXL Mobile team is responsible for one of the best educational apps on the market today, available on both iOS and Android Platforms.

As a key leader and manager of the Mobile team, you will participate directly in software design and engineering, help develop the team by mentoring and coaching, and create processes that ensure productivity and efficiency.

**What You'll Be Doing**

- Lead and mentor a team of talented mobile engineers, both to start projects from scratch as well as to work with the existing code base

- Oversee the development process for your team, including design, coding, documentation, testing, debugging, and tuning
- Coordinate with project managers, designers, and QA
- Ship successful iOS and Android applications
- Provide accurate estimates, evaluate feasibility, and assess new platforms and technologies for application technology and architecture
- Collaborate and communicate clearly across multiple development teams to design and release amazing applications
- Participate in recruiting top software engineers to join our team

### **What We're Looking For**

- Bachelor's or advanced degree in computer science or a related discipline
- At least 5 years of experience in software engineering and at least 2 years of leadership experience
- Experience recruiting and building a team
- Expert-level skills in iOS and/or Android development

Drive the design and development of deep learning technologies for health care applications such as segmentation, anomaly detection, image processing, natural language understanding, time series analysis, etc. Provide guidance to data collection teams on test protocols including design of experiments, sample size, and statistical distributions. Design and implement networks to provide automation of clinical tasks using one or more of medical images, electronic medical records, waveforms, and clinical reports. Demonstrate algorithms meet accuracy requirements on general subject population through statistical analyses and error estimation. Gather and analyze data, devise innovative data science solutions and build prototypes to enable development of high-performance algorithms in scalable, product-ready code. Initiate and propose unique and promising deep learning capabilities, develop new and innovative algorithms and technologies, pursuing patents where appropriate. Stay current on published state-of-the-art algorithms and competing technologies. Contribute to the development of software and data delivery platforms that are service-oriented with reusable components across teams (multiple teams) that can be orchestrated together into different methods for different businesses. Research and evaluate emerging technology, industry and market trends to assist in product development and/or operational support activities to for multiple teams or complex scenarios.

We are looking for engineers with a passion for using machine learning to create intelligent applications. In this highly accomplished, deeply technical and close-knit team of data scientists and machine learning engineers, you will create tools that are used by millions of people. You will design and implement new machine learning algorithms and techniques and collaborate with the most innovative product development teams in the world.

Our team researches new machine learning algorithms, models and techniques that will power amazingly intelligent user experiences. We want new ambitious team members to join our research ML group. In this role, we create new models and algorithms, and actively engage with the academic community by publishing your work and participating in academic efforts. You will also have the

opportunity to contribute to cool projects around Apple, and use your data science, machine learning and artificial intelligence skills to transfer your ideas into solutions for some of the most challenging technical problems in the next generation of products that will delight millions of people.

## **Key Qualifications**

Experience applying machine learning to solve practical problems

Solid understanding of foundational statistics concepts and ML algorithms

Experience working with time-series sensor data (optical, electrical, motion, and other)

Experience building/working with data pipelines

Strong software development skills, with proficiency in Python and C++ preferred

Creative, collaborative, & product focused

## **Description**

Apple's central AI/ML org is looking for Applied Scientists who are passionate about using machine learning to build new user experiences.

The team you will join is responsible for creating innovative experiences with wearables and sensors. We are highly collaborative and partner with a variety of product teams across Apple including Watch, Siri, Accessibility, Home, and others and have shipped features like Raise to Speak on the Apple Watch.

In this role, you will work with time-series data from multiple sensors, build appropriate data and modeling pipelines, apply a variety machine learning techniques, help integrate models on-device to power new experiences, and work with your team to iterate on the end user experience.

## **Education & Experience**

PhD in Machine learning, Statistics, Computer Science, Physics, or related field or

MS in related field with a strong academic track record

3+ years of research experience in academia or industry

Biogen (NASDAQ: BILB) is a biotechnology leader that discovers, develops and delivers innovative therapies to improve the lives of patients. As a company, Biogen recognizes that cutting-edge science and medicines can change the course of devastating neurologic diseases. For more information please visit: [www.biogen.com/careers](http://www.biogen.com/careers)

## **Job Description**

### **Overview**

The Director Machine Learning and Artificial Intelligence, Real World Evidence Strategy and Analytics will lead a team of data scientists to provide machine learning and artificial intelligence solutions for high priority applications in WWM, R&D and Commercial at Biogen. This role reports into the Head, Real World Evidence Strategy and Analytics (ALIGN) within Personalized Health Research, Analytics and Solutions (PHRAS).

### **Primary Responsibilities**

As Director Machine Learning and Artificial Intelligence (MLAI), you will:

- Ensure that staff implement innovative, rigorous MLAI methods to meet project objectives
- Lead and supervise complex MLAI research projects to ensure high quality deliverables
- Provide technical leadership, develop best practices, and expand MLAI capabilities
- Develop partnerships across WWM, R&D and Commercial and participate in cross-functional MLAI initiatives
- Develop and lead strategic open innovation partnerships using MLAI methods
- Work with colleagues within ALIGN to allocate MLAI and other data sciences resources with appropriate level of experience based on project requirements
- Collaborate with and provide oversight to external entities (e.g. consultants and vendors) in the development and application of MLAI methods
- Play a leading role in planning the size and composition of MLAI team, recruiting high quality candidates, and building and leading a high performing team of MLAI data scientists
- Oversee career progression of staff in terms of MLAI skills, consulting, and administrative processes

### **Qualifications**

#### **Qualifications / Skills**

- Thorough understanding of machine learning and artificial intelligence methodologies.
- Expertise in high dimensional data derived from digital health applications, biomarkers, genomics analyses, and imaging
- Able to manage multiple projects simultaneously, to manage conflicting priorities, and to be flexible when priorities change
- Able to manage, mentor and direct multiple staff
- Able to write and present information effectively, explain methodology and the consequences of decisions in lay terms

- Demonstrate strong organizational skills, including the ability to prioritize

## **Education**

- MS or PhD in Computer Science, Biostatistics, Machine Learning & Artificial Intelligence, Physics, Mathematics, Computational Chemistry, Chemistry, Bioinformatics, or Computational Biology
- 10-12 years of experience in complex analytics and data sciences, high dimensional data, and digital health.

Clarifai is an artificial intelligence company that excels at visual recognition. We do not sell abstract, futuristic technology - we sell a solution that businesses can use to solve real-world problems. We believe that the same AI technology that gives big tech companies a competitive edge should be available to developers and businesses of any size or budget. That's why we build products to make it easy, quick, and inexpensive for developers and businesses to innovate with AI, go to market faster, and build better customer experiences.

We have secured a \$30M Series B round of funding and are backed by Menlo Ventures, Google Ventures, USV, NVIDIA, Qualcomm, Osage, Lux Capital, LDV Capital, and Corazon Capital. To continue to succeed, we need people like you to join the team in Washington, DC to work on our government projects!

Clarifai is proud to be an equal opportunity workplace dedicated to pursuing and hiring a diverse workforce.

## **Your Impact**

You'll join our Applied Machine Learning Team and help our team drive customer acquisition and revenue growth in 2020. You value collaboration and want to work closely with others in the company, including research, backend, infrastructure, product, frontend, and design. You'll help build and maintain our customer models and visual search technology. You have the ability to make a significant impact on the company and the AI space as a whole.

## **Your Opportunity**

- Train public and private custom models with curated data and evaluate model performance. We are always looking to increase our accuracy and refine our current models.
- Work with our senior engineers to improve our object detection, segmentation, tracking, visual search and develop new products.
- Help the team deploy production ready models to customers. We anticipate that customers will have steady feedback for us on the models, so we should be focusing on using that feedback to make frequent model improvements.
- Help maintain our research ML infrastructure.
- Collaborate with the research team, and make sure solutions worked out by our research team are production ready. We value alignment between the Applied Machine Learning and research teams, and this is key to our continued success.

## **Requirements**

- 3+ years of hands-on experience crafting and experimenting with neural networks, machine learning techniques and computer vision
- Experience with imaging or NLP modalities
- Fluent with using a neural network framework such as TensorFlow, Keras, Caffe, or Torch, and understanding how back-propagation works
- Fluent with Python, as well as experience with packages such as NumPy, pandas, scikit-learn, and matplotlib.

## **Great To Have**

- Experience with search infrastructure or GO language
- Experience with TensorRT, Deepstream Projects in video, speech, or NLP
- Experience with government contracts and interactions
- Published Research papers/patents

## **Objectives**

You'll thrive in this role if you love to learn fast and move fast.

## **In Your First 30 Days, You Will**

- Get up to speed on either a customer-facing ML project or a component of our ML infrastructure for training our models
- Learn how we work with both the Research team and the Backend team
- Have created your own branch and begun coding

## **60 Days In, You Will**

- Be adding either functionality or scalability to key software components, under the guidance of a Senior AML Engineer
- Have contributed to at least one biweekly sprint
- Helped ship something a customer cares about

## **180 Days In, You Will**

- Invented a new way to do something
- Improved the platform to make other engineers and scientists more efficient

NVIDIA's Deep Learning Institute (DLI) is looking for a learning platform engineer to join our global training team. Through our workshops and online courses, DLI helps our community of over 1.5M

developers and other stakeholders learn how to tackle challenging problems and improve their products & services through the power of technology and artificial intelligence. We operate like a startup, but with the support and encouragement of a much larger organization.

Since its inception, DLI has trained more than 200,000 developers, data scientists and researchers worldwide on the tools and technology of GPU-accelerated computing. We are looking to grow that number exponentially as artificial intelligence, data science and high performance computing become central to technological innovation. You will have the opportunity to help advance development in some of the world's most meaningful and exciting AI applications, including Robotics, Autonomous Vehicles and Healthcare. We deliver our programs through a mix of instructor-led on-site workshops and online digital offerings.

### **What You'll Be Doing**

- Building tools and documentation to scale the DLI platform worldwide, via new deployments and integrations.
- Building new orchestration and administration features, to optimize technical delivery and bring new GPU learning activities to students.
- Implementing and maintaining data processing pipelines, enabling data-driven decision-making across DLI activities.
- Planning and coordinating DLI technical requirements for events and conferences, in collaboration with CSPs and course developers.
- Administering and maintaining DLI's Open edX Learning Management System, to provide a good student experience to learners.
- Supporting learners, instructors and content developers by troubleshooting issues and providing technical guidance on topics in AI, accelerated computing, and containerized GPU applications.
- Staying on top of the latest developments in GPU computing, including the latest hardware, tools, and techniques.

### **What We Need To See**

- Passion to build, operate, maintain and support a live platform.
- Confirmed experience of 3+ years developing full stack web applications.
- 2+ years professional experience building applications in Python.
- 1+ year maintaining production applications in AWS, Azure or GCP.
- 1+ year building and maintaining RESTful applications using containerized microservices.
- Bachelor's degree in computer science, computer engineering or a related field or equivalent experience.
- A desire to help the world work more optimally using GPUs.
- Excellent verbal and written communication skills in English.
- Ability to work effectively in a fast paced highly multifaceted work environment.

### **Ways To Stand Out From The Crowd**

- Familiarity with GPU accelerated computing, including building, maintaining and solving containerized Jupyter notebook environments or similar.
- Experience operating, integrating and extending the Open edX LMS.
- Cloud resource orchestration using Terraform.
- Building and maintaining Kubernetes clusters.
- Experience building and maintaining Apache Airflow DAGs.
- Web services development using Django and/or Flask.

We are looking for an experienced Software Engineer to join our rapidly growing Artificial Intelligence team. News and social media move financial markets. We are one of the largest producers of news in the world and ingests over 70,000 external news feeds and social media like Twitter each day. This data keeps our clients informed, and our team's insights help make sense of it for our customers.

### **Who are we?**

Our Artificial Intelligence (AI) group: researchers and engineers who have a passion for solving complex problems. Our charter: to extract relevant, meaningful, tradable, and actionable information (pricings, earnings, recommendations and major events) from data (news, web, social media, and structured data) in real-time. Since our customers rely on this information to make swift financial decisions, we guarantee precision, accuracy and latency beyond most academic and industry standards.

### **Who are you?**

A strong software engineer who enjoys building and improving complex, large-scale systems. You like writing testable and maintainable code. You are autonomous: you know whether your time is best spent thinking about the architecture or writing a tool that helps you get the job done. You want to join a close-knit group and make a big impact.

Help us improve our low-latency, high-volume pipeline, which carries two million news stories and half a billion tweets daily. You will integrate new functionality, such as supporting more document formats and publishing the output of our AI systems to more downstream listeners. You will improve the speed and reliability of the existing pipeline.

### **We'll trust you to:**

- Write, test and maintain production-quality code
- Work in a fast-paced and agile environment to deliver high-quality features to our clients
- Improve our SDLC processes

### **You'll need to have:**

- 5+ years of software development experience
- Bachelor's degree or higher in a Computer Science or related field
- Experience building large-scale software systems: developing, testing, and maintaining them
- Experience with multithreading and distributed computing
- Strong coding skills in one or more of: C/C++, Python, Java
- Experience with version control tools such as Git and SVN
- Interest in building and maintaining Machine Learning applications. Experience is a plus!

**We'd love to see:**

- In-depth knowledge of toolchains (build systems, compilers, linkers, interpreters, debuggers, profilers)
- Strong Linux/UNIX skills
- Experience designing and using relational databases
- Experience building and maintaining large-scale systems
- Knowledge of artificial intelligence, machine learning, or natural language processing

Decooda is seeking a marketing data scientist to join our entrepreneurial team. If you are a curious high-achiever that is interested in leveraging game-changing technologies to solve big challenges and turn the world on its head, then Decooda may be the place for you.

Decooda, an exciting big data, analytics, and data science technology startup building its team in Atlanta. We are seeking data science experts that are familiar with traditional analytics, statistics and machine learning. The marketing data scientist's responsibilities will involve creating tools and advancing the firm's analytics and insights capabilities. Example projects include creating systems and modules to access, manipulate, and produce outputs from social media, enterprise, third-party, IoT and machine data. Projects also include creating coding and testing modules that enhance and expand the capabilities of the team's text processing and machine learning systems.

**Requirement: Must have green card or be US citizen**

**Your Role Will Include**

- Creating output to explain data analysis, data visualization, and statistical modeling
- Creating R (Shiny) applications to create insights into our data
- Research, Recommend and implement various Topics Modeling Approach
- Tuning Various Machine Learning Models:

**Technologies Required:** R, R-Shiny, Python, SQL, HTML, CSS

**Knowledge Of The Following Is a Plus**

- Naïve Bayes
- Neural Networks
- K-Nearest Neighbor
- SVM
- Forest and Trees
- Gradient Boosting
- Regression
- Jupyter Notebook
- openNLP
- StanfordNLP
- GATE
- NLTK
- Mallet

- Graph / Neo4j
- MySQL
- Postgres
- ElasticSearch
- matplotlib
- numpy
- scikit-learn
- scipi
- pymc3

### **Skills & Requirements**

- We are looking for candidates with a qualitative and quantitative background with a degree in majors such as Computer Science, Engineering, Science, Mathematics, Economics, Computational Linguistics or similar.
- Please include, in CV/resume or separately, detailed descriptions of past relevant projects. Decooda can only consider candidates who are legally authorized to work in the U.S. without sponsorship. Decooda is an equal opportunity employer.
- The ideal candidate is curious and versatile, and eager to tackle complex problems. The position offers a diverse range of projects and the opportunity to quickly have a direct impact upon the organization.
- The marketing data scientist must be comfortable working in an agile development environment with high expectations for rapid delivery of prototypes, changing requirements, and direct feedback from the internal business customer.
- Candidates should be able to learn on the fly and be capable of taking responsibility for delivering defined objectives.

Hands-on experience coding in Python, R or other advanced programming languages is required for this role, as is experience working with large datasets using SQL.

Decooda is a rapidly evolving AI based market insights company. Our mission is to turn data into actionable insights that enable marketing and sales teams to identify differentiated customer insights and behavior that can drive real-time consumer targeting and engagement. We achieve our goals through a combination of developing cutting-edge cognitive analytics, massive parallel processing approaches, and creative deep learning and artificial intelligence techniques.

### **About Neudesic**

Passion for technology drives us, but it's innovation that defines us. From design to development and support to management, Neudesic offers decades of experience, proven frameworks and a disciplined approach to quickly deliver reliable, quality solutions that help our customers go to market faster.

What sets us apart from the rest, is an amazing collection of people who live and lead with our core values. We believe that everyone should be **Passionate** about what they do, **Disciplined** to the core, **Innovative** by nature, committed to a **Team** and conduct themselves with **Integrity**. If these attributes mean something to you - we'd like to hear from you.

### **Role Profile**

Neudesic is currently seeking a Senior Data Scientist for our Phoenix, Arizona market. This role requires the perfect mix of being a brilliant technologist and a deep appreciation for how technology drives business value. You will have a broad and deep technology background and the ability to build end-to-end machine learning solutions that solve client business problems. You must have demonstrated the ability to engage senior-level, technology decision-makers in data management, real-time analytics, predictive analytics and data visualization.

To be successful delivering ML/DL projects to completion, you must exhibit strong leadership qualities necessary for building trust with clients and technologists. You will partner with solution architects to drive client success by providing practical guidance based on your experience in data science and machine learning. You will partner with a diverse sales unit to professionally represent Neudesic and drive business results. In addition, you will assist in creating sales assets that clearly communicate our value proposition to technical decision-makers.

**Requirements:**

- At least 5 years business domain experience implementing data-driven, analytical solutions that improve product development, marketing, or other business objectives that were operationalized and delivered actual results to the business.
- Advanced knowledge of multivariate statistics, correlation analysis, dimensionality reduction and hypothesis testing
- Proficiency in Python and R
- Experience deploying models, operationalizing models into business processes, and monitoring models running in production
- Advanced knowledge of machine learning models and techniques (regression, classification, decision trees, clustering, and neural networks, etc.)
- Proficiency coding Keras/TensorFlow or PyTorch in Python
- Deep understanding of ML model diagnostics, tuning and the interpretation of models
- Strong data wrangling skills and proven experience working with large, complex datasets
- Experience working with big data tools/environments, such as, Hadoop, Spark, Apache Beam, and Databricks is a strong plus
- Proficiency with Linux/Unix environments
- Proven experience building and deploying ML models in a serverless cloud computing platform (Google Cloud, Azure, or AWS)
- Expert in at least one machine learning use case, such as, Natural Language Processing, Computer Vision, Time Series Forecasting, etc.
- Ability to tell stories and make recommendations with data visually using Power BI and Tableau

**Additional Skills & Competencies:**

- Bachelor's degree in a quantitative field like Computer Science, Data Science, Business Analytics, Statistics, Mathematics or related field is required. Advanced degree preferred
- Ability to work directly with business development teams during project envisioning (e.g., proposal generation, statements of work, RFP/RFQ creation and delivery) to come up with the best solution for given requirements, with the ability to provide reasonably accurate estimates for projects
- Distinctive communications skills and the ability to communicate analytical and technical content in an easy-to-understand way

- Excellent interpersonal and organizational skills, ability to handle diverse situations, multiple projects and rapidly changing priorities.
- Ability to communicate with clients at all levels.
- Ability to travel up to 25%

### **More about our Predictive Enterprise Service Line:**

The digital business uses data as a competitive differentiator. The explosion of big data, machine learning and cloud computing power creates an opportunity to make a quantum leap forward in business understanding and customer engagement. The availability of massive amounts of information, massive computing power and advancements in artificial intelligence allow the digital business to more accurately predict, plan for and capture opportunity unlike ever before. The predictive enterprise service line is the evolution from using data strictly as a reporting mechanism of what's happened to leveraging the latest in advanced analytics to predict and prescribe future business action. Our services include:

- **Data Management Solutions:** We build architectures, policies, practices and procedures that manage the full data lifecycle of an enterprise. We bring internal and exogenous datasets together to formulate new perspectives and drive to data-thinking.
- **Self-Service Data Solutions:** We create classic self-service and modern data-blending solutions that enable end-users to enrich pre-authored analytic reports by blending them with additional data sources.
- **Real-Time Analytic Solutions:** We build real-time analytics solutions on data-in-motion that eliminate the dependency on stale and static data sets resulting in the ability to immediately query and analyze diverse data sets.
- **Machine Learning Solutions:** We build machine-learning solutions that support the most complex decision support systems

Amazon is seeking an experienced, self-directed data scientist to support the research and analytical needs of Amazon Web Services' Sales teams. This is a unique opportunity to invent new ways of leveraging our large, complex data streams to automate sales efforts and to accelerate our customers' journey to the cloud. This is a high-visibility role with significant impact potential.

### **About AWS**

Amazon Web Services (AWS) provides companies of all sizes with an infrastructure web services platform in the cloud ("cloud computing"). With AWS you can requisition compute power, storage, and many other services – gaining access to a suite of elastic IT infrastructure services as your business demands them. AWS is the leading platform for designing and developing applications for the cloud and is growing rapidly with hundreds of thousands of companies in over 190 countries on the platform.

### **About You**

You, as the right candidate, are adept at executing every stage of the machine learning development life cycle in a business setting; from initial requirements gathering to through final model deployment, including adoption measurement and improvement. You will be working with large

volumes of structured and unstructured data spread across multiple databases and can design and implement data pipelines to clean and merge these data for research and modeling.

Beyond mathematical understanding, you have a deep intuition for machine learning algorithms that allows you to insist on defining the problem so that you can anticipate and suggesting appropriate algorithm applications. You're talented at communicating your results clearly to business owners in concise, non-technical language.

What you will do

- Work with a team of data scientists and engineers to define business problems.
- Deliver quantitative research and develop predictive models in an Agile research and development environment.
- Collaborate with central economics, machine learning, data engineering, sales operations, finance, other analytics teams, and business partners (customers) to ensure the most efficient and effective allocation of resources to tackle our team's agenda.
- Use AWS services like SageMaker to build scalable ML models in the cloud.
- Examples of project assignments include modeling usage of AWS services to determine recommend optimal sales planning, quota setting, territory coverage, recruiting needs, office planning and more
- Support the analytical needs of the team inclusive of routine reporting, statistical inference, predictive modeling and simulation

### **Basic Qualifications**

- 2+ years of professional work experience in Machine Learning, Data Science, Computer Science, Artificial Intelligence, Predictive Analytics or similar fields.
- Previous experience working in the areas of inferential statistics, machine learning, simulation and predictive modeling.
- Fluency in SQL and at least one of the following programming languages: Python, Scala, Julia, R
- Experience with statistical analysis and model prototyping environments (SAS, SPSS, etc.)

### **Preferred Qualifications**

- A Masters or PhD in statistics, economics, computer science, machine learning, operational research, or another highly quantitative field.
- Experience with the Sales, Operations, Marketing, or Autonomous Vehicle domains
- Industry experience building/operating highly available, distributed systems for data analytics
- Experience with AWS ML and supporting services
- Strong communication skills in both technical and non-technical settings.

Amazon.com's Buyer Risk Prevention's (BRP) mission is to make Amazon the safest and most trusted place worldwide to transact online. BRP safeguards every financial transaction across all Amazon sites. As such, BRP designs and builds the software systems, risk models, and operational processes that minimize risk and maximize trust in Amazon.com. The BRP organization is looking for a Applied Scientist for its Risk Mining Analytics (RMA)'s team, whose mission is to combine advanced analytics with investigator insight to detect negative customer experience, improve system effectiveness, and

prevent bad debt across Amazon.

As a Applied Scientist, you will be responsible for modeling complex problems, discovering insights, and building cutting edge risk algorithms that identify opportunities through statistical models, machine learning, and visualization techniques to improve operational efficiency and reduce bad debt.

You will need to collaborate effectively with business and product leaders within BRP and cross-functional teams to build scalable solutions against high organizational standards. The candidate should be able to apply a breadth of tools, data sources, and ML techniques to answer a wide range of high-impact business questions and proactively present new insights in concise and effective manner.

The candidate should be an effective communicator capable of independently driving issues to resolution and communicating insights to non-technical audiences. This is a high impact role with goals that directly impacts the bottom line of the business.

### **Responsibilities**

- Analyze terabytes of data to define and deliver on complex analytical deep dives to unlock insights and build scalable solutions through Data Science/ML to ensure security of Amazon's platform and transactions
- Build Machine Learning and/or statistical models that evaluate the transaction legitimacy and track impact over time
- Ensure data quality throughout all stages of acquisition and processing, including data sourcing/collection, ground truth generation, normalization, transformation, and cross-lingual alignment/mapping
- Define and conduct experiments to validate/reject hypotheses, and communicate insights and recommendations to Product and Tech teams
- Develop efficient data querying infrastructure for both offline and online use cases
- Collaborate with cross-functional teams from multidisciplinary science, engineering and business backgrounds to enhance current automation processes
- Learn and understand a broad range of Amazon's data resources and know when, how, and which to use and which not to use.
- Research and implement novel machine learning and statistical approaches
- Maintain technical document and communicate results to diverse audiences with effective writing, visualizations, and presentations

### **Basic Qualifications**

- Masters in quantitative discipline, e.g. Mathematics, Statistics, Operations Research, Artificial Intelligence
- 3+ years' experience in business analytics, forecasting or business planning with emphasis on analytical modeling, quantitative reasoning and metrics reporting preferably from an internet environment

- 3+ years of hands on experience with statistical software tools: SAS, SPSS, Strata, R, Python or Matlab
- Experience in machine learning and statistical techniques such as classification, clustering, regression, statistical inference, collaborative filtering, and natural language processing, experimental design, social networking analysis, feature engineering etc.
- Demonstrate understanding and experience with relational data sets, data warehouses, data mining and data analysis techniques

Amazon is an Equal Opportunity-Affirmative Action Employer – Minority / Female / Disability / Veteran / Gender Identity / Sexual Orientation

### **Preferred Qualifications**

- A PhD in CS, Machine Learning, Statistics, Operations Research, Artificial Intelligence
- 4+ years of industry experience in predictive modeling and analysis
- Compelling communication and influencing skills and participation in winning the support of management and influence the course of major strategic decisions
- Experience in e-commerce / on-line companies in fraud / risk control functions

Microsoft Research AI (MSR AI) is a research organization that brings together the breadth of talent across Microsoft Research to pursue game-changing advances in artificial intelligence.

We seek applicants working in machine learning, natural language processing, information access and retrieval and related fields with a passion and demonstrated ability for independent research, including a strong publication record at top international research venues, to work toward advancing state-of-the-art in artificial intelligence while providing practical solutions to real-world problems.

Examples of current directions include natural language processing (e.g. question answering, semantic parsing, natural language interfaces, cross-lingual models, etc.), machine learning (specifically deep learning, transfer learning and weakly supervised learning) and information access (e.g. conversational search, knowledge graphs and neural retrieval models).

### **Responsibilities**

As a researcher in Microsoft Research AI, you will develop your research career as a member of a world-class research organization. You will set your own research agenda and collaborate with other researchers, scientists and engineers, with the goal of advancing the state of the art and contributing impactful advances to products and services used by millions of people worldwide.

We offer a vibrant environment for cutting-edge, multidisciplinary research including access to diverse data sources, an open publication policy, and close links to top academic institutions around the world.

### **Qualifications**

Required Qualifications

- PhD in AI, machine learning or closely related areas.
- Well-established research track record of publications, open source code, or other scientific leadership activities.

### **Preferred Qualifications**

- Demonstrated ability to collaborate, communicate effectively, and work as part of a team.
- Ability to define an ambitious research agenda
- Passion about real-world applications and impact

Your application should include a CV, the names of at least three references and an academic statement (2-4 pages) that outlines both your research achievements and agenda and your service and outreach activities.

Udacity's mission is to power the enterprise through next-generation technology education. We're an immersive online learning platform, powering corporate technical training in fields such as Artificial Intelligence, Machine Learning, Data Science, Autonomous Systems, Cloud Computing and more. We are backed by some of the best-known investors: Andreessen Horowitz, Charles River Ventures, Bertelsmann and Drive Capital, among other leading VC firms. Udacity is helping the enterprise market bridge the talent shortage and skills gaps during their digital transformation journey. We are providing a powerful and differentiated solution inside of a \$32b total addressable market opportunity. If you are inspired to be a core component of this transformational opportunity... read on!

### **Enterprise Team**

Our Enterprise team is responsible for helping companies and their employees realize the power of Udacity's training at scale. You will help leading companies empower their teams with training in the latest technologies so that they can develop powerful new products and services on a global scale. We're looking for someone who has a proven track record of providing highly-professional customer service to executives and managers at Fortune 1,000 companies, and can excel in a fast-paced startup environment.

### **Responsibilities**

- Empathize with every aspect of the customer experience, putting customers' needs first.
- Guide and coach customer executives, managers and employees with a dedicated customer success process. Maintain high levels of customer engagement and satisfaction with a focus on customer loyalty and driving strong renewal and upsell rates.
- Coach customers to be product experts and train their teams on Udacity methodologies so they become increasingly self-sufficient.
- Identify common customer challenges and actively suggest better solutions.
- Partner with Udacity's Sales team to help them be more effective.
- Partner closely with other cross-functional team members to translate business needs and product requirements into new solutions for customers.
- Craft customer on-boarding assets, adapt existing customer on-boarding assets and work with product marketing to refine existing and create new on-boarding assets.
- Help drive customer references and case studies.

## **What We Value**

- 5+ years of experience in a customer-facing customer success, account management or strategic consulting organization. Software or education experience a benefit.
- Self-motivated, proactive team player with innovative ideas to inspire customer loyalty and adoption.
- A strong desire to learn and define an emerging function in a rapidly growing and dynamic startup environment
- Strong interpersonal skills and experience building internal and external relationships.
- Consistent track record of highly-professional customer service in a fast paced, dynamic environment.
- Diplomacy, tact, and poise under pressure when working through customer issues.

Consider applying if your experience is close to what we described above. We look for people with exceptional potential, as we know highest performing teams include people of diverse backgrounds, perspectives, and life experiences.

For more than 11 years, Amazon Web Services has been the world's most comprehensive and broadly adopted cloud platform. AWS offers over 100 fully featured services for compute, storage, databases, networking, analytics, machine learning and artificial intelligence (AI), Internet of Things (IoT), mobile, security, hybrid, virtual and augmented reality (VR and AR), media, and application development, deployment, and management from 49 Availability Zones (AZs) across 18 geographic regions in the U.S., Australia, Brazil, Canada, China, France, Germany, India, Ireland, Japan, Korea, Singapore, and the UK. AWS services are trusted by millions of active customers around the world—including the fastest-growing startups, largest enterprises, and leading government agencies—to power their infrastructure, make them more agile, and lower costs. To learn more about AWS, visit <https://aws.amazon.com>.

The Content & Learning Specialist will create scalable learning experiences and content resources for teams within WWRO (WorldWide Revenue Operations) and for internal customers in AWS Sales. The ideal candidate will be creative and tech savvy with experience in both instructional design and content development.

The Content & Learning Specialist will bring rigor to content life cycle management, from how we capture organizational processes to how we deliver the content to our audiences. You will be responsible for developing high-quality content in multiple formats such as interactive eLearning, videos, virtual workshops, and Wiki pages. The role requires deep collaboration with SMEs including senior level leaders across multiple disciplines/functional roles. You will help to drive a self-service approach, addressing knowledge gaps to reduce customer inquiries.

The ideal candidate will be comfortable working on multiple projects in a fast-paced, high-energy environment. They must be willing to roll up their sleeves and do what it takes to get the job done while insisting on the highest standards and measuring the impact of the learning experiences they build.

### **Specific Responsibilities Will Include**

- Design and develop training materials and content: Wiki pages, tutorial videos, interactive eLearning modules, exercises, and assessments.
- Use appropriate tools and delivery methods relative to usage and need.
- Develop scalable modules to maximize content re-use and ensure training programs are consistent and ready for a potentially global audience.
- Design, publish, and edit content on the Knowledge Center wiki, which houses SOPs, references, policies, and customer-facing content.
- Facilitate scoping meetings with subject-matter-experts and technical project leads.
- Continually evaluate solutions for quality, business impact, and scalability.
- Develop assessments that measure learner outcomes.

This position is located in Seattle.

### **Basic Qualifications**

- 1+ years of experience as an analyst or engineer in the data/BI space
- Experience with data visualization using Tableau, Quicksight, or similar tools
- Experience with SQL

### **Responsibilities**

- Solve analytical problems, and effectively communicate methodologies and results
- Draw relevant inferences and insights from data including, identification of trends and anomalies
- Work closely with internal stakeholders such as business teams, product managers, engineering teams, and partner teams and align them with respect to your focus area
- Design and develop highly available dashboards and metrics using SQL and Tableau.
- Provide wing-to-wing project life-cycle execution (project planning, execution, risk assessment and system availability)
- Execute analytical projects and understanding of analytical methods (like ANOVA, Distribution theory, regression, forecasting, Machine Learning Techniques, etc.)
- Develop and oversee the initiation of strategy recommendation statistical analysis to segment customer behavior and develop targeted solutions to pr

### **Preferred Qualifications**

- Degree in Instructional Design, Adult Learning, or a related field.
- Knowledge of web development (HTML, CSS).
- History of sparking improvements in learning strategy and content through collaboration and prototyping.
- Ability to prioritize, manage and complete multiple projects with tight deadlines, multiple stakeholders, and minimal oversight.
- Experience developing content and learning materials for complex concepts and technical topics.
- Experience managing, monitoring, and reporting on curriculum and assessment data.

Play a part in the next revolution in human-computer interaction. Build groundbreaking technology for artificial intelligence. Transform the way people find their favorite movies and TV shows, watch sports, listen to music, interact with their smart home and much more! Work with the people who built the intelligent assistant that helps millions of people get things done — just by asking. Join Siri's Domains team at Apple. This team is searching for outstanding engineers who are passionate about building life changing new experiences on one of the fastest growing platforms in the world.

The Siri Domains team is looking for someone with a combination of strong technical skills and desire to improve quality of customer features. We're looking for the right person who can collaborate with other specialists and teams in several technical areas to help improve and standardize standard methodologies, through code, tests and processes. You should be able to act in a fast-paced environment with constantly evolving priorities and have a thirst for new technology.

### **Key Qualifications**

- Experienced with iOS App Development, and have shipped mobile Apps.
- Working experiences and deep understanding of large scale software, object-oriented design, performance optimization, and multi-threading on mobile platforms.
- Strong object-oriented programming (Objective-C, C++, and Swift), developed easy-to-read and easy-to-maintain code, and worked in full Software Development Process.
- Experienced with Test Driven Development (TDD), Agile (Scrum or Kanban), working within a distributed team and fast pace development environment, ability to work collaboratively and dynamically.
- Excellent communication skills, and thrive in a collaborative team environment, strong problem solving skills, fresh ideas, and self-starter.
- Excellent problem solving, critical thinking, and self-starter.
- 7+ years of shown experience

### **Description**

Are you interested in being responsible for providing and implementing new features supporting Siri Domain Messages? Than this may be the role for you!

You will join a hands-on development team that fosters creativity and generates outstanding solutions to deliver engineering perfection by partnering with a variety of multi-functional teams cross the company

You will prioritize tasks with rapid development cycles, remain flexible and calm in the face of uncertainty, and collaborate to deliver excellent results for time-critical issues within given specifications

You will work to improve the performance and reliability of all Siri experiences

You will create tools and frameworks that the entire Siri product can benefit from

You will be a technical leader to team members

time, evaluating and ranking millions of possibilities each second. Every improvement to our recommendation models has a direct impact on Vungle's mission, and that means we get the chance to push our machine learning algorithms to their limits.

We're looking for hardcore software engineers who love applying their skills to all sorts of problems in the machine learning domain. At Vungle, you'll work on a small engineering team responsible for the design and implementation of high-performance, scalable, and reliable ML architecture. You'll collaborate closely with our Data Scientists and work on everything from feature engineering to database design to custom implementations of state-of-the-art machine learning algorithms. Most importantly, you'll have the chance to get your ideas into production, measure their impact, and keep improving.

### **What You'll Do**

- Design and scale predictive models to handle production-level loads of billions of daily requests
- Identify new features, better algorithms, and performance optimizations; test your ideas on live traffic and take them from prototype to production
- Work with data science and ML toolkits like scikit-learn, numpy, TensorFlow, Theano and the like
- Use big data technologies like Spark to build efficient and reliable data pipelines specifically designed to support problems in the machine learning domain
- Use your expert coding skills across a number of languages such as Python, Scala and Go
- Be technology agnostic and always pick the right tool for the job
- Be an evangelist for quality software engineering practices

### **Requirements**

- MS in Computer Science or equivalent with 6+ years professional experience as a software developer, or a BS with 8+ years of experience
- 2+ years experience with machine learning, artificial intelligence or related field (either academic or industry)
- Strong programmer with a background in OOP (Python, Java, C++, Scala or equivalent), capable of writing high performance production quality code
- Strong understanding of CS fundamentals, data structures and algorithms and complexity analysis
- Familiarity with core ML concepts, common supervised and unsupervised algorithms, feature engineering and feature selection, bias/variance, etc
- Comfortable conducting and participating in thorough design and code reviews

### **Preferred**

- Previous experience in back end development
- MS in Computer Science or related field with coursework in machine learning or artificial intelligence

- 2+ years professional experience working with popular machine learning libraries such as scikit-learn, TensorFlow, Theano or similar
- Experience implementing and maintaining high performance back end systems
- Experience working with distributed frameworks and big data technologies like Spark

## **About Vungle**

Vungle is the trusted guide for growth and engagement, transforming how people discover and experience apps. Mobile application developers partner with Vungle to monetize their apps through innovative in-app ad experiences that are inspired by insight and crafted with creativity. Advertisers depend on Vungle to reach, acquire, and retain high-value users worldwide. Vungle develops tools that include data-led buying and UX recommendations, ad format innovation, creative automation, and more. Vungle's data-optimized ads run on over 1 billion unique devices to drive engagement and increase returns for publishers and advertisers ranging from indie studios to powerhouse brands, including Rovio, Zynga, Pandora, and Microsoft. The company is headquartered in San Francisco and has offices around the world in London, Berlin, Beijing, Tokyo, Seoul, and Singapore.

## **Some Of The Specific Areas We Are Working Into Are**

As a Sr. ML Engineer/Data Scientist on the Search & Discovery Platform team at Roblox, you'll redefine how 100's of Millions of users search and discover the most interesting games to play, items to define their digital avatar, or connect with friends. You will partner with Data Scientists, Product Managers and Engineers to understand users needs and improve search and discovery by employing relevance and ranking techniques including Machine Learning and Artificial Intelligence.

- Search Ranking - Personalization
- Recommender System - Computational re-Ranking
- Information Retrieval - (Deep) Learning to Rank
- (Deep) Learning to Match Query - Query (intent) Understanding

## **You Are**

- BS, MS or Ph.D. in computer science, engineering, mathematics, machine learning, (computational) physics or statistics.
- You must be fluent in Python, SQL and must know Java/Scala. Knowing C# is a plus.
- Strong mathematical, statistical methods & analytical skills
- 3+ years of experience end-to-end model building using algos like SVM, DNN, Random forest etc. and deployment experience
- 3+ experience with one or more of the following: recommendation systems, ranking systems, Natural Language Processing, text understanding, classification, pattern recognition, targeting systems, or similar.
- Experience working with big data & distributed systems and computing tools like S3, Hive, MapReduce, and Spark

## **Plus**

- Experience in building Recommender Systems, Information Retrieval, Search Ranking, Deep Learning to Match & personalization is a big plus.
- Experienced in building and running production machine-learning based systems.

## **You Will**

- Be a Search and Recommendation Champion: you have prowess and past experience in a multitude of recommendation technologies, empowering you to understand the challenges of making discovery better continuously by hypothesis, modeling, and experimentation.
- Help shape and build next generation search and discovery for games, immersive worlds and other user-generated content like models
- Ensure that our systems are resilient, robust and can scale to meet the demands of our Imagination Platform to ensure our players have a seamless experience anywhere in the world.
- Support our search and discovery infrastructure in production, sharing the on-call rotation with your team colleagues.

We are looking for engineers with a passion for using machine learning to create intelligent applications. In this highly accomplished, deeply technical and close-knit team of data scientists and machine learning engineers, you will create tools that are used by millions of people. You will design and implement new machine learning algorithms and techniques and collaborate with the most innovative product development teams in the world.

Our team researches new machine learning algorithms, models and techniques that will power amazingly intelligent user experiences. We want new ambitious team members to join our research ML group. In this role, we create new models and algorithms, and actively engage with the academic community by publishing your work and participating in academic efforts. You will also have the opportunity to contribute to cool projects around Apple, and use your data science, machine learning and artificial intelligence skills to transfer your ideas into solutions for some of the most challenging technical problems in the next generation of products that will delight millions of people.

## **Key Qualifications**

- Experience applying machine learning to solve practical problems
- Solid understanding of foundational statistics concepts and ML algorithms
- Experience working with time-series sensor data (optical, electrical, motion, and other)
- Experience building/working with data pipelines
- Strong software development skills, with proficiency in Python and C++ preferred
- Creative, collaborative, & product focused

**Description**Apple's central AI/ML org is looking for Applied Scientists who are passionate about using machine learning to build new user experiences.

The team you will join is responsible for creating innovative experiences with wearables and sensors.

We are highly collaborative and partner with a variety of product teams across Apple including Watch, Siri, Accessibility, Home, and others and have shipped features like Raise to Speak on the Apple Watch.

In this role, you will work with time-series data from multiple sensors, build appropriate data and modeling pipelines, apply a variety machine learning techniques, help integrate models on-device to power new experiences, and work with your team to iterate on the end user experience.

**Education & Experience** PhD in Machine learning, Statistics, Computer Science, Physics, or related field or

MS in related field with a strong academic track record

3+ years of research experience in academia or industry

The candidate should be an effective communicator capable of independently driving issues to resolution and communicating insights to non-technical audiences. This is a high impact role with goals that directly impacts the bottom line of the business.

### **Responsibilities**

- Analyze terabytes of data to define and deliver on complex analytical deep dives to unlock insights and build scalable solutions through Data Science/ML to ensure security of Amazon's platform and transactions
- Build Machine Learning and/or statistical models that evaluate the transaction legitimacy and track impact over time
- Ensure data quality throughout all stages of acquisition and processing, including data sourcing/collection, ground truth generation, normalization, transformation, and cross-lingual alignment/mapping
- Define and conduct experiments to validate/reject hypotheses, and communicate insights and recommendations to Product and Tech teams
- Develop efficient data querying infrastructure for both offline and online use cases
- Collaborate with cross-functional teams from multidisciplinary science, engineering and business backgrounds to enhance current automation processes
- Learn and understand a broad range of Amazon's data resources and know when, how, and which to use and which not to use.
- Research and implement novel machine learning and statistical approaches
- Maintain technical document and communicate results to diverse audiences with effective writing, visualizations, and presentations

### **Basic Qualifications**

- PhD or equivalent Master's Degree plus 4+ years of experience in CS, CE, ML or related field
- 2+ years of experience of building machine learning models for business application
- Experience programming in Java, C++, Python or related language
- Masters in quantitative discipline, e.g. Mathematics, Statistics, Operations Research, Artificial Intelligence

- 3+ years' experience in business analytics, forecasting or business planning with emphasis on analytical modeling, quantitative reasoning and metrics reporting preferably from an internet environment
- 3+ years of hands on experience with statistical software tools: SAS, SPSS, Strata, R, Python or Matlab
- Experience in machine learning and statistical techniques such as classification, clustering, regression, statistical inference, collaborative filtering, and natural language processing, experimental design, social networking analysis, feature engineering etc.
- Demonstrate understanding and experience with relational data sets, data warehouses, data mining and data analysis techniques

Google's software engineers develop the next-generation technologies that change how billions of users connect, explore, and interact with information and one another. Our products need to handle information at massive scale, and extend well beyond web search. We're looking for engineers who bring fresh ideas from all areas, including information retrieval, distributed computing, large-scale system design, networking and data storage, security, artificial intelligence, natural language processing, UI design and mobile; the list goes on and is growing every day. As a software engineer, you will work on a specific project critical to Google's needs with opportunities to switch teams and projects as you and our fast-paced business grow and evolve. We need our engineers to be versatile, display leadership qualities and be enthusiastic to take on new problems across the full-stack as we continue to push technology forward.

Google is and always will be an engineering company. We hire people with a broad set of technical skills who are ready to take on some of technology's greatest challenges and make an impact on millions, if not billions, of users. At Google, engineers not only revolutionize search, they routinely work on massive scalability and storage solutions, large-scale applications and entirely new platforms for developers around the world. From Google Ads to Chrome, Android to YouTube, Social to Local, Google engineers are changing the world one technological achievement after another.

### **Responsibilities**

- Participate in cutting edge research in artificial intelligence and machine learning applications.
- Develop solutions for real world, large scale problems.

Omni-Channel Modeling Analytics Team in USAA's Enterprise Information Management Office. They will work with advanced machine learning technologies to help our call-center and digital partners optimize their processes with data science solutions.

Data Scientist Lead uses advanced techniques that integrate traditional and non-traditional datasets to enable analytical solutions; Applies predictive analytics, machine learning, simulation, and optimization techniques to generate management insights and enable customer-facing applications; Builds analytical solutions leveraging internal and external applications to deliver value and create competitive advantage; Leads initiatives and influences system architecture to enable automated intelligent solutions; Translates complex analytical and technical concepts to senior management to enable business decisions; Maintains relationships with academic and industry thought-leaders to ensure enterprise has access to cutting-edge thinking and technologies.

## Job Requirements

- Partners with business leaders across the organization to assess business needs, define business problems and develop a research agenda
- Leads cross functional, matrixed teams to solve highly complex work critical to the organization.
- Designs and builds large and complex information sets
- Integrates and extracts relevant information from large amounts of both structured and unstructured data (internal and external) to enable analytical solutions.
- Leads and conducts advanced analytics leveraging predictive modeling, machine learning, simulation, optimization and other techniques to deliver insights or develop analytical solutions to achieve business objectives.
- Leads efforts to develop scalable, efficient, automated solutions for large scale data analyses, model development, model validation and model implementation.
- Works with IT to translate prototypes into new products, services, and features and provide guidelines for large-scale implementation.
- Builds and maintains a robust library of reusable algorithms and supporting code such that research efforts are based on the highest quality data, are transparently conducted, are able to be productionized and are reproducible.
- Provides guidance regarding analytical approach and iteration of algorithms to team members.
- Translates complex analytical and technical concepts to senior management and non-technical employees to enable understanding and drive informed business decisions.
- Develops and maintains academic and industry relationships for the purposes of research; Interacts with internal and external peers and management to maintain expertise and awareness of cutting edge techniques, technologies and potential business solutions.

### **Minimum Education**

- Master's degree in Computer Science, Applied Mathematics, Quantitative Economics, Statistics, or related field (6 additional years of related experience beyond the minimum required may be substituted in lieu of a degree)

### **Minimum Experience**

- 8 or more Years in predictive modeling, large data analysis and computer science
- Experience in stochastic modeling, machine learning, and other advanced mathematical techniques (e.g., neural nets, simulation, graph analysis)
- Expert in at least one compiled language (e.g., Java, C or more or more) and one dynamic scripting language (Python, PERL, Ruby)
- A strong track record of communicating results, insights, and technical solutions to Senior Executive Management (or equivalent)

### **Preferred Experience**

- Prior experience using Speech-to-Text and/or Natural Language Processing (NLP) algorithms to develop models using unstructured text that were successfully implemented or used in a production environment; experience with the Gridspace Sift tool a plus.
- Highly competent at data engineering in SQL and/or SAS as well as advanced machine learning (ML) techniques using Python; comfortable in cloud computing environments (Azure, GCP, AWS).
- Expertise in using advanced statistical analysis to discover key relationships in data and applying that information to predict likely future outcomes.
- Proven ability to enrich (add new information to) data, advise on appropriate course(s) of action to take based on results, summarize complex technical analysis for non-technical executive audiences, succinctly present visualizations of high dimensional data, and explain and justify results of work conducted.
- Fluent in deep learning frameworks and libraries (TensorFlow, Keras, PyTorch, etc).
- Hands-on experience delivering products or solutions that utilized deep learning neural networks in areas such as computer vision, Natural Language Processing (NLP), sensor data from the Internet of Things (IoT), and recommender systems.
- Highly skilled in handling Big Data (Spark, Kafka, etc).
- Experience in publishing at top ML, computer vision, NLP, or AI conferences and/or contributing to ML/AI-related open source projects and/or converting ML/AI papers into code is a plus.
- PhD in Computer Science, Applied Mathematics, Quantitative Economics, Operations Research, Statistics, or related field with coursework in advanced Machine Learning techniques (Natural Language Processing, Deep Neural Networks, etc).

Interested in Machine Learning, and empowering the world to do more and better machine Learning? Amazon SageMaker, Amazon Web Service's (AWS) Machine Learning platform team is building customer-facing services to catalyze data scientists and software engineers in their machine learning endeavors. This product is a blend of HTTP API's, low and high-level SDK's, and an AWS Console UI.

The SageMaker Images team is a new team in SageMaker. We are building a service that lets data scientists and developers easily control the exact environment in which their code runs. With SageMaker Images, customers write and execute code in a predictable way without having to build containers. For example, customers can deploy a Jupyter notebook to SageMaker training or hosting without ever touching Docker. This seamless code motion works across a broad spectrum of services including SageMaker Studio, Hosting and Batch Transform, AWS Batch, ECS, EKS, Lambda, Glue and ECR. SageMaker Images service is the core service in SageMaker for container build, publish, registration and discovery. Using SageMaker Images together with AWS Step Functions, customers can build complex workflows working with just the code they wish to run

You will design, implement, test, document, and support cross-cutting services to help customers do machine learning at scale. You'll assist in gathering and analyzing business and functional requirements, and translate requirements into technical specifications for robust, scalable, supportable solutions that work well within the overall system architecture. You will serve as a key technical resource in the full development cycle, from conception to delivery and maintenance. You will produce comprehensive, usable software documentation; recommend changes in development, maintenance and system standards.

You will own delivery of entire piece of the system and serve as technical lead on complex projects using best practice engineering standards, and hire/mentor junior development engineers.

We're moving fast, and this is a great team to come to to have a huge impact on AWS and the world's customers we serve!

### **Basic Qualifications**

- 2+ years of non-internship professional software development experience
- Programming experience with at least one modern language such as Java, C++, or C# including object-oriented design
- 1+ years of experience contributing to the architecture and design (architecture, design patterns, reliability and scaling) of new and current systems.
- Bachelor's Degree in Computer Science or related field
- Computer Science fundamentals in object-oriented design
- Computer Science fundamentals in data structures
- Computer Science fundamentals in algorithm design, problem solving, and complexity analysis
- Proficiency in, at least, one modern programming language such as Java, Golang, Python, C++, C#, Perl

### **Preferred Qualifications**

- Experience building complex software systems that have been successfully delivered to customers
- Knowledge of professional software engineering practices & best practices for the full software development life cycle, including coding standards, code reviews, source control management, build processes, testing, and operations
- Ability to take a project from scoping requirements through actual launch of the project
- Experience in communicating with users, other technical teams, and management to collect requirements, describe software product features, and technical designs.
- Deep hands-on technical expertise in: large scale systems engineering; building and operating complex distributed systems
- Experience with docker, Machine Learning, data mining, and/or statistical analysis tools such as R and MATLAB is a plus
- Master's degree in Computer Science, Computer or Electrical Engineering

Are you passionate about developing impactful, novel Machine Learning (ML) technology strategy and taking it to large-scale production? Are you passionate about engaging the AI community (AI researchers, developers building AI products, roboticists making robots that work, data scientists, and innovative entrepreneurs in hot startups and large enterprises)?

Artificial Intelligence (AI) has the potential to transform our society and community for generations. Impacting transportation, mobility, telecommunication, energy, healthcare and insurance, rescue and emergency response, hospitality. Achieving this requires implementing one of the most complex computing systems to-date at unprecedented scale. AWS Autonomous Compute is taking a fresh approach with providing an end-to-end, scalable cloud environment that simplifies the development, scaling and production deployment of AI technology. Including a global cloud footprint, infinitely scalable cloud storage, advanced networking and security, state-of-the-art AI platforms and services, rigorous engineering, and a team with the longest experience building cloud technologies.

AWS Autonomous Computing is seeking a Principal Solutions Architect (SA) for our Autonomous Computing business. The SA will be responsible for defining, building and deploying effective and targeted technology strategy to accelerate broad pre-sales engineering activities. The SA will facilitate the enablement of solutions architecture with specific customer centric value proposition and demos about end-to-end AI technologies – data ingestion, data preparation, model development including architecture optimization, model validation, large-scale orchestration, deployment and model lifecycle management – on the AWS cloud. The SA will directly interface with the AWS product and software development teams regarding customer and partner requirements. The SA will work closely across multiple internal and external organizations – AWS product engineering, business development, sales, marketing, partners, and machine learning research communities – to position the AWS platform for customers and partners; and provide guidance on the value proposition and benefit to those customers and partners.

The ideal candidate will possess a deep technical background combined with business acumen that enables them to drive an engagement and interact at the highest levels of startups and large Enterprises. The candidate will have the technical depth and business experience to easily articulate the potential and challenges of AI (different platforms and frameworks in the AWS cloud) to engineering/research teams and C-Level executives. This requires deep familiarity with state-of-the-art approaches to AI, as well as target AI use cases using distributed computing systems in the cloud.

As the ideal candidate, you will be the thought leader responsible for helping customers understand the value proposition of production-grade AI on AWS, creating the most compelling content and demos to help customers understand the use cases and value propositions, and building the right programs to increase awareness and adoption. You will also be a trusted advisor to customers and internal teams; helping develop the AI knowledge and skills of Solutions Architects, as well as the technical field community. Additionally, you will work with the AWS Machine Learning and AWS EC2 engineering and product management teams to shape product vision and prioritize features for AI products and solutions. You will get to work on a leading technology field and growing business; and have a material impact, every day. You will be able to facilitate relationships with senior personnel, as well as easily interact and give guidance to technical experts, researchers, software developers, IT pros, and system architects. This requires a demonstrated ability to think strategically about business, product, research, and technical challenges.

This is an opportunity to be a thought leader in the emerging space of autonomous computing and make a significant contribution to enable transformation across several industries.

### **About AWS**

Amazon Web Services (AWS) is the pioneer and recognized leader in Cloud Computing. Our web services provide a platform for IT infrastructure in-the-cloud that is used by hundreds of thousands of developers and businesses around the world. These customers range from start-ups to leading web companies to Global 2000 companies in financial services, pharmaceuticals, and technology. AWS customers are looking for ways to transform their businesses and solve their own complex business challenges with machine learning (ML) technologies in the cloud. AWS is leading the way in providing customers with powerful, end-to-end machine learning platforms such as Amazon SageMaker.

## **Roles & Responsibilities**

- Architect advanced solutions leveraging AWS services like EC2, S3, SPOT, and ML related services, working closely with our customers to deeply understand their business needs and to design technical solutions that take advantage of the AWS Cloud platform.
- Demonstrate the viability of each solution through mechanisms like proof-of-concepts, prototypes and pilots including applied research activities that bring early-stage products to market.
- Develop best practices documentation, and develop a strong go-to-market technical strategy.
- Craft and develop compelling audience-specific messages and tools (product videos, customer success stories, advanced demos, white papers, presentations, how to guides, etc.)
- Evangelize AWS AI architectures and technologies through forums such as AWS Blogs, white papers, reference architectures and public-speaking events such as AWS summit, and user-group events.
- Collaborate with AWS field sales, professional services, training and support teams to help partners and customers learn and effectively use AWS for AI.
- Serve as a key member of the business development and account management teams helping to ensure customer and partner success in AI on the AWS platform.
- Act as a technical liaison between customers, service engineering teams and support teams.
- Gain recognition and credibility as a regular panelist and keynote speaker for multiple internal and external events.
- Deliver compelling presentations, product demos, roadmap reviews, sample solutions and discussions to drive adoption of AI on AWS.
- Identify leads for potential engagement needing pre-sales support.
- Collaborate with internal teams to define the product road map, market positioning and developer program initiatives
- Assess training requirements and coordinating with various training teams on scheduling and delivery of training to both internal and external audiences.

## **Basic Qualifications**

- MS in Engineering (or related STEM fields)
- 7+ years experience working with a few of these technologies: advanced machine learning, probabilistic modeling, optimization, sensor fusion and scalable computing systems.
- Demonstrated ability to work with multiple technical and stakeholder groups to bring a complete solution to production.
- Strong track record of publications in peer-reviewed journals, conferences and/or curated blogs.
- Deep knowledge and extensive experience building and deploying one or more of these technologies in production: Deep learning (e.g. CNN, RNN, LSTM, GAN, etc.), Reinforcement Learning, Accelerated compute (e.g. GPU, FPGA, ASICs, etc.), ML Frameworks (e.g. TensorFlow, PyTorch, etc.), ML engineering (e.g. Containers, Kubernetes, Kubeflow, etc.), Probabilistic Modeling (e.g. Bayesian modeling, Probabilistic Deep Neural Networks, Probabilistic Graphical Models, etc.), Global non-convex optimization (e.g. Genetic Algorithms, Particle Swarm, etc.)

and non-linear estimation techniques (e.g. Unscented Kalman Filters, Particle filters, etc.) and time series forecasting.

- Experience with one or more general purpose programming languages, including but not limited to: Python, Go, C/C++, JavaScript, Java.
- Solid enterprise communication skills, and business and financial acumen.
- Strong analytical skills, and demonstrated ability to turn detailed data analysis into useful strategic insight in order to drive customer adoption and make appropriate recommendations to the business.
- Strong verbal and written communications skills are a must, as well as leadership skills.
- Demonstrated ability to work effectively across internal and external organizations.

### **Preferred Qualifications**

- Ph.D. in Engineering (or related STEM fields)
- Experience developing, deploying and managing AI products at scale.
- 10+ years of engineering, development, data science and modeling experience.
- Demonstrated experience solving end-to-end large-scale problems in aerospace, transportation, energy, manufacturing, telecommunications, genomics, healthcare and/or robotics with proven AI technologies deployed at scale.
- Experience with cloud computing and distributed computing.

If you are a senior applied research engineer/scientist with a passion for working on massive semi-structured text and graph datasets, then the LinkedIn Data Team is the place for you. The ideal candidate will have domain experience (data mining, information retrieval, security data science, natural language processing, advanced statistics, and/or machine learning), a strong systems orientation, and experience in building data mining products. The work you put forth will directly impact and fuel LinkedIn's search relevance, ad targeting, information extraction, and recommendations.

As a Sr. Staff Software Engineer, you will be an agile architect in the design, development, and support of the most visible Internet-scale features and infrastructures at LinkedIn.

This position is full-time and based in our offices indicated on the job posting.

AI is like oxygen at LinkedIn — it powers everything we do. We use it in ways that our members experience the site every day, like giving them the right job recommendations, encouraging them to connect with someone, or providing them with helpful content in the feed. It is also used in our enterprise products to help salespeople predict the responsiveness of their leads, serve relevant advertisements to our members, and help recruiters find new talent pools.

We use AI to standardize data in a way that all our products and systems can understand, filter out spam and harmful content, route connections to ensure a fast site speed experience, and send informative notifications to our members.

The LinkedIn AI team is responsible for developing machine learning algorithms, engineering data pipelines and scalable software platforms that fuel all LinkedIn applications. We use state of the art big data and AI technologies to solve problems. To name a few examples:

1) We developed new classes of machine learning models based on generalized mixed effects models to combine disparate sources of data for personalization at the member level.

- 2) We heavily employed LSTM, CNNs, and sequence-to-sequence models for most of our natural language processing and computer vision tasks.
- 3) We built an "AI automation" platform called Pro-ML that allows us to manage the features and machine learning models for every engineering team at the company from one system. This system provides a single platform for the entire lifecycle of developing, training, deploying, and testing machine learning models. Our data infrastructure team innovated Kafka and Samza. We leverage them as well as Hadoop, Ambry, Spark, TensorFlow, Pig/Hive, Azure to process data.

LinkedIn AI is driven by a global team of ~400 engineers distributed across the USA (Sunnyvale, Mountain View, San Francisco, New York), India, and Ireland. We are looking for Technical Leads/Architects at Senior Staff or higher level to lead the technical direction of our AI solutions. In addition to setting the strategy, you will be responsible for designing the next generation of highly-scalable machine learning algorithms for one or more of these problems: recommendations, response prediction, content matching (text, image, video), search, knowledge graph construction, natural language processing, and directing other software engineers.

The candidate will be joining the AI team that is charged with developing the AI algorithms that power our job seeking products, including job search and recommendations. The team works in close partnership with the Product and Engineering partners in the LinkedIn Talent Solutions business whose charter it is to identify and match job seekers and hiring managers so we are able to provide economic opportunity to every member of the global workforce. The team is composed of other AI engineers who all have applied and/or academic experience in developing AI algorithms for search and recommendation systems.

#### Responsibilities

Work with BIG data, crunching millions of samples for modeling data mining, recommendation, or search relevance solutions.

Provide technical leadership, driving and performing best engineering practices to initiate, plan, and execute large-scale, cross functional, and company-wise critical programs.

Identify, leverage, and successfully evangelize opportunities to improve engineering productivity. Be responsible for driving the technical vision of the ML algorithms used in the user-facing recommendations and search systems.

Lead, evangelize and get buy-in for the AI technical strategy for our search and recommendation systems for our jobs marketplace.

Hold the team to a high machine learning bar and actively reduce ML tech debt, designing systems that scale with algorithms and with time.

Synchronize with the rest of the engineering and product leads to make sure that our AI strategy is in sync with the larger vision for LinkedIn jobs ecosystem.

#### Basic Qualifications

PhD Degree in Computer Science or Machine Learning or related technical discipline, or related practical experience.

6+ years experience in designing ML algorithm solutions, specifically on search and recommender systems, for user facing products

6+ years experience in working on large scale data, and deploying ML solutions into production

environments

3+ years experience in technically leading ML teams by setting the strategy, metrics and following through with execution.

#### Preferred Qualifications

Experience in designing and building infrastructure and web services at large scale.

Expertise in one or more of the following: machine learning, data mining, advanced statistics, information retrieval, or natural language processing.

Experience with developing and designing consumer-facing data based products

Experience with Hadoop, Spark, Pig or other MapReduce paradigms.

Published work in academic conferences or industry circles. Candidates may be invited to present a talk on their work as part of the interview process.

Experience working on the TensorFlow platform and in designing scalable recommendation algorithms

Experience in designing metrics for search and recommendation systems, figuring out the ML algorithms that can optimize for the same with a view of having direct business impact.

Argo AI is in the business of building self-driving technology you can trust. With experienced leaders in the field and collaborative partnerships with some of the world's largest automakers, we're building self-driving technology that is engineered to scale globally and transform mobility for millions.

Talented individuals join our team because they share our purpose to make it safe, easy, and enjoyable for everyone to get around cities. We aspire to impact key industries that move people and goods, from ride hailing to deliveries.

#### **Meet The Team**

Argo AI Cloud Platform engineers create reusable architecture patterns for cloud engineering via infrastructure as code for Argo teams to leverage as common shared components and educate Argo teams on how to architect their solutions for scale, security, and reviewed changes through automation. The Cloud Platform team interacts with engineering teams spanning from remote vehicle operations, ingest/data processing, mapping, labeling, triage, machine learning (detection, prediction, tracking), motion planning/control, offline simulation, and release/deployment teams to unify development practices and scalable efficiency of cloud/cloud native technologies

Engineers in the Cloud Platform team will be based in either Pittsburgh, PA or Palo Alto, CA.

#### **What You'll Do**

- Design and implement scalable distributed systems in the cloud to facilitate the development of self-driving vehicles.
- Contribute to self-driving vehicle log ingest/processing, simulation, and related applications to enable fully autonomous vehicles.
- Take ownership of end-to-end processes and infrastructure automation for Argo engineering teams to deploy services into the cloud and establish/advocate shared engineering patterns.

## **What You'll Need To Succeed**

- A degree in Computer Engineering, Computer Science, Electrical Engineering, Mechanical Engineering, Physics, Robotics or a related field.
- Hands on development in Python, Go, or Java to create production level services that incorporate CI/CD.
- Experience in using infrastructure as code to automate the creation of cloud resources. E.g. Terraform, Cloud Formation, or others.
- Strong experience with architecting/deploying scalable services and workloads in the cloud (AWS, GCP) and/or cloud native environments.
- Strong experience with deployment management/scheduling/high availability/failure modes for distributed applications and compute workloads running on CPUs, GPUs, and/or TPUs.
- Understand engineering design limitations and provide guidance for teams to scale their deployments in the cloud so that they can achieve desired performance within budget.
- Experience creating reusable deployment patterns for teams to adopt, that incorporate networking, security, monitoring, logging, alerting, continuous integration and deployments.
- Understanding of API specification languages (e.g. Open API 2.0/gRPC) and the ability to create reusable code via code generation, templates, and other rapid development techniques for teams to consume.
- Leverage and modify open source tools to meet unique requirements for internal teams, including but not limited to Kubernetes, Prometheus, FluentD, Itsio, Envoy, CoreDNS, etcd, Flux, among others.

Argo AI is in the business of building self-driving technology you can trust. With experienced leaders in the field and collaborative partnerships with some of the world's largest automakers, we're building self-driving technology that is engineered to scale globally and transform mobility for millions.

Talented individuals join our team because they share our purpose to make it safe, easy, and enjoyable for everyone to get around cities. We aspire to impact key industries that move people and goods, from ride hailing to deliveries.

## **Meet The Team**

The Argo AI prediction team is responsible for developing algorithms and code to allow an autonomous vehicle to understand its world. The prediction team analyzes the output generated by the perception team and anticipates what will happen next. Prediction is tightly coupled with the motion planning team.

## **What You'll Do**

- Ideal candidates will be experienced software engineers who code algorithms in C++, SSE, CUDA, and/or OpenCL to enable real-time processing of data to improve our self-driving cars' ability to navigate urban environments

- Your work will be essential to fielding these vehicles and you will have direct exposure to real world data and feedback and the satisfaction of having contributed to a state-of-the art autonomous vehicle
- You will have significant cross functional responsibilities between perception and motion planning and participate in discussions and brainstorming

### **What You'll Need To Succeed**

- Degree in Computer Engineering, Computer Science, Electrical Engineering, Robotics or a related field
- Strong background developing with C++ including the use of templates, multiple-inheritance and abstract classes
- Significant experience optimizing code to be both compute and memory efficient
- Software system architecture design
- Good communication skills
- Experience in Linux environments is desired
- Knowledgeable in area pertaining to prediction such as statistics, machine learning for classification and regression, time series forecasting and reinforcement learning

### **What We Offer You**

- High-quality individual and family medical, dental, and vision insurance
- Competitive compensation packages
- Employer-matched 401(k) retirement plan with immediate vesting
- Employer-paid group term life insurance and the option to elect voluntary life insurance
- Paid parental leave
- Paid medical leave
- Unlimited vacation
- Complimentary daily lunches, beverages, and snacks
- Pre-tax commuter benefits
- Monthly wellness stipend
- Professional development reimbursement
- Employee assistance program
- Discounted programs that include legal services, identity theft protection, pet insurance, and more
- Company and team bonding outlets: employee resource groups, quarterly team activity stipend, and wellness initiatives

### **Our Background**

Argo AI was founded in late 2016 by industry experts with extensive experience building robotic systems for commercial applications. Our once-small team has since grown into an over 1,000-person strong company with strategic partnerships with two of the world's leading automakers: Ford

and Volkswagen. Our self-driving system is the first with commercial deployment plans for Europe and the U.S., and thanks to an ability to tap into both automakers' global reach, our technology platform has the largest geographic deployment potential of any self-driving technology to date. The Personalization team makes deciding what to play next easier and more enjoyable for every listener. From Daily Mix to Discover Weekly, we're behind some of Spotify's most-loved features. We built them by understanding the world of music and podcasts better than anyone else. Join us and you'll keep millions of users listening by making great recommendations to each and every one of them.

### **What You'll Do**

- Contribute to designing, building, evaluating, shipping, and refining Spotify's product by hands-on ML development
- Collaborate with a cross functional agile team spanning user research, design, data science, product management, and engineering to build new product features that advance our mission to connect artists and fans in personalized and relevant ways
- Prototype new approaches and production-ize solutions at scale for our hundreds of millions of active users
- Help drive optimization, testing, and tooling to improve quality
- Be part of an active group of machine learning practitioners in Boston (and across Spotify) collaborating with one another

### **Who You Are**

- You have a strong background in machine learning, with experience and expertise in personalized machine learning algorithms, especially recommender systems.
- You have hands-on experience implementing production machine learning systems at scale in Java, Scala, Python, or similar languages. Experience with XGBoost, TensorFlow is also a plus.
- You preferably have experience with data pipeline tools like Apache Beam or even our open source API for it, Scio and cloud platforms like GCP or AWS.
- You care about agile software processes, data-driven development, reliability, and disciplined experimentation
- You love your customers even more than your code

**The Twilio AI/ML business unit is looking for a Senior Product Manager for our search and speech recognition contact center products. Reporting directly to Twilio AI's Director of Product, you will be responsible for understanding our contact center customers' needs and working with the ML engineering team to define and build the products. Who? Twilio is looking for a product leader who lives the Twilio Magic and has a demonstrated track record of Product Management. They also have:**

- Ability to set a strategic vision for Twilio's Speech Recognition and Search Contact Center products aligned with the company's long term goals and deliver on it.
- Experience building and delivering products for developers. Strong empathy with developer customers from various backgrounds and levels of sophistication.

- Experience with NLU, Speech Recognition or and applied ML use cases.
- Experience with contact center, customer engagement or customer service products.
- Ability to understand customer problems, gather requirements from many - often competing - sources, prioritize, and work with engineering and design to deliver.
- Ability to leverage data to understand customer behavior at scale and interpret metrics about your products.

**What? As a Staff Product Manager, you will**

- Own the product roadmap for Twilio’s Speech and Search contact center products, including our APIs, ML models and User Interfaces.
- Run customer discovery sessions with target customers to uncover big business problems that can turn into big product opportunities
- Write product specifications including customer stories, API specifications and collaborate with UX design on wireframes
- Plan and execute product launches working cross-functionally across engineering, marketing, sales, and other product teams.
- Report on both the business and operational performance of your products and customers

**And live the Twilio Magic values:**

- WEAR THE CUSTOMER’S SHOES: Talk with customers and listen to their problems. Talk to cross-BU teams and understand the problems they’ve heard from customers.
- WRITE IT DOWN: Create clear, written documentation of the problems you seek to solve (and associated risks). Collaborate with other Product Manager’s to finesse your documentation. Present those plans to your team, business unit leads and leadership.
- RUTHLESSLY PRIORITIZE & DRAW THE OWL: Ruthlessly prioritize the incremental path to solving customer problems, delivering concrete customer value at each stage. Work closely with customer design partners to deliver experiences they love and value.
- BE AN OWNER & BE BOLD: Think creatively about the unique advantages of Twilio’s communication breadth and scale. We have vast amounts of engagement data across our business units - but it is not yet centralized or utilized. This team will help shape the future of Twilio.
- EMPOWER OTHERS: Collaborate extensively with other PMs, other functional teams and Business Units within Twilio on their initiatives. Be an advocate and coach for other PMs. Help engineering teams focus on what is needed to create a great product experience. Facilitate quarterly planning, execute sprints in agile/scrum, manage the backlog and sprint prioritization. Collaborate with GTM teams on product launches (marketing, support, sales enablement), and dev experience teams on documentation.

Can Alexa help anyone experience the music they enjoy? Even if they don't know what they'd like to listen to in this moment? Or, if they know they want "Happy rock from the 90s", can she help them find it?

The Amazon Music Search engineering team's vision is to be the one stop shop for all Amazon music search and discovery needs across any of Amazon Music's client experiences. We are building a set of services that can perform federated search across various (sometimes complex) sources of data. We also own highly available and distributed data stores that we use to index a variety of content to

be made available for search.

## Amazon Music

Imagine being a part of an agile team where your ideas have the potential to reach millions. Picture working on cutting-edge consumer-facing products, where every single team member is a critical voice in the decision-making process. Envision being able to leverage the resources of a Fortune-500 company within the atmosphere of a start-up. Welcome to Amazon Music, where ideas are born and come to life as Amazon Music Unlimited, Prime Music, and so much more.

Everyone on our team has a meaningful impact on product features, new directions in music streaming, and customer engagement. We are looking for new team members across a variety of job functions including software engineering/development, marketing, design, ops and more. Come join us as we make history by launching exciting new projects in the coming year.

Our team is focused on building a personalized, curated, and seamless music experience. We want to help our customers discover up-and-coming artists, while also having access to their favorite established musicians. We build systems that are distributed on a large scale, spanning our music apps, web player, and voice-forward audio engagement on mobile and Amazon Echo devices, powered by Alexa to support our customer base. Amazon Music offerings are available in countries around the world, and our applications support our mission of delivering music to customers in new and exciting ways that enhance their day-to-day lives.

Note that while the team you would work on sits in Amazon Music's main offices in San Francisco at SFO28, you would have the option to work from a new Amazon Music space in San Jose for some portion of the week if you prefer.

Come innovate with the Amazon Music team!

### **Basic Qualifications**

- 4+ years of professional software development experience
- 3+ years of programming experience with at least one modern language such as Java, C++, or C# including object-oriented design
- 2+ years of experience contributing to the architecture and design (architecture, design patterns, reliability and scaling) of new and current systems
- Bachelor's Degree in Computer Science or a related field
- 5+ years of software development experience using Java or C++
- Computer Science fundamentals in object-oriented design, data structures and algorithm design, and complexity analysis

### **Preferred Qualifications**

- MSc or PhD in a related technical field
- Experience working with search relevance and ranking algorithms

- Experience building complex software systems that have been successfully delivered to customers
- Experience collaborating with machine learning scientists on cross organizational projects
- Experience in communicating with users, other technical teams, and management to collect requirements, describe software product features, and technical designs.
- Experience with AWS services highly desirable

Amazon Redshift is a fast, scalable data warehouse that makes it simple and cost-effective for our customers to analyze data across their data warehouse and data lakes. Redshift delivers ten times faster performance than other data warehouses by using machine learning, massively parallel query execution, and columnar storage on high-performance disk.

As a Director of Software Development for Redshift, you will be responsible for leading a group of top talent in the design and development of a product that allows for the setup and deployment of new data warehouses in minutes, and running queries across petabytes of data stored in data warehouses. In particular, you will be responsible for the fault tolerance and high availability of all micro-services of the componentized system architecture.

Joining the Amazon Redshift team gives you the opportunity to:

- Work on a disruptive product that's still in its early stages.
- Solve challenging problems that will revolutionize database computing in the cloud.
- Build a product that will leverage the scale of resources available in the cloud.
- Work for a company that's a recognized leader in the cloud computing space.
- Be involved in the fast growing, big data space.

### **Responsibilities Include**

- Growing and leading a data warehouse software development team responsible for rethinking the assumptions behind how traditional DW services are built and thinking how to build database services best suited for the cloud.
- You will develop the design, implementation, testing and deployment of these services.
- You will draw from your deep and broad technical and management expertise to mentor senior engineers and managers, complete hands-on technical work and provide leadership on complex technical issues, design tradeoffs, and feature and schedule prioritization.
- This is one of our most strategic technical projects with a long-term vision and an opportunity to deliver both significant business and industry-wide technical impact.
- As an engineering leader within Database Services, you will work with senior executives to develop business targets and resource requirements, influence our technical and business strategy, help hire talented engineers and managers, and conceive innovative new solutions for our customers.

### **Basic Qualifications**

- Bachelor's degree in Computer Science (related field) or equivalent work experience
- 10+ years of experience on architecting fault tolerant and high available systems.
- 5+ years' experience managing people with 3+ years of managing multiple managers/teams.

### **Preferred Qualifications**

- A leadership position in a team delivering solutions at scale.
- Masters or PhD in Computer Science or Engineering with a minimum of 10 years of relevant software development and engineering management experience.

**Course Hero** is scaling! We are looking for a motivated, and progressive Senior DBA - Data Engineer that will help build our next-generation Data Platform. We are searching for someone who has a DevOps mentality and passionate about innovating, optimizing, and automating data at scale.

You can expect high impact and wide-ranging responsibilities: As a Senior DBA - Data Engineer, you will have deep hands-on experience working with Data Scientists, Machine Learning experts, and Search Engineers. The scalable systems you build will enable our product designers to bring powerful data products to the Course Hero platform.

**Check out these videos to learn more about our** engineering culture, **and our** company mission.

### **Here Are Some Ways You'll Make An Impact**

- Work with a team of passionate data engineers and scientists to enable data mining, deep learning, statistical modeling, predictive analytics, machine learning, and NLP.
- Plan and execute a path to scale our data infrastructure in both traffic and data.
- Ensure compliance with the organization's high bar for data quality and modeling standards, across the product and related business areas.
- Automate monitoring and administration of the data infrastructure to help us grow our microservice architecture.
- Collaborate with engineering on query tuning and schema design so we can continue to scale.
- Provide tools to empower internal teams across the organization (sales, operations, finance, engineering, etc.) to make data-driven decisions.
- Participate in the on-call rotation and document administration and response procedures through runbooks & playbooks.

### **Are you our Star Senior DBA - Data Engineer?**

- Experienced with AWS RDS
- Expert in Mysql and other relational database technologies.
- Robust Ops foundation - you're always thinking "What happens if this fails" when you build things.
- Proficient in scripting and automation
- Worked with Machine Learning experts and Data Scientists to enable self-service data ingestion, transformation, visualization, reporting and advanced analytics (machine learning, AI).
- Strategic thinker and thrive operating in a broad scope, from conception through a continuous operation.
- Hands-on experience working with large scale data ingestion, ETL processing, storage, Hadoop ecosystems, Spark, non-relational databases (NoSQL, MongoDB, Cassandra), and messaging systems (Kafka, Kinesis, RabbitMQ).
- Bachelor's or Master's degree in computer science, mathematics, economics, engineering, or other related fields.

- Experienced using broader AWS stack (i.e. S3, Athena, Redshift, EC2, SNS, SQS, SES, DynamoDB, Kinesis).
- Experience with ElasticSearch, Docker, and Kubernetes.
- Familiar with Python analytics libraries, Tableau, or use of R language.
- Experience with standard IT security practices such as Access, Authorization, and Key Management.

Splunk's Machine Learning team is looking for a Sr. Principal Engineer with strong Machine Learning architecture experience who can design, build, test, and support our batch and streaming machine learning services. These services will be used in solutions for both on-premise and cloud deployments. You will have significant experience in architecting, designing, developing and deploying machine learning runtimes at scale. You will communicate effectively on the merits and value of our machine learning-based solutions to direct stakeholders, senior leaders at Splunk, and our customers.

## **Responsibilities**

Splunk architects are passionate about continuously improving both what we deliver, and how we deliver our product to customers. As the machine learning architect, you will

- You will drive system architecture and design decisions for Splunk's machine learning infrastructure for both cloud and on-premise environments.
- You will plan, design, develop, test, and maintain key software improvements, primarily related to machine learning capabilities at Splunk.
- Lead a high performing team to drive scalability and innovation to ensure the long term effectiveness and interoperability between all components of the machine learning framework.
- You will work closely with product management to define product strategy and roadmap.
- Communicate to our internal and external stakeholders on machine learning topics in general, and the merits of our system in particular.
- You will lead software system architecture and design to appropriately incorporate machine learning into product features and effectively communicate this solution to software engineers, architects, and business leaders.
- Be a standout colleague who enjoys collaborating with, learning from, mentoring, and teaching other team members to create a positive work environment.

## **Requirements**

- 10+ years of software and product development experience, preferably in cloud computing or distributed systems and Big Data technologies such as Spark, Hadoop.
- 5+ years of experience in a similar role that displays strong leadership competencies and ability to foster technical strategy
- 3+ years of professional experience using machine learning frameworks such as scikit-learn, SparkML, or Tensorflow, and tools such as notebooks (Jupyter, Zepellin).
- 10+ years of experience deploying enterprise production systems in one of the following languages (Python, Java, Scala or C++ or GO).
- Strong Plus with experience with containers and orchestration technologies, such as Docker and Kubernetes.

- Bachelors in Computer Science or related fields or equivalent practical experience

Have you ever wanted to work on state of the art computer vision and applied machine learning that will make a lasting impact on society?

We are looking for brilliant Machine Learning Software Dev Engineers who have the passion to tackle tough problems by bringing cutting edge deep learning technologies to customer facing computer vision products at Amazon Web Services (AWS)!

As a Machine Learning Software Dev Engineer on the Amazon Rekognition Team (<https://aws.amazon.com/rekognition/>) you will design and develop fast, efficient and highly scalable deep learning algorithms that are applied to challenging deep learning-based image and video recognition problems.

In 'Rekognition' we offer a service that makes it easy to add image and video analysis to applications. Rekognition APIs enables you to quickly add sophisticated visual search, image classification, face recognition and much more to your applications.

You'll work with senior scientists and engineers within Amazon AI and develop high quality software that is robust and reliable.

Software Engineers at Amazon do so much more than just software development.

### **We'll Be Looking At You To Help**

- Decide what features to build and performance improvements.
- Drive software engineering best practice.
- Design distributed and scalable systems.
- Provide technical leadership and contribute to the definition, development, integration, test, documentation, and support of Java and Python software.
- Instill best practices for software development and documentation, making sure designs meet requirements, and delivering high quality software on tight schedules.

### **Basic Qualifications**

- 4+ years of professional software development experience
- 3+ years of programming experience with at least one modern language such as Java, C++, or C# including object-oriented design
- 2+ years of experience contributing to the architecture and design (architecture, design patterns, reliability and scaling) of new and current systems

### **Preferred Qualifications**

- Masters or PhD in Computer Science
- 10+ years of relevant software development and/or engineering management experience
- Experience with machine learning, deep learning, data mining, and/or statistical analysis tools.
- Knowledge of professional software engineering practices and best practices for the full software development life cycle, including coding standards, code reviews, source control management, build processes, testing, and operations.

- Experience with highly distributed, multi-tenant systems with clear state-full/state-less boundaries.

For two decades, NVIDIA has pioneered visual computing, the art and science of computer graphics. With our invention of the GPU we also set the stage for advances in the field of medical research, computer vision and artificial intelligence. Today NVIDIA is at the groundbreaking level to innovate robotics and intelligent autonomous machines. There has never been a more exciting time to join our company and team.

The team around Project Isaac is building a robotics tools to teach the next generation of intelligent and autonomous robots. Isaac is binding together high-fidelity simulation, perception and planning algorithms, machine learning to Jetson, a small and powerful computational platform to form the brain of intelligent machines. Our team is diversified and spreading all over the world and over dozens of technological fields, and together we want to change the way robots are programmed.

### **What You'll Be Doing**

- Build perception modules fusing traditional computer vision and machine learning
- Use simulation and GPUs to formulate new algorithms and methodologies to teach robots
- Encapsulate complex algorithms and robot skills behind user friendly APIs.
- Participate in establishing the team technological roadmap
- Mentor junior team members and interns

### **What We Need To See**

- Minimum requirement MS or PhD and 4+ years of relevant experience
- Outstanding programming skills in C++, C, and/or Python
- Experience taking projects from Research to Productization
- Experienced code reviewer able to produce production ready code
- You are comfortable working cross functionally with product and hardware teams

### **Ways To Stand Out From The Crowd**

- Comfortable working on Nvidia Jetson hardware
- CUDA and proficiency in modern deep learning frameworks such as TensorFlow or PyTorch is a plus.
- Exposure to robotics or similar autonomous machine development
- Project management tools (e.g. JIRA, Microsoft Project)
- You have a thirst and ability to learn and adapt to new technologies
- Flexibility/adaptability for working in a dynamic environment with different frameworks and requirements
- Writing papers and publishing is a plus

Our division primarily focuses on research & development and advanced prototyping, transforming state of the art signal processing algorithms into real-time software systems.

Projects involve small multi-disciplinary teams of engineers working together in spiral or agile development environments to meet aggressive customer schedules aimed at near-term field demonstrations. We are seeking a candidate for this position with a track record of implementing high-performance signal processing on general purpose processors, such as ARM.

### **The Successful Candidate Will Be Responsible For**

- Contributing to design and development of advanced systems as a part of multi-disciplinary teams. These teams are made up of other software team members and subject matter experts from the areas of systems engineering, hardware, firmware, machine learning, RF front end design, and signal processing.
- Designing, implementing, and testing real-time C/C++ software for multi-core systems running Linux or a real-time operating systems, such as VxWorks
- Experience building software products that utilize third party mathematics and communication libraries
- Experience with interface communication standards / protocols such as TCP/IP, UDP, and DDS
- Ability to read and understand signal processing algorithms written in MATLAB
- Advanced knowledge of the Linux operating system as well as experience with real-time operating systems
- Designing, implementing, and testing software to configure and control RF hardware devices
- Integrating software into third-party software frameworks and architectures, such as Redhawk
- Documenting the developed systems
- Support system field testing and collection events, usually about a week in duration once or twice a year

### **The Successful Candidate Will Have The Following Education/experience**

- Bachelor's Degree in Computer Engineering, Electrical Engineering, or Computer Science
- 2+ years of C/C++ real-time software development experience
- Experience using version control (Subversion, GIT, etc.) and continuous integration software tools (Jenkins)
- Active Secret level security clearance at a minimum

### **Bonus Education/experience**

- Master's Degree in Computer Engineering, Electrical Engineering, Computer Science, or equivalent
- Existing security clearance higher than the Secret level
- Experience with Machine Learning and/or Artificial Intelligence algorithms and libraries, such as TensorFlow
- Experience with MATLAB GPU computing
- Experience with High Performance Computing including parallel and distributed computation
- Experience with Model-Based Design code generation practices
- Experience with cloud-based computing platforms, such as Amazon Web Services (AWS)
- Experience with other programming languages such as Python and/or Java

LLnC

Imagine what you could do here. At Apple, we believe new ideas have a way of becoming phenomenal products, services, and customer experiences very quickly. Bring passion and dedication

to your job and there's no telling what you could accomplish.

It takes deeply dedicated, intelligent and hard-working individuals to maintain and exceed the high expectations for the exciting iPhone brand at Apple. The iPhone Operations Data Team is looking for an extraordinary Machine Learning Engineer to join our team. You will craft, design and implement our machine learning strategy to the massive iPhone supply chain and help build the future of our manufacturing systems. You will be building, deploying and scaling algorithms from laptops in Cupertino serving thousands of inferences daily in industrial manufacturing settings.

### **Key Responsibilities**

- Deploy scalable Machine Learning and Computer Vision algorithms on local and cloud-based inferencing platforms
- Build and maintain API's for ML inference services, and web applications to host ML solutions
- Work with resources in the factory to integrate ML applications with existing factory software and systems
- Be a great teammate, approachable, ready to assist DevOps and engineers at factory sites to build pipelines that need minimal operational maintenance
- Abilities to independently learn new technologies; prioritize tasks and take ownership; and meaningfully present results of analyses in a clear and impactful manner

### **Key Qualifications**

- Solid programming skills in Python or Java
- Experience in building light web applications using frameworks such as Flask, Node.js, React, etc.
- Experience in deployment and scaling of Machine Learning and Deep Learning algorithms on cloud services such as AWS, Azure, and Google Cloud
- Experience in data modeling in RDBMS (e.g. MySQL, PostgreSQL), and NoSQL databases
- Knowledge of software development tools such as Git, CI/CD, Docker, Kubernetes, etc.
- Knowledge of building scalable data pipelines using Hadoop, Spark, Hive, Cassandra, Kafka and NoSQL databases.
- Nice to Have:
- Experience with Image Analysis/Computer Vision
- Knowledge or familiarity of ML algorithms (deep learning, classification, clustering, Torch, Caffe, MXNet, TensorFlow)
- Experience with Python libraries such as scikit-learn, scipy, spacy, and NLTK
- Knowledge of networking concepts and protocols, e.g. TCP/IP, HTTP, etc.
- Knowledge of Swift, Objective-C, Cocoa, Cocoa-Touch, and CoreML
- Familiarity with manufacturing, or an industrial domain

### **Description**

As a key member of our team, collaborate with different engineering and operations teams leading development of ML solutions for a variety of tasks and projects. Are you passionate to learn and use a variety of software techniques, delivering projects from end-to-end?

You will help the ML Engineers deliver applications with minimal delays at precisely the right resource footprint with elasticity, while ensuring absolutely tight and robust security, privacy and confidentiality. You are equally comfortable enabling data pipelines to transport data (in and) out of our factories through custom-built platforms.

You will provide guidance on architecting custom solutions for data annotation, build infrastructure applications, interact with Big Data and produce applications that are quality tested, highly available, and run at Apple-scale with no downtime.

If you are passionate to influence the quality, speed and efficiency of our ML algorithms, come and help enable our vision to create the most refined products in the world.

**Education & Experience-** BS in Computer Science, EE, or related fields with 5 + years proven track record applying machine learning techniques to real business problems.

- Master's of Computer Science, Machine Learning, or higher level degree PhD preferred

**Course Hero** is scaling! We are looking for a **Senior Machine Learning Engineer** who can help us build intelligent data products such as Semantic Knowledge Graph, Document Classification and Entity Tagging, and ML-powered Search and Recommender Engines.

You will be a part of the ML and Data Product Engineering team and will collaborate cross-functionally to build and ship intelligent products that are used by millions of Students and Educators. Data Products powered by ML are critical to Course Hero's success, powering many aspects of our marketplace and supporting student-facing use-cases. The key charter for the Data Products team is to build the Semantic Knowledge Graph in order to help personalize bespoke learning experiences for students and help educators create unique course content.

As a senior engineer, you will be expected to take the lead on multiple projects and be involved in every step of the process. We expect you to thrive in a fast-paced, high-growth environment, and adapt to ever-changing business needs. You can view these videos to learn more about our engineering culture, and our company mission.

### **Here are some ways you'll make an impact!**

- Be a self-motivated, bold thinker, innovator and builder of scalable AI/ML systems end-to-end and embrace full-stack data science
- Design and develop machine learning and natural language processing algorithms to understand our large document (>30M) and Q&A (>10M) corpus, enrich it with semantic tags, and represent as a large knowledge graph
- Work alongside experienced engineering, design, and product teams with proven entrepreneurial success, to find the right solution to a problem and ship intelligent products
- Help engineers from other teams to understand and learn about machine learning and help Course Hero be a data driven company

## **Are you our next Senior Machine Learning Engineer?**

- 4+ years of Machine Learning experience, preferably with a focus on natural language processing, question-answering, semantic search, and recommender systems
- Experience using ML frameworks such as Tensorflow, SpaCY, or Scikit-Learn
- Solid programming skills in Python, Go, or Java
- Experience working with distributed data processing systems like Spark/Hadoop
- Masters or PhD in machine learning, computer science, or computational linguistics

## **Bonus Points!**

- Deep understanding of algorithms and evaluation methods used in production-grade text understanding, question-answering, and relational learning systems.
- Knowledge of search technologies like Solr, Elasticsearch
- Docker and Kubernetes
- Passionate about education

## **Senior Data Scientist**

### **Description**

We are looking for a Data Scientist to join Pearson's AI Products and Solutions team. Our mission is to enable the development of AI-first, outcome-driven products to improve learning experiences. The position provides the opportunity to engage in cutting-edge research on a cross-functional team and contribute to developing products that have an impact on millions of learners around the globe. Our primary focus is currently Aida™ Calculus ( <https://www.pearson.com/us/higher-education/products-services-teaching/learning-engagement-tools/aida.html> ).

### **What You'll Do**

- Be responsible for defining, developing and leading a small team (2-3 direct reports) of highly skilled data scientists in collaboratively tackling an ambitious R&D agenda.
- Provide technical and scientific leadership when designing a plan of execution and addressing unforeseen challenges and problems.
- Lead by example and excel as a senior scientific contributor through active hands-on participation.
- Collaborate and communicate effectively with both technical and non-technical stakeholders and partners as well as senior management and leadership.
- Assist in the creation and execution of an R&D strategy focused on developing AI capabilities that enable pioneering educational products. Help define project scope, priorities, and appropriate distribution of resources.
- Accomplish results by communicating honestly; setting expectations, monitoring, and appraising job results; coaching, counseling, and disciplining employees; developing, coordinating, and enforcing systems and policies.

## **Qualifications**

### Who You Are

- You have an advanced degree in a relevant field such as computer science, statistics, and data science.
- You have 5 years relevant experience.
- Ideally, you have prior experience leading a team.
- You have strong technical and scientific prowess and experience showcasing strong coding skills using Python. Preferred experience includes git version control in shared team repositories, cloud technologies (e.g. Amazon AWS, Google Cloud Platform), containers (Docker), and web application development (including API, REST, JSON).
- You have a passion for and demonstration of conducting research while maintaining an end-product vision.
- You are skilled at Agile project planning and oversight.
- You have a knack for creative problem solving, willingness to learn new technologies and skills, and ability to mentor peers.

At Pearson, we're committed to a world that's always learning and to our talented team who makes it all possible. From bringing lectures vividly to life to turning textbooks into laptop lessons, we are always re-examining the way people learn best, whether it's one child in our own backyard or an education community across the globe. We are bold thinkers and standout innovators who motivate each other to explore new frontiers in an environment that supports and inspires us to always be better. By pushing the boundaries of technology — and each other to surpass these boundaries — we create seeds of learning that become the catalyst for the world's innovations, personal and global, large and small. Pearson is an Equal Opportunity and Affirmative Action Employer and a member of E-Verify. All qualified applicants, including minorities, women, protected veterans, and individuals with disabilities are encouraged to apply.

We are looking for a passionate mobile UI lead, to be embedded in the AI product solutions team, that will contribute to the creation of innovative A.I. app experiences in education. Our mission is to deliver the development of AI-first, outcome-driven products to improve learning. The position provides the opportunity to engage in delivering cutting-edge solutions within a cross-functional team. Above all, your work will contribute to developing products that have an impact on millions of learners around the globe.

### **As a Mobile Lead You Will**

- Analyze & Design - Design solutions that effectively model the customer's requirements, taking into account performance, maintainability/complexity, market trends and innovation, controlling costs, system robustness and scalability, and long term quality initiatives. Follow established design patterns and recommend new design patterns.
- Prototype - on different cutting edge cross platform stacks
- Implement - Implement designs following Pearson coding standards and industry best practices.

- Review - Participates in and reviewing requirements, design, code, and test case (both manual and automated) reviews
- Test - Work closely with other teams (e.g., QA, devOps, configuration management, end users) to release high quality software. Create testable code and implement automated unit, integration, and functional tests as part of all development activities.
- Document - Complete project documentation as required, including logging status, risk, progress, and effort on assigned work.

## **Qualifications**

### **Required Education & Experience:**

- B.S. in Computer Science or equivalent, with strong fundamentals and problem solving skills
- Experience in modern mobile SDKs (Android, iOS)
- Accomplished Mobile developer especially in crossplatform stack (React Native) and/or native (Android & iOS) with strong team leading skills
- Delivered at least one production quality app to Google Play or Apple Store
- 10 years experience with complete development process: design, test, build, deploy, repeat in a cloud environment
- 5 years experience using industry standard DevOps tools (CI/CD, Jenkins, GoCD, Git, scripting, Gradle, Maven, Docker/containers, Kubernetes, etc...)
- Familiarity with API development, HTTP, async processing, parallel processing, distributed computing
- Expert knowledge in software source control: Gitlab, Git, or BitBucket
- Expert experience with mobile programming languages (JS, Swift, Java)
- 5 years experience with Analytics, logging, monitoring, metrics (SDKs from Firebase and Google is a plus)
- 5 years experience creating APIs, Web Services (RESTful), API documentation.
- Familiar with various testing platforms
- Experience building and maintaining scalable solutions in a distributed environment.
- Agile methodologies (e.g. Scrum, Kanban, XP, etc.)
- Experience in defining and completing non-functional requirements such as Accessibility, Security, I18N, Performance, and/or Scalability
- Excellent verbal & written communication skills
- Self-starter, able to work solo and part of a cross functional team
- Ability to work with 3rd party vendors, manage interactions and project needs

At Apple, we work every day to create products that enrich people's lives. Our Advertising Platforms group makes it possible for people around the world to easily access informative and imaginative content on their devices while helping publishers and developers promote and monetize their work. Our technology and services power advertising in Apple News and Search Ads in the App Store. Our platforms are highly performant, deployed at scale, and set new standards for enabling effective advertising while protecting user privacy!

We are looking for a world-class Product Manager to join the team and help build the next

generation of marketplace algorithms and optimization tools. Are you looking for a technically challenging product management position? Do you get excited turning insights from large data sets into product improvements? We are searching for you with a proven track record of enabling cross-functional teams to deliver complex systems. You will need to understand the world of optimization systems development and data driven product management, orchestrate a product plan and schedule, then successfully manage execution from development to launch and continued optimization and operation of the product.

### **Key Qualifications**

- 5+ years of product management or related experience, preferably in advertising
- Experience managing products through the full life cycle: strategy, development, launch, optimization, sunset. Experience launching a v1 product is a plus
- Experience building large scale forecasting, optimization or machine learning systems
- Strong track record of collaborating with engineers and data scientists on technical design discussions and proposing simple, creative solutions to complex problems
- Fundamentally analytical and technical; ability to collect and analyze data from a variety of sources, identify key insights, spot product optimization opportunities, and inform product decisions
- Excellent analytical, verbal and written communication skills

### **Description**

- Accountable for advertising performance prediction and ad-serving optimization product capabilities, features, and SLAs

- Collaborate with business partners to understand business direction, customer needs, product structure and requirements
- Define, prioritize and deliver marketplace product roadmap and product features based on business requirements
- Measure resulting outcomes and continuously optimize future initiatives
- Oversee the development, delivery and deployment of the solution
- This role involves a fair amount of hands-on data analysis on big datasets

**Education & Experience** BS or MS in Computer Science, Statistics, Operations Research, Economics or related areas

Are you interested in building software for Alexa AI which includes Natural Language Understanding infrastructure for Incremental Learning, AutoML, Deep Learning or solving complex Big Data problems? We're building the Machine Learning platform behind Alexa. We're working hard, having fun, making history; come join us!

This team is in the Spoken Language Understanding Innovations org within Alexa AI which is a hybrid science and engineering org that builds services integrating new innovations to enable language engineers, scientists, SDEs and product managers to build conversational experiences for millions of Alexa's customers. We are developing our ML stack to offer state-of-the-art abstractions to developers so they can deliver immersive voice experiences with ease. To accomplish this, we work closely with some of the best ML Research and Applied Scientists in the field. Projects this team is

working on includes AutoML, Incremental Learning, Deep Learning, Testing Strategy, and Data preparation (Big Data pipeline).

As a member of the team you will be responsible for leading the front end development and launch of core product features. You will have significant influence on our overall strategy by helping define these product features, drive the system architecture, and spearhead the best practices that enable a quality product.

The ideal candidate is clearly passionate about new opportunities and has a demonstrable track record of success in delivering new features and products. A commitment to team work, hustle, and strong communication skills (to both business and technical partners) are absolute requirements. Creating reliable, scalable, and high performance products requires exceptional technical expertise, a sound understanding of the fundamentals of Computer Science, and practical experience building large-scale distributed systems. This person has thrived and succeeded in delivering high quality technology products/services in a hyper-growth environment where priorities shift fast.

### **Basic Qualifications**

- Bachelor's degree in computer science or related field, or equivalent professional experience
- 5+ years of professional experience as a software engineer or front end engineer
- 3+ years of Experience designing, developing, and scaling modern web applications
- 3+ years of Experience with Rails, React, Java, CSS/SASS, and/or other modern web technologies

•

### **Preferred Qualifications**

- Track record delivering correct, stable, performant, and secure front-end software.
- Ability to solve difficult & ambiguous software and UX problems.
- Ability to decompose problems into clear software and UX design actions.
- Proficient in a broad range of software design approaches and common UX patterns.
- Ability to dive into source code of front end libraries to debug, patch, and extend them when necessary
- Knowledge of engineering and operational excellence best practices.
- Understands the implications of introducing dependencies.
- Knows how to instrument software with real user metrics to reflect the customer experience.
- Proficiency in at least one back-end programming language, e.g. Java, Ruby, Python, PHP, C#, or Node.js.

The Inventory Planning and Control (IPC) team owns Amazon's global inventory planning systems. We build the systems that decide what, when, where, and how much we should buy to meet Amazon's business goals and to make our customers happy. We do this for millions of items, for hundreds of product lines worth billions of dollars of inventory world-wide. Our systems are built entirely in-house, and are on the cutting edge in automated large scale supply chain planning and optimization systems. IPC fosters new game-changing ideas, continuously improves, resulting in sophisticated, intelligent and self-learning models. IPC is unique in that we're simultaneously

developing the science of supply chain planning and solving some of the toughest computational challenges at Amazon.

The Capacity Aware Planning & Optimization (CAPO) team in IPC is responsible for managing the storage and inbound capacity for Amazon's WW fulfillment network at aggregate and FC level, short term and long term. We build scalable software to generate capacity control signals which are consumed by various critical decision making systems in Amazon's supply chain. Our simulation based capacity controller leverages the largest simulation system in the world to solve challenging network capacity management problem. We solve one of the largest nonlinear optimization problems in the world using cutting-edge distributed computing techniques. We build advanced machine learning models to approximate complicated production system behaviors in our models.

### **Major Responsibilities Include**

As a Data Scientist in the team, you will be tasked to understand and work with bleeding edge research to enable the implementation of sophisticated models. You will be an analytical problem solver who enjoys diving into data from various businesses, is excited about investigations and algorithms, is comfortable with multi-tasking, and can align scientists, engineers and business stakeholders to deliver on a joint goal. Your expertise in synthesizing and communicating insights and recommendations to audiences of varying levels of technical sophistication will enable you to answer specific business questions and innovate for the future.

- Own the design, development, and maintenance of scalable solutions for ongoing metrics, reports, analysis, dashboards, etc. to support analytical and business needs.
- Design and drive experiments, A/B testing, outlier deep dives and form actionable recommendations. Manage the implementation of those recommendations.
- Improve upon existing machine learning methodologies by developing new data sources, developing and testing model enhancements, running computational experiments, and fine-tuning model parameters for new models.
- Use analytical and statistical rigor to solve complex problems and drive business decisions.
- Communicate verbally and in writing to business customers with various levels of technical knowledge, educating them about our research, as well as sharing insights and recommendations.
- Utilize code (Python, R, Scala, etc.) for analyzing data and building statistical and machine learning models and algorithm.

To help describe some of our challenges, we created a short video about Supply Chain Optimization at Amazon - <http://bit.ly/amazon-scot>

Amazon is an Equal Opportunity-Affirmative Action Employer – Minority / Female / Disability / Veteran / Gender Identity / Sexual Orientation / Age

### **Basic Qualifications**

- Bachelor or Master's degree in Statistics, Applied Mathematics, Operation Research, Economics or a related quantitative field

- 5+ years' of experience with data querying languages (e.g. SQL), scripting languages (e.g. Python), or statistical/mathematical software (e.g. R, SAS, Matlab, etc.)
- Experience articulating business questions and using quantitative techniques to arrive at a solution using available data

### **Preferred Qualifications**

- Excellent written and oral communication skills
- Experience processing, filtering, and presenting large quantities (Millions to Billions of rows) of data
- Depth and breadth in quantitative knowledge. Excellent quantitative modeling, statistical analysis skills and problem-solving skills. Sophisticated user of statistical tools.
- Ability to quickly adapt to changing priorities and generate innovative solutions in an extremely fast-paced environment.
- Combination of deep technical skills and business savvy enough to interface with all levels and disciplines within our customer's organization
- Experience in gathering requirements and formulating business metrics for reporting.
- Experience working with data related to causal analysis (e.g. estimating causal lift) or experiments
- Experience in supply chain management

Apple ignited the personal computer revolution in the 1970s with the Apple II and reinvented the personal computer in the 1980s with the Macintosh. Today, Apple continues to lead the industry in innovation with its award-winning computers, operating systems, smart phones and tablet computers, this is made possible because we value the "Think Different" philosophy.

Make a difference.

The Operations team at Apple is looking for a dynamic and motivated candidate for the role of a Data Engineer. The role is an opportunity for a self-driven individual to utilize their business acumen, acquire process knowledge and apply analytical skills to deliver creative, value-added solutions to the Operations team at Apple.

The Engineer needs to be adept in the use of data forensics, statistical tools and techniques to be able to identify process gaps, root cause issues and recommend optimal solutions. Knowledge and hands on experience of quantitative analysis in the supply chain domain is expected. Ability to use statistical tools and techniques to identify process gaps, root cause issues and drive data driven decision making is desirable.

Ability to think strategically and execute on operational strategies to make definitive and measurable improvements for the operations teams along with providing leadership in a cross functional environment across geographies is a must have. Ability to crisply articulate findings to senior leadership and a passion for driving excellence is desired. Must be able to work in a fast paced environment, perform effectively under dynamic conditions such as directional changes, tight deadlines and limited resources. Organizational skills and the ability to multi task are essential. Commitment to keeping up to date with industry leading technologies, techniques, tools and best practices and experience with SQL, Teradata, Python and Tableau experience is an absolute must. Must be able to work in a fast-paced environment, perform effectively under dynamic conditions

such as directional changes, tight deadlines and limited resources.

An understanding of data sources & relationships, reporting tools and systems knowledge is required. Experience with measuring and managing data quality is desirable. Ability to translate technical content for non-technical audiences and vice-versa would be beneficial. A positive attitude and the ability to communicate and negotiate are necessary to be successful in this role.

Ability to think out of the box and influence peers and management with data driven models using advanced analytics is a must have. Ability to leverage quantitative skills, select appropriate tools and techniques, create frameworks to drive policy changes and implementing corrective actions to improve the customer experience will be a measure of success for this role. Excellent verbal and written communication & presentation skills using data visualization applications is desired.

### **Key Qualifications**

- Minimum 5 years experience within Operations and Supply Chain desired
- Proven data driven decision making skills
- Computational analysis using Excel, mySQL, Teradata, Python, Tableau, Business Objects, JMP, R, Matlab, SPSS and SAP preferred.
- Experience with Teradata, SQL, Tableau preferred
- Fluency in SQL or other programming languages (Python, Java, and/or C++)
- Development experience with at least one scripting language (PHP, Perl, Python, etc.)
- Applied Machine Learning experience (regression analysis, time series, probabilistic models, bayesian statistics)

### **Description**

- Provide analytical reporting and analytics to the operations team and external partners

- Ability to operate in a fast paced, rapidly changing environment
  - Ability to rapidly learn and adapt to business changes
  - Create and maintain reports, create and manage data models, leverage data across complex hierarchies using multiple data sources
  - Leverage process improvement techniques to drive improvements in data quality
  - Detail oriented and self-motivated individual able to function effectively when working independently or in a team
- 
- Ability to maintain poise and a positive attitude in a challenging environment
  - Excellent communication and presentation skills
  - Perform testing to support system implementations and upgrades
  - Leverage industry best practices for data analysis and share across the operations community

Imagine what you could do here. At Apple, great ideas have a way of becoming great products, services, and customer experiences very quickly. Bring passion and dedication to your job and there's no telling what you could accomplish.

Do you want to make Siri and Apple products smarter for our users? The Siri Search & Knowledge teams are building groundbreaking technology for algorithmic search, machine learning, natural language processing, and artificial intelligence. The features we build are redefining how hundreds of millions of people use their computers and mobile devices to search and find what they are looking for. Siri's universal search engine powers search features across a variety of Apple products, including Siri, Spotlight, Safari, Messages and Lookup. As part of this group, you will work with one of the most exciting high performance computing environments, with petabytes of data, millions of queries per second, and have an opportunity to imagine and build products that delight our customers every single day.

### **Key Qualifications**

- Strong coding skills
- Strong background in computer science: algorithms and data structures
- Experience with AWS Services such as Amazon S3 EC2 EKS / Kubernetes
- Excellent interpersonal skills able to work independently as well as in a team
- Experience with Information Retrieval Large Scale Data-Mining and/or Machine learning are a plus
- Experience Web Crawling is a plus

### **Description**

We design and build infrastructures to support features that empowers billions of Siri users. Our team processes trillions of links to find the best content to surface to users through search. We also analyze pages to extract critical features for indexing, ranking. We apply statistical analysis to improve link selection, freshness, retrieval rates, extraction quality, and many others. You'll have the opportunity to work with large scale systems with trillions of rows and many petabytes of data and incredible complexity.

The Amazon Alexa app is a companion to Alexa devices for setup, remote control, and enhanced features. The Alexa app understands a customer's habits, preferences and delivers a personalized experience to help them manage their day by providing relevant information as customers want it. We believe voice is the most natural user interface for interacting with technology across many domains; we are inventing the future. As voice-enabled technology becomes increasingly advanced, consumers are demanding more from what their voice products can do. We're looking for Scientists who are passionate about innovating on behalf of customers, demonstrate a high degree of product ownership, and want to have fun while they make history.

As an Applied Scientist, you will help build a production scaled personalized recommendation and lead the team to build Machine Learning (ML) and Deep Learning (DL) models to help derive business value and new insights through the adoption of Artificial Intelligence (AI). The successful candidate will be responsible for model selection and identification of appropriate training data sets; building, training, and evaluating models; and delivering results to the business. A successful candidate will be a person who enjoys diving deep into data, doing analysis, discovering root causes, and designing long-term solutions.

- Define the long-term development, science and business strategies for the team.
- Expertise in the areas of data science, machine learning and statistics.

- Translate business needs into advanced analytics and machine learning models and provide strong algorithm and coding execution and delivery of Machine Learning & Artificial Intelligence.
- Work closely with the engineers to architect and develop the best technical design and approach.
- Being able to deliver a ML / DL project from beginning to end, including understanding the business need, aggregating data, exploring data, building & validating predictive models, and deploying completed models to deliver business impact to the organization.
- Use Deep Learning frameworks like Tensorflow, and Keras to build models.
- Analyze, extract, normalize, and label relevant data.
- Work with Engineers to help our customers operationalize models after they are built.

### **Basic Qualifications**

- Phd or Masters in a highly quantitative field (Computer Science, Machine Learning, Informatics, Operational Research, Statistics, Mathematics, etc.) or equivalent experience
- 10+ years of industry experience in predictive modeling, data science and analysis
- Experience with using data visualization tools, handling terabyte size datasets and working with GPUs to develop models
- Experience with Python, R, Scala, SQL and one of the advanced Deep Learning, RL or AI libs like TensorFlow and PyTorch
- Experience leading teams developing ML and DL models and working with Product and partner teams.
- Experience with writing and speaking about complex technical concepts to broad audiences in a simplified format.
- Recognized technical expertise includes but not limited to publications, editorial and advisory boards, conference/symposium presentations, patents, professional peer recognition and strategically important developments, innovations, or technical contributions
- Demonstrated experience in mentoring and coaching interns, and junior technical contributors.

### **Preferred Qualifications**

- Demonstrable track record of dealing well with ambiguity, prioritizing needs, and delivering results in a dynamic environment
- Track record of diving into data to discover hidden patterns
- Combination of deep technical skills and business savvy enough to interface with all levels and disciplines within our customer's organization
- Experience with AWS technologies like Redshift, S3, EC2, Data Pipeline, & EMR
- Publications or presentation in recognized Machine Learning, Deep Learning and Data Mining journals/conferences
- Ability to develop experimental and analytic plans for data modeling processes, use of strong baselines, ability to accurately determine cause and effect relations
- Good skills with programming languages, such as Java, python or C/C++

**We are looking for a talented Data Analyst to join our Client`s team. The ideal candidate will be skilled at analyzing large data sets, recommending appropriate statistical tests and helping to design algorithms for leveraging data in real time.**

### **Responsibilities**

Research and develop statistical models for data analysis and anomaly detection

Collaborate with the engineering team and management to understand the needs and propose solutions

Implement prototypes **for real time algorithms**

Recommend suitable architectures for scalable and performant deployments

About the Team

This team develops globally managed services that support our internal customers by distributing configuration changes quickly and safely throughout our network. This 'behind-the-scenes' team is in charge of developing, testing and supporting this highly available system serving numerous internal clients and interfacing with a variety of downstream systems.

### **Qualifications**

#### **Required Education and Experience**

MS/PhD in Computer Science or related technical field or equivalent practical experience.

7+ years of relevant work experience in software development and data analysis

#### **Required Skills**

**Experience in anomaly detection or machine learning, statistical analysis,** and associated algorithms.

Background in data mining and statistical analysis

#### **Desired Skills**

Experience with Python 3

Strong interpersonal, communication, and organizational skills.

Self-motivated, highly responsible, able to work with little supervision.

Experience building scalable, production-grade distributed systems.

Experience with big data processing pipelines such as Hadoop and Spark

Experience with Elasticsearch and ELK.

**Rate: \$80-100/hr on W2**

Play a part in the next revolution in human-computer interaction. Give to a product that is redefining mobile computing. Build groundbreaking technology for large scale systems, spoken language, big data, and artificial intelligence. And work with the people who built the intelligent assistant that helps millions of people get things done — just by asking. Join the Siri Machine Learning & Natural Language team at Apple.

### **Key Qualifications**

- Strong programming and software engineering skills (Java, C++, Scala, Python or equivalent)

- Expertise in various facets of machine learning and natural language processing, such as classification, feature engineering, information extraction, structured prediction, clustering, semi-supervised learning, topic modeling and ranking
- Prior experience with applying Big Data (MapReduce, Hadoop, Hive and/or Pig, Spark) tools to large quantities of textual data is a plus
- Hardworking, self-starter, shown ability to run multiple projects to strict deadlines.

### **Description**

The goal of the Siri Machine Learning & Natural Language team is to take Siri to the next level of intelligence and accuracy using advanced statistical techniques. We work on a wide spectrum of approaches to improving Siri. You would work on core machine learning algorithms and models that are part of Siri's ability to understand and respond to requests. You would also work on building scalable distributed systems to deliver these models to Siri's users. You should be passionate about building extraordinary products. This position involves a wide variety of skills and innovation. This is a rare opportunity that sits at the state of the art of machine learning and software.

**Education & Experience** Bachelor's in Computer Science or equivalent Masters or PhD preferred  
Do you want to join Alexa AI -- the science team behind Amazon's intelligence voice assistance system? Do you want to utilize cutting-edge deep-learning and machine learning algorithms to delight millions of Alexa users around the world?

If your answers to these questions are "yes", then come join us at the Alexa Artificial Intelligence team, which is in charge of improving Alexa user satisfaction through real-time metrics monitoring and continuous closed-loop learning. The team owns the modules that reduce user perceived defects and frictions through utterance reformulation, contextual and personalized hypothesis ranking.

With the Alexa Artificial Intelligence team, you will be working alongside a team of experienced machine/deep learning scientists and engineers to create data driven machine learning models and solutions on tasks such as sequence-to-sequence query reformulation, graph feature embedding, personalized ranking, etc..

### **You Will Be Expected To**

- Analyze, understand, and model user-behavior and the user-experience based on large scale data, to detect key factors causing satisfaction and dissatisfaction (SAT/DSAT).
- Build and measure novel online & offline metrics for personal digital assistants and user scenarios, on diverse devices and endpoints
- Create and innovate deep learning and/or machine learning based algorithms for utterance reformulation and contextual hypothesis ranking to reduce user dissatisfaction in various scenarios;
- Perform model/data analysis and monitor user-experienced based metrics through online A/B testing;
- Research and implement novel machine learning and deep learning algorithms and models.

## **Basic Qualifications**

- Master's degree in Electrical Engineering, Computer Sciences, or Mathematics with specialization in speech recognition, natural language processing, or machine learning
- 5+ years experience with programming languages such as C/C++, Java, Perl or Python.

## **Preferred Qualifications**

- PhD in Electrical Engineering, Computer Sciences, or Mathematics with specialization in speech recognition, natural language processing, or machine learning
- 8+ years experience in building natural language processing systems
- Solid ML background and familiar with standard NLU and ML techniques
- Experience with PySpark for big data processing, analysis and ML
- Scientific thinking and the ability to invent, a track record of thought leadership and contributions that have advanced the field
- Solid software development experience
- Good written and spoken communication skills

Imagine what you could do here. At Apple, great ideas have a way of becoming great products, services, and customer experiences very quickly. Combining groundbreaking machine learning techniques with next-generation hardware, our teams take user experiences to the next level.

We are looking for scientists and engineers to join our teams in Cupertino, Seattle, Pittsburgh, Cambridge (UK), and Beijing.

## **Key Qualifications**

- Strong background in search engine core engineering, information retrieval, data management and artificial intelligence
- Strong programming experience in one or more of the following: Python, Java, C/C++, Go
- Knowledge of machine learning fundamentals such as feature extraction, learning algorithms, training and evaluation
- Strong programming skills with proven experience crafting, prototyping, and delivering advanced algorithmic solutions
- Creative, collaborative, and innovation focused

## **Description**

Our teams are creating groundbreaking technology in the areas of algorithmic search, machine learning, knowledge bases, NLP, and artificial intelligence. The experiences we build are redefining how hundreds of millions of people use their computers and mobile devices to find what they are looking for. Our technologies power features across a variety of Apple products, including Siri, Spotlight, Safari, Messages, Lookup, Maps, Music, and News.

As a member of a search team at Apple, you will use your deep understanding of search, information retrieval, and artificial intelligence to tackle meaningful technical problems, collaborate with the most innovative product development teams in the world, and transfer your ideas into solutions in the

next generation of Apple products and services. You will perform fundamental research by defining, designing, implementing and evaluating algorithms involving unrivaled data and objectives. You will also actively engage with the academic community by collaborating with universities, publishing and presenting your work, and attending conferences.

**Education & Experience** PhD, MS, or BS in Machine Learning, Computer Science, or related fields.

At Apple, we work every day to build products that enrich people's lives! Our Advertising Platforms group makes it possible for people around the world to easily access informative and imaginative content on their devices while helping publishers and developers promote and monetize their work. Today, our technology and services power advertising in Search Ads in the App Store and Apple News. Our platforms are highly-performant, deployed at scale, and setting new standards for enabling effective advertising while protecting user privacy!

We are looking for an exceptional hands-on machine learning (ML) senior manager who can thrive in a fast-paced environment. You will develop, implement and deploy to production new advertising algorithms and supporting capabilities. The position also involves developing a keen understanding of the ad network behavior; detecting meaningful data patterns; assuring the integrity and breadth of the data; measuring user, campaign and app performance; and finally analyzing the results of extremely large-scale experiments. In particular, this position focuses on creating recommendations for our advertisers to help them manage their campaigns in order to help them derive the most value from our platform while creating a health and thriving marketplace.

### **Key Qualifications**

- You can apply advanced statistical methods and work with large, complex data sets.
- You can actively participate in investigations into multiple streams of ads quality data, and draw conclusions from data, recommend actions.
- You have experience in some of the following domains: Algorithms, Architecture, Artificial Intelligence, Database Systems, Data Mining, Distributed Systems, Machine Learning, Networking, Statistics, Game Theory, Auction Design, or other experience with rigorous Quantitative Analysis or Systems Software implementation.
- You have experience developing in Python or Java.
- You are familiar with databases, SQL, and scripting languages.
- You have a practical understanding of modern machine learning and its components.
- You enjoy working closely with operational teams on deployment, monitoring, and management concerns.
- You actively manage performance of the team reporting to you and take responsibility to drive its outcome

### **Description**

You will lead the team that defines, refines, and/or refactors our approaches, designs, and architectures to meet the ad network challenges we must solve. You will lead a team of world-class machine learning engineers hungry to apply leading-edge technologies to deliver extraordinary experiences to our customers. You will play a critical leadership role building products which deliver

on Apple's privacy commitments and change the way advertising works with data.

You will have the opportunity to work on a platform with extreme scale requirements. At Ad Platforms, we are constantly developing products to provide amazing user experiences and drive value for publishers and developers. You will have the chance to lead the design and implementations of the engineering solutions that bring cutting edge ad network algorithms into production in heterogeneous environments. You have the chance to apply cutting edge data engineering techniques, platform engineering approaches, and algorithmic solutions.

You will join and contribute to a culture that emphasizes understandability, reliability, resiliency, simplicity, reusability, extensibility, scalability, and productivity. We are one team, nurturing each other's growth and supporting each other in delivering for our customers and Apple.

**Education & Experience**BS/MS/PhD in Computer Science, Distributed Systems, Software Engineering, or related field; and experience designing, building, maintaining, and extending web-scale production systems.

Experience leading teams that deliver the infrastructure, frameworks, and components that support mission critical ML capabilities.

Senior Technical Program Manager , Alexa AI Intelligent Decisions Platform is a new role in Amazon Alexa's Artificial Intelligence (AI) organization. Alexa AI organization's mission is to "Invent AI capabilities to complete customer interactions naturally and without any friction, anytime and anywhere". Our Intelligent Decisions Platform team builds the foundational Artificial Intelligence technology that is responsible for determining the best action to fulfill customer requests once we understand what they said and what they meant based on the context, in a frictionless manner.

Alexa is at the forefront of customer and scientific innovation in the area of machine learning (ML) and artificial intelligence (AI). Our AI will be customer-centric, leveraging the latest scientific methods to create productive, natural interactions for our customers as they go about their daily lives. As Senior TPM, you will have ownership for one of our strategic initiatives and be responsible for directing and prioritizing our activities towards that initiative's successful criteria.

This is an opportunity to lead the Artificial Intelligence team behind the smart, instantly familiar, and universal personal assistant -- Alexa. The Artificial Intelligence team is looking for exceptional Technical Program Managers to be part of a world class team changing the way people develop and interact with digital personal assistants anytime and anywhere.

You must enjoy a close-knit team environment of shared responsibility. The ideal candidate will have experience leading delivery across science and engineering disciplines and an established track record of delivering large programs and driving technical roadmaps.

You should be a problem solver who is excited by hard never-been-solved before challenges, and enjoys working with Science and tech teams collaboratively. You should be somebody who is passionate about customers and about leading programs that have both broad influence and unique science and technical challenges to solve. We are creating new customer experiences, so you must be able to put yourself in the customer's shoes and anticipate what will delight them. You will be expected to come up with hypotheses and validate/invalidate them via qualitative and quantitative

research. You must enjoy a close-knit team environment of shared responsibility. This role requires great technical expertise, and ability to dive deep into the science based challenges and solutions we solve on a daily basis. The ideal candidate will have experience leading delivery across science and engineering disciplines and an established track record of delivering large complex programs.

### **As Part Of The Team You Will**

- Green-field opportunity to create the artificial intelligence platform behind Alexa
- Drive the integration of science and engineering, owning the technical agenda, planning and execution
- Manage partnerships with the teams building Alexa capabilities to ensure high quality end-user experiences
- Plan customer solutions from the data – dive deep into experience data to identify problems and push for solutions.
- Find the opportunities for multiplying innovation across different customers, investing individual technology advances into the core science and platforms
- Continuously improve the internal processes and customer engagement models to streamline and accelerate the delivery of new technology

### **Basic Qualifications**

- 7+ years of experience in a related industry, including hands-on management of large, cross-functional software projects
- Experience building processes, project management, and release schedules, and employing effective risk management to large programs
- Experience in building ML-related software projects
- Product development experience
- Bachelors degree in computer science, engineering or a related technical discipline

### **Preferred Qualifications**

- Proven ability to work across teams and organizations, leading solutions to technical problems and delivering results through influence
- Effective at deriving concrete requirements out of ambiguous problems and constructing large-scale execution plans against those requirements
- Rich experience in driving ML related software projects in the search, ads and recommendation area.
- Excellent judgment, organizational, and problem-solving skills
- Outstanding written and verbal communication skills and the ability to communicate effectively with stakeholders at all levels of the organization
- Comfortable working in a fast paced, highly collaborative, dynamic work environment
- Exceptional interpersonal communication skill, including verbal, written, listening and customer relationships

AI products at Zillow help millions of people find the best home for them with less stress and more clarity. Zillow ML scientists develop a variety of ML models (natural language understanding,

computer vision, recommendation systems) that enables our customers to find and move to their next home. Join the team that develops end to end platform powering AI research and development at Zillow!

As a member of the AI Platform team, you will help define Zillow's approach to artificial intelligence research & Products in a deep way, powering products like home value estimation, document understanding, economic research, personalized recommendations etc.

Learn more about what we are doing at <https://www.zillow.com/data-science> and <https://www.zillow.com/engineering>

### **About The Role**

- Design and build scalable infrastructure for orchestrating end to end machine learning lifecycle from experimentation phase to deployment.
- Work closely with our data infrastructure team to build the data systems and stores that power ML models.
- Collaborate with various internal teams (product, engineering) to scope and deliver tools ensuring ease of platform use.
- Work with a variety of technologies such as Spark, Kubernetes, Scikit-learn, Kafka, Tensorflow etc.
- Code with the best language for the job, be it - Python, Java, Go or Scala

Who you are

### **Basic Qualifications**

- A degree (BS+) in Computer Science or a related discipline. Masters in Machine Learning preferred.
- 5+ years of experience with machine learning, infrastructure or backend
- 3+ years of experience with platform solutions
- Excellent interpersonal skills and passionate about collaborating across organizational boundaries.

### **Nice To Have**

- Experience developing complex software systems scaling to millions of users with production quality deployment, monitoring and reliability.
- Experience working with cloud services (AWS/Azure/GCP)
- Experience with modern data technologies (Spark, Hive, Kafka, Beam, Airflow)
- Experience with Machine Learning Frameworks (e.g. PyTorch, Keras, Tensorflow, XGBoost)

affordable, and accessible to all data users. Snowflake developed an innovative new product with a built-for-the-cloud architecture that combines the power of data warehousing, the flexibility of big data platforms, and the elasticity of the cloud at a fraction of the cost of traditional solutions. We are

now a global, world-class organization with offices in more than a dozen countries and serving many more.

### **As a Senior Software Engineer At Snowflake You Will**

- Build highly reliable software to meet the needs to the largest customers.
- Build and tune machine learning models that support internal Snowflake resource policies and machine learning platform features.
- Utilize vast amounts of service data to generate execution strategies, and to design and build intelligent features.
- Understand customer requirements and business goals, and participate in the design of machine learning platform features.
- Ensure operational readiness of the services and meet the commitments to our customers regarding reliability, availability and performance.

### **Our Ideal Senior Software Engineer Will Have**

- 7+ years industry experience designing and building systems, machine learning models, platforms and frameworks.
- Extremely strong fundamental computer science skills.
- Deep Fluency in Java, C# or C++. Python experience a plus.
- Experience with common ML frameworks such as Spark, MLlib, Tensorflow, Pytorch, XGBoost, or scikit-learn.
- Ability to work in a team environment, collaborate well, and mentor junior engineers.
- Ability to work on-site in our downtown Bellevue office.
- Advanced degree in Computer Science or related field.

### **Bonus Points For Experience With The Following**

- Experience in building highly-scalable models for optimization and classification problems.
- Experience in building machine learning execution platforms and frameworks.
- Experience in adapting machine learning techniques to highly parallel and distributed environments.
- Data warehouse design, database systems, and large-scale data processing solutions.
- Development experience in one of the major clouds: AWS, Azure, GCP.
- MS or PhD degree in Computer Science, Artificial Intelligence, Machine Learning, or related technical field.

Are you looking for opportunities to deliver innovations to a billion users that improve their daily life? Do you want to be part of a fast-cycle, high visibility and hardcore Natural Language Experiences team with ambitious goals? We are hiring extremely talented, highly motivated and productive applied and data scientists with expertise in building large scale natural language understanding and natural language generation models using cutting edge Deep Learning

technologies as well as advanced linguistic knowledge. Though the job description is for level 2, we are hiring at multiple levels.

As a part of Microsoft Experience and Devices Division, we are the Natural Languages Experience team, sitting at the intersection between experience, intelligence, data and system. We are building products touching hundreds of millions of users on daily basis, generating multiple billions of hours of usage and tens of millions of Office documents across all kinds of devices. Our team is responsible for energizing the next generation of Office productivity experiences with the power of aggregated big data, artificial intelligence and large-scale cloud computing. On top of that, we are aggressively evolving Office experience toward language processing, editing and intelligence aided task completion for effective reading, writing and designing documents in Microsoft Office.

Our goal is to delight our users by boosting their productivity and improving the quality of their creation. Our core drivers are large scale machine learning, including DNN and RNN based technologies, along with analyzing, inferring and experimenting with truly big data. Creating user experiences across web, mobile, PC and Mac that are designed to be powered by AI. As part of the team, you would be driving intelligence experience projects through their entire life-cycle from idea creation through implementation, experimentation and finally to world-wide availability. Our team have offices in multiple worldwide locations, including Redmond Washington, Serbia, Dublin and also closely collaborate with Microsoft AI and Research on many joint innovations.

### **Responsibilities**

The mission of our group is to advance writing assistance in Core Office apps and to make fundamental contributions to advancing the state-of-the-art in language technology both within Microsoft and in the industry. As an experienced applied scientist, your responsibilities include working with researchers, applied scientists and engineers to design and build various deep learning NLP models using latest technologies for Office intelligent services. If you are passionate about applying cutting edge NLP technology to positively impact the lives of millions of people, this is the job for you.

### **Qualifications**

- 5+ years of research or product experience in Natural Language Processing
- Passion for discovering the next generation of groundbreaking technologies in natural language technology
- Fluency with recent NLP & ML advancements, e.g. transformers, distillation, etc.
- Hands-on experience in Deep Learning using frameworks such as PyTorch, TensorFlow, Keras, etc.
- Strong coding skills in one or more of Python, C#, C/C++
- PhD or Masters in Computational Linguistics, Computer Science or related field
- Strong ability and effectiveness working in a significant technical problem domain, in the term of plan, design, execution, continuous release and service operation.
- Passionate and self-motivated.
- Ability to effectively work in collaborative multiple project team environment and ship model features in a fast-paced startup environment.

- Good communication skills, both verbal and written.
- Customer/End results/Metrics driven in design and development.

Strong ability in self-learning, entering new domain, managing through uncertainty in an innovative team environment

As an Engineering Director leading the Global AI/ML Platforms team, this individual will be the leader for the engineering group driving AI/ML platform delivery for Nike Global Technology.

### **What You Will Do**

- Expand the highly skilled, cross-functional engineering team that delivers platforms enabling Nike's Digital Transformation and near real time data-based decision making. Manage the professional development and career plans for those on your team and develop the technology leaders of tomorrow.
- Lead AI/ML Platform development and support; including data science tools, feature store, model management/workflows, model serving, workload scheduling, and experiment tracking and acceleration platforms.
- Develop a vision and long-term goals for how your team will provide AI/ML capabilities to multiple business functions across Nike's Global Technology organization, plan the strategy for achieving those goals, and drive implementation toward the north star you set.
- Leverage your prior experience, knowledge of industry trends, and personal creativity to develop new and innovative solutions which delight our customers. Continually maintain awareness and knowledge in relevant and related changes in technology and machine learning. Continually push the boundary of what is possible and be on the offense always.
- Embrace and embody Nike's core values (maxims) in your work and interactions with peers, stakeholders, and direct reports.
- Role model transparency, accountability and effectiveness as a leader in Nike. Communicate clearly, build trust and strong relationships across the company, do the right thing.
- Engage employees meaningfully and genuinely. Assist the teams by removing roadblocks, aligning efforts across Nike's matrix to drive progress and always win as a team.
- Stay current with industry trends and lead development of key data analytics and model development & serving innovation platforms.
- Partner with Architecture to ensure architectural consistency across platforms, geographies, and Cloud Service Providers.
- Accountable for growing & developing Enterprise Platform technology by attracting top industry talent.
- Develop AI/ML Platforms annual operating plans.
- Develop and lead team metrics and SLA's.
- Contribute to cross-team Enterprise Platforms domain-mapping and strategy.
- Ensure the technical team aligns with architectural standards, documentation and operational strategy alongside peers.
- Partner with the Enterprise Data & Analytics AAML and Nike Digital Engineering ("Serve") teams to enhance and drive standard practices and patterns across Nike business users.
- Work closely with platform product directors to understand and communicate product vision, strategy, and roadmaps that are aligned with Nike's strategies and initiatives

- Represent the customer to the delivery teams and provide sprint feature prioritization to ensure technology alignment with business priorities & strategies.
- Hold accountability for engineering team(s) backlog grooming across multiple engineering teams
- Provides customer service to our global technology and business partners for onboarding, adoption, support and documentation.
- Partner closely with Reference Architecture, Domain/Solution Architecture, and Platform Engineering to align Platform Product Roadmaps with execution plans that meet our customer needs.

### **What You Bring To Nike**

- Technologies:
- Must have knowledge and/or Experience with technologies such as AWS Sagemaker, Tensorflow, Kubeflow, Databricks & Spark, AWS EMR, and similar platforms. Should be able to communicate with customers about each technology and the benefits/tradeoffs of each solution.
- Must have knowledge and/or experience with open source technologies in the area of Data Science, AI & ML
- Must be able to articulate and/or have experience with the lifecycle of model development
- Must have an understanding of enterprise security and privacy requirements associated with technology development.
- 4+ years' experience as an engineering leader for technology related products. Will consider candidates with less experience that have deep technical domain knowledge as an architect.
- 7+ years' successful experience in technology, engineering and technical influencing related roles
- Proven experience collaborating on latest technologies with Engineers and Architects
- Extensive background in working with business partners: Translating business needs into prioritized technology features and requirements
- Proven track record of being results oriented with demonstrated ability to achieve aggressive goals
- Proven presentation and facilitation skills
- Understanding of Agile software development methodology
- Must excel working in team-oriented roles that rely on ability to effectively collaborate with others
- Self-directed and comfortable working in ambiguous, dynamic environments
- Excellent oral and written communication skills with the ability to influence others internally and externally
- A Bachelor's degree in Computer Science, Analytics, Machine Learning or related field or equivalent experience

Do you want to change the world? Alexa and Echo are literally shaping the future of voice recognition and cloud-based content/services. Alexa is the name of the Amazon cloud service and the brain that powers Echo, the award-winning and groundbreaking new Amazon device designed around your voice. Echo connects to Alexa, to provide information, answer questions, play music, read the news, check sports scores or the weather, and more—instantly. It's hands-free, and always on. All you have to do is ask.

To achieve this, we blend of a variety of disciplines (such as NLP, data mining, machine learning, big data, semantic web, graph stores, cloud computing) in an effort to understand our customers and the things they're excited about. To complement our complex algorithms and extensive data analyses, we create elevated and inspirational mobile and web features across the entire Echo system. We use artificial intelligence, data mining and usability studies to develop new features, and we test them through hundreds of R & D experiments a year. We want to make it easy for you to search for your favorite products, discover new brands you'd like, play your favorite songs or even replenish your fridge - and much, much more!! We are also incredibly intent on solving some of the most complex computing problems to be found in industry and academia, and we get to test our solutions in the real world every day. And most importantly, we relentlessly ask: "What haven't we thought of yet?"

As a member of the Alexa Identity team, you will enable Alexa to treat people as individuals and manage the preferences and resources they have shared with Alexa. You will help Alexa to recognize individuals and to deliver personalized experiences wherever they are in their day. You will have significant influence on our overall strategy by helping define these features, drive the system architecture, and spearhead the best practices that enable a quality product.

The ideal candidate has a demonstrable track record of technical leadership and success in delivering new features and products. A commitment to teamwork, hustle, and strong communication skills (to both business and technical partners) are absolute requirements. Creating reliable, scalable, and high performance products requires exceptional technical expertise, a sound understanding of the fundamentals of Computer Science, and practical experience building large-scale distributed systems. This person has thrived and succeeded in delivering high quality technology products/services in a hyper-growth environment where priorities shift quickly.

### **Responsibilities Include**

- Develop new and innovative analyses to inform Alexa Identity product strategy and design. This analysis will determine approach and roadmap for key strategic initiatives.
- Analyze relevant business information, and uncover trends and correlations to develop insights that can materially improve our product and strategy decisions.
- Develop clear communications for recommended actions.
- Establish new, scalable, efficient, automated processes for tracking and reporting on progress of initiatives. This includes causal analysis on feature launches and its impact on the business.
- Use machine learning, data mining and statistical techniques to create new, scalable solutions for business problems.

### **Basic Qualifications**

- 7+ years of work experience in data science, business analytics, business intelligence (BI), or comparable experience in big data environments
- Bachelor's degree in Statistics, Computer Science, Math, Finance, Operations Research or other quantitative field
- 5+ years of experience in data mining and dataset preparation using SQL
- 5+ years of experience in data visualization tools like Tableau.
- Experience in designing and building data infrastructure / automated reporting tools

- Experience in partnering with business owners to understand requirements and develop supporting analysis to solve business problems

### **Preferred Qualifications**

- Master's degree in Computer Science, Engineering, Math, Finance, Statistics or a related discipline.
- 10+ years of relevant work experience in data science, business analytics, business intelligence (BI), or comparable experience in big data environments
- Proven experience in BI/DW providing strategic research, recommendations, and implementation in both business and technical roles
- Familiarity with Amazon's cloud infrastructure including EC2, S3 and Redshift
- Experience with Python or other relevant scripting language
- Experience with relational database design and architecture
- Strong interpersonal and communication skills. Must be able to explain technical concepts and analysis clearly to a diverse audience, including senior executives, and be able to translate business objectives into actionable analyses
- Be self-driven, and show ability to deliver on ambiguous projects.

Artificial intelligence (AI) is rapidly transforming and improving the ways that industries like healthcare, banking, energy, and retail operate. However, there is one industry in particular that offers incredible potential for the application of AI technologies: education. The opportunities — and challenges — that the introduction of artificial intelligence could bring to higher education are significant.

Are you a developer who has hands-on experience with building cloud-native applications? Would you like to work with our customers to help them architect, develop and re-engineer applications to fully leverage the AWS Cloud?

Do you like to work on a variety of cutting edge, business-critical projects at the forefront of application development and cloud technology adoption?

In order for applications to be fully optimized, they need to be architected to take advantage of the global scale, elasticity, automation and high availability features of the AWS cloud. On the AWS platform, services such as API Gateway, Lambda, ECS, SQS, Kinesis, AI and others provide opportunities to design and build cloud-ready applications.

AWS is looking for talented hands-on technical architects and senior developers to help accelerate our growing Professional Services business. This is an excellent opportunity to join Amazon's world-class technical teams, working with some of the best and brightest engineers while also developing your skills at one of the most innovative and progressive technology companies. Here in Professional Services, we engage in a wide variety of business-critical, high-profile projects for customers and partners and help them better leverage the ever-evolving AWS platform.

Our team collaborates across the entire AWS organization to bring access to product and service teams, to get the right solution delivered and drive feature innovation based upon customer needs.

We are looking for hands-on application architects and developers who will:

- Work as a technical leader alongside customer business, development and infrastructure teams
- Lead technical and design discussions with IT executives to help enterprises speed their adoption of new technologies and practices
- Architect and building highly scalable, cloud-native applications on the AWS platform using core developer services like API Gateway, Lambda, SQS, DynamoDB and ECS.
- Leverage new technology paradigms (e.g., serverless, containers, microservices)
- Migrate monolithic applications to micro services architectures
- Advise on implementing AWS best practices
- Influence infrastructure architecture by sharing your application development expertise
- Represent the voice for developers internally and influence our AWS Professional Services offerings and AWS product strategy for developers by working with AWS platform engineering, Business Development and other cross-functional teams
- Travel to client locations to deliver professional services as needed

Our Consultants work with enterprise customers locally, regionally and potentially domestically. As such, Consultants will be required to travel to client locations to sell and deliver professional services as needed.

### **Basic Qualifications**

- BS level technical degree or equivalent professional or military experience
- 8+ years of large scale software development or application engineering with recent coding experience in two or more of the following languages: Java, JavaScript, C/C++, C#, Swift, Node.js, Python, Go, or Ruby
- Cloud experience
- 5+ years of experience as a technical specialist in Customer-facing roles
- Exposure to Agile development methodologies
- Experience with Continuous Integration and Continuous Delivery (CI/CD)

### **Preferred Qualifications**

- Architecting complex financial services applications
- Computational grids for Risk, Pricing, Valuations or Actuarial calculations
- Real-time Stream processing / Complex Event Processing for Financial Fraud, Algorithmic Trading, Transaction Monitoring, Marketing decisioning
- Mission critical, highly scalable systems for Core Banking, Trading and Settlement, and Core Insurance
- Analytical systems for Risk, Capital Computations, Financial Crime, Customer Insight or Treasury Analytics
- Statistical modeling for Banking, Capital markets and Insurance
- Master's degree in Computer Science or related technical field

- Computer Science or Engineering background
- Demonstrated success as a software developer, application architect, product manager, CTO, or consultant working with various platforms
- Architecting, designing and developing applications on the AWS platform
- Designing and building application using Container and serverless technologies
- Experience architecting highly available systems that utilize load balancing, horizontal scalability and high availability
- Experience in leading application development teams at FinTechs or Financial Services Software Technology vendors
- Cloud certifications
- Good exposure to Agile software development and DevOps practices such as Infrastructure as Code (IaC), Continuous Integration and automated deployment
- Continuous Integration (CI) tools (e.g. Jenkins)
- Experience with configuration management platforms (e.g. Chef, Puppet, Salt, or Ansible)
- Strong practical application development experience on Linux and Windows-based systems
- Presenting at public events such as technology conferences, hackathons, blogging, writing on technical forums, etc.
- Experience working directly with customers, partners or third-party developers

This role is part of the Whisk team within the Samsung NEXT Product organization.

Whisk has built a multi-sided marketplace over the past 7 years that delivers value to each member of the network such as Publishers, Retailers, IOT & Health, and Brands. Whisk also has a consumer experience, my.whisk.com for shopping lists, saved recipes, and other potential experiences. Whisk joined Samsung NEXT in March and there are plans to invest more heavily in the platform, to scale the business and grow each aspect of the network (publisher, retailer, IoT, Health, Brands, & B2C). Each investment should not only add value to its own experience but also to the network of partners overall.

### **About NEXT Product**

The NEXT Product organization is a hyper-growth startup within Samsung NEXT. We're a globally distributed product development team in search of builders and creators to help conceive, grow and scale new products and categories.

Successful candidates, at all levels within the organization, will: approach all things team-first, take ownership and "be the change you seek", have strong written and verbal communication skills, have high EQ, enjoy fast-paced, outcome-driven environments and be inspired to learn and explore daily both inside and outside of your field of expertise.

### **The Role**

As a NLP Machine Learning Engineer, you will build ML-based systems, tools, and services to improve Whisk's Food Genome (<https://whisk.com/cognitive-food-platform/>) and to produce highly relevant and personalized recommendations. We are looking for a candidate that has industry experience with a range of Machine Learning disciplines (NLP) and has worked with large data sets, specifically

understanding and representing semantics. Experience with the food industry is a plus. This position is located in our New York office.

### **Responsibilities**

- Work closely with our Data team to extend and improve our Food Genome by applying NLP based methods to this complex domain
- Build models to generate food recommendations and personalized offering based on user behavior
- Design, develop, test, deploy, maintain and improve ML models/infrastructure and software that uses these models
- Manage individual project priorities, deadlines and deliverables

### **Required Qualifications**

- MS degree in Computer Science or a related quantitative field
- 5+ years of experience in one or more of the following areas: machine learning (NLP), recommendation systems
- Experience with machine learning frameworks such as TensorFlow or Keras
- Experience working in an Agile environment and within a distributed team

### **Bonus Points**

- Ph.D. degree in Computer Science or a related quantitative field
- Research experience in Natural Language Processing or Deep Learning

### **About Samsung NEXT**

Samsung NEXT champions builders and founders inventing a more purposeful future. We attract, develop, and celebrate diverse talent with world-class capacity to transform ideas into realities at scale. We prioritize experiences over things and are dedicated to thoughtfully integrating the physical and digital worlds... and we accelerate Samsung's vision to inspire the world.

Founded in 2012, Samsung NEXT has four key functions in the global software ecosystem:

- **Product:** designs and builds software experiences to transform the way we work and live
- **M&A:** acquires game-changing companies to bring their products and services to consumers worldwide
- **Ventures:** invests in startups that have the potential to scale by leveraging the Samsung ecosystem
- **Partnerships:** creates partnerships with innovative companies to enrich Samsung products and services

our cast of unique characters as we build the world's largest and most fascinating digital library: giving subscribers access to a growing collection of ebooks, audiobooks, magazines, documents, and more.

In addition to works from major publishers and top authors, we also create our own original content exclusively for Scribd users.

Our community includes **over 1M subscribers in more than 190 countries**. Join us in turning screen time into quality time!

## **The Opportunity**

We are looking for exceptional, results-oriented and passionate Machine Learning experts to join our growing Recommendation Team. As an early member of a world-class team, you will lead the way by creating and owning the next generation of machine learning algorithms and end-to-end systems that power the experience for our **6B+ monthly recommendations and 100M+ users around the world**.

## **Qualifications**

- 1+ years of experience applying Machine Learning in industry, especially related to Personalization
- Strong background in Machine Learning and Recommender Systems, with deep understanding of supervised and unsupervised methods (collaborative-filtering, content-based, deep learning, reinforcement learning, contextual multi-armed bandit, causal inference)
- Great coding skills and software development experience (spark, scala, python, java, tensorflow)
- Successful track record of ownership in challenging cross-functional projects
- Demonstrated ability to design and build complex systems that have positively impacted the business
- BS in Computer Science, Statistics, or related field

If you are results-oriented, self-driven, motivated to succeed, and are eager to make an impact by working on cutting-edge ML products and shaping Scribd's future, please reach out to us. We are looking forward to talking to you!

At Perficient you'll deliver mission-critical technology and business solutions to Fortune 500 companies and some of the most recognized brands on the planet. And you'll do it with cutting-edge technologies, thanks to our close partnerships with the world's biggest vendors. Our network of offices across North America, as well as locations in India and China, will give you the opportunity to spread your wings, too.

We're proud to be publicly recognized as a "Top Workplace" year after year. This is due, in no small part, to our entrepreneurial attitude and collaborative spirit that sets us apart and keeps our colleagues impassioned, driven, and fulfilled.

Perficient currently has a career opportunity for a **Senior Azure Solutions Architect**.

## **Job Overview**

One of our large clients has made strategic decision to move all their Hospital management data to a new Azure environment for processing and analytics. This is a multiyear roadmap with many components that will piece into a larger Enterprise level Azure implementation. Perficent subject matter expert will work with the client team to move this data into new environment in a fashion that will meet requirements for applications and analytics.

A Senior Solutions Architect is expected to be knowledgeable in two or more technologies within (a given Solutions/Practice area). The Solutions Architect may or may not have a programming background, but will have expert infrastructure architecture, client presales / presentation, team management and thought leadership skills.

You will provide best-fit architectural solutions for one or more projects; you will assist in defining scope and sizing of work; and anchor Proof of Concept developments. You will provide solution architecture for the business problem, platform integration with third party services, designing and developing complex features for clients' business needs. You will collaborate with some of the best talent in the industry to create and implement innovative high quality solutions, participate in Sales and various pursuits focused on our clients' business needs.

You will also contribute in a variety of roles in thought leadership, mentorship, systems analysis, architecture, design, configuration, testing, debugging, and documentation. You will challenge your leading edge solutions, consultative and business skills through the diversity of work in multiple industry domains. This role is considered part of the Business Unit Senior Leadership team and may mentor junior architects and other delivery team members.

### **Responsibilities**

- Own and aggressively drive forward specific areas of Azure technology architecture and provide architectural solutions/designs to project execution teams for implementation.
- Provide architectural assessments, strategies, and roadmaps for one or more technologies including **ADLS and Synapse** (formerly knows as ADW)
- Lead workshops with many teams to define data ingestion, validation, mining, engineering, modeling, visualization, AI, and analytics
- Design and Build Azure Data services including **ADF, ADL, AMM, ADLS, ADW, Power BI, AML, ABS**, and other services within the Azure data framework
- Lead the technical planning & requirements gathering phases including estimate, develop, test, manage projects, architect and deliver complex projects
- Participate and lead in design sessions, demos and prototype sessions, testing and training workshops with business users and other IT associates
- Contribute to the thought capital through the creation of executive presentations, architecture documents and articulate them to executives through presentations Determine Project and solution estimation and team structure definition
- Support multiple Agile Scrum teams with planning, scoping and creation of technical solutions for the new product capabilities, through to continuous delivery to production.
- Provide end to end vision and hands on experience with Azure Cloud Platform

- Provide vision and leadership to define the core technologies necessary to meet client needs including: development tools and methodologies, package solutions, systems architecture, security techniques, and emerging technologies
- Liaise with offshore team and clients for resolving technical dependencies, issues, and risks.
- Mentor and provide architectural guidance to multiple teams building innovative applications.
- Drive common vision, practices and capabilities across teams.
- Engage with business stakeholders to understand required capabilities, integrating business knowledge with technical solutions
- Engage with Technical Architects and technical staff to determine the most appropriate technical strategy and designs to meet business needs
- Demonstrate broad solutions technical leadership, impacting significant technical direction, exerting influence outside of the immediate team and driving change

### **Qualifications**

- At least 10+ years of experience in designing, architecting and implementing large scale data processing/data storage/data distribution systems particularly in Azure
- Most recent 2+ years of experience in delivering large scale Azure projects
- At least 5+ years real time and streaming experience in Azure based data solutions
- At least 3+ years in presales and demo using Azure data services including ADW and ADLS
- At least 5+ years of Hands-on administration, configuration management, monitoring, performance tuning of Hadoop/Distributed platforms
- At least 5+ years of demonstrated experience at least in the most recent 2+ years of designing and delivering solutions using Cortana Intelligence suite of analytics services part of Microsoft Azure including Azure Machine Learning Studio, HDInsight, Polybase, Azure Data Lake Analytics, Azure Data Warehouse, Streaming Analytics, Data Catalog, R/R Studio
- Should have experience designing service management, orchestration, monitoring and management requirements of cloud platform.
- At least 3+ years of experience in migrating large volumes of data using standard Azure automation tools from on premise and cloud infrastructure to Azure
- Ability to produce high quality work products under pressure and within deadlines with specific references
- VERY strong communication, solutioning, and client facing skills especially non-technical business users
- At least 5+ years of working with large multi-vendor environment with multiple teams and people as a part of the project
- At least 2+ year of working with Power BI
- At least 5+ years of working with a complex Big Data environment using Microsoft tools
- 5+ years of experience with Team Foundation Server/JIRA/GitHub and other code management toolsets

### **Preferred Skills And Education**

Master's degree in Computer Science or related field

Certification in Azure platform

Perficient full-time employees receive complete and competitive benefits. We offer a collaborative work environment, competitive compensation, generous work/life opportunities and an outstanding benefits package that includes paid time off plus holidays. In addition, all colleagues are eligible for a number of rewards and recognition programs including billable bonus opportunities. Encouraging a healthy work/life balance and providing our colleagues great benefits are just part of what makes Perficient a great place to work.

Amazon is looking for a passionate, talented, and inventive Scientist with a strong machine learning background to help build industry-leading Speech and Language technology. Our mission is to push the envelope in **Automatic Speech Recognition (ASR), Natural Language Understanding (NLU)**, and Audio Signal Processing, in order to provide the best-possible experience for our customers.

As a Scientist, you will work with talented peers to develop novel algorithms and modeling techniques to advance the state of the art in spoken language understanding. Your work will directly impact our customers in the form of products and services that make use of speech and language technology. You will leverage Amazon's heterogeneous data sources and large-scale computing resources to accelerate advances in spoken language understanding.

We are hiring in all areas of spoken language understanding: ASR, NLU, text-to-speech (TTS), and Dialog Management.

### **Basic Qualifications**

- PhD or equivalent Master's Degree plus 4+ years of experience in CS, CE, ML or related field
- 2+ years of experience of building machine learning models for business application
- Experience programming in Java, C++, Python or related language
- Graduate degree (MS or PhD) in Electrical Engineering, Computer Sciences, or Mathematics with specialization in speech recognition, natural language processing, or machine learning.
- Familiar with programming languages such as C/C++, Java, Perl or Python.
- 1+ years experience in building speech recognition and natural language processing systems (e.g. commercial speech products or government speech projects)
- 1+ years Machine Learning experience and familiar with standard speech and machine learning techniques.

### **Preferred Qualifications**

- 5+ years experience in building speech recognition and natural language processing systems (e.g. commercial speech products or government speech projects)
- 5+ years Machine Learning experience and familiar with standard speech and machine learning techniques.
- Scientific thinking and the ability to invent, a track record of thought leadership and contributions that have advanced the field
- Solid software development experience
- Good written and spoken communication skills.

Are you a developer who has hands-on experience with building cloud-native applications? Would you like to work with our customers to help them architect, develop and re-engineer applications to fully leverage the AWS Cloud?

Do you like to work on a variety of cutting edge, business-critical projects at the forefront of application development and cloud technology adoption?

In order for applications to be fully optimized, they need to be architected to take advantage of the global scale, elasticity, automation and high availability features of the AWS cloud. On the AWS platform, services such as API Gateway, Lambda, ECS, SQS, Kinesis, AI and others provide opportunities to design and build cloud-ready applications.

AWS is looking for talented hands-on technical architects and senior developers to help accelerate our growing Professional Services business. This is an excellent opportunity to join Amazon's world-class technical teams, working with some of the best and brightest engineers while also developing your skills at one of the most innovative and progressive technology companies. Here in Professional Services, we engage in a wide variety of business-critical, high-profile projects for customers and partners and help them better leverage the ever-evolving AWS platform.

Our team collaborates across the entire AWS organization to bring access to product and service teams, to get the right solution delivered and drive feature innovation based upon customer needs.

We are looking for hands-on application architects and developers who will:

- Work as a technical leader alongside customer business, development and infrastructure teams
- Lead technical and design discussions with IT executives to help enterprises speed their adoption of new technologies and practices
- Architect and building highly scalable, cloud-native applications on the AWS platform using core developer services like API Gateway, Lambda, SQS, DynamoDB and ECS.
- Leverage new technology paradigms (e.g., serverless, containers, microservices)
- Migrate monolithic applications to micro services architectures
- Advise on implementing AWS best practices
- Influence infrastructure architecture by sharing your application development expertise
- Represent the voice for developers internally and influence our AWS Professional Services offerings and AWS product strategy for developers by working with AWS platform engineering, Business Development and other cross-functional teams
- Travel to client locations to deliver professional services as needed

Our Consultants work with enterprise customers locally, regionally and potentially domestically. As such, Consultants will be required to travel to client locations to sell and deliver professional services as needed.

### **Basic Qualifications**

- BS level technical degree or equivalent professional or military experience

- 8 + years of large scale software development or application engineering with recent coding experience in two or more of the following languages: Java, JavaScript, C/C++, C#, Swift, Node.js, Python, Go, or Ruby
- Cloud experience
- 5+ years of experience as a technical specialist in Customer-facing roles
- Exposure to Agile development methodologies
- Experience with Continuous Integration and Continuous Delivery (CI/CD)

### **Preferred Qualifications**

- Master's degree in Computer Science or related technical field
  - Computer Science or Engineering background
  - Demonstrated success as a software developer, application architect, product manager, CTO, or consultant working with various platforms
  - Architecting, designing and developing applications on the AWS platform
  - Designing and building application using Container and serverless technologies
  - Experience architecting highly available systems that utilize load balancing, horizontal scalability and high availability
  - Cloud certifications
  - Good exposure to Agile software development and DevOps practices such as Infrastructure as Code (IaC), Continuous Integration and automated deployment
  - Continuous Integration (CI) tools (e.g. Jenkins)
  - Experience with configuration management platforms (e.g. Chef, Puppet, Salt, or Ansible)
  - Strong practical application development experience on Linux and Windows-based systems
  - Presenting at public events such as technology conferences, hackathons, blogging, writing on technical forums, etc.
  - Experience working directly with customers, partners or third-party developers
- **Do you dare to reinvent the future of education?**

**At Cengage, we're building a future where all learners can have the tools and confidence to achieve their goals.**

**Cengage's ed2Go unit is the industry leader in online learning for adults. With an ever-expanding catalog of continuing education courses and career training programs, we make it easy for educational institutions to jump-start or augment their existing learning programs with high-quality continuing education courses that are affordable and easy to use. Serving as a virtual college, we partner with over 2,000 top colleges and universities, offering the latest in instructor-led online courses from the top professionals in their fields.**

**Are we right for you?**

**We set the bar higher by bringing our unique talents and points of view to the table every day. We're curious and comfortable with change and are willing to take risks to transform education for the better. Most importantly, we put learning first with everything we do. We also offer a fun, challenging, and rewarding environment with the opportunity to work with some of the most talented people in our industry. Together, there's no limit to what we can**

**imagine, create and innovate!**

### **What You'll Do Here**

**As an experienced Software UI Engineer, you'll work closely with engineering colleagues and UX designers in the design and execution of our front end development. Culture is important to us. We are looking for someone who shares our passion for delivering great products in a positive team environment. The ideal candidate will be a good communicator, a quick and passionate learner, and demonstrate enthusiasm for making our products the best that they can be.**

- Be a thought leader in front end technologies, design patterns, and implementation best practices
- UI Engineering:
  - Build engaging & interactive pages
  - Front end development and practices and provide technical and design feedback on early concepts
  - Writing high-quality software as a member of an Agile team. Write unit, integration, and performance tests.
  - Develop code to streamline and support online content authoring and publishing capability
  - Work with engineering and the product team to design and implement highly interactive user interfaces
  - Ensure that all web pages have a consistent look and feel
  - Integrate third-party tools, PaaS/SaaS services
- **Iterate and improve existing products, applications, and architecture**
- **Estimating stories and tasks with a high degree of accuracy. Help break down, estimate, and provide just-in-time design for small increments of work**
- **Collaborate with engineers both in and outside your direct team on implementation and release of code branches to effectively meet the product roadmap**
- **Collaborate with Architects in best practices for code implementation with code reviews prior to deployment from the development environments**
- **Understand performance parameters and assess application performance**
- **Proactively share information across the team, to the right audience with the appropriate level of detail and timeliness**

### **Required**

#### **Skills You Will Need Here:**

- A deep understanding of developing User Interfaces.
- Bachelors degree in Computer Science or a related field, or equivalent combination of education and recent, relevant work experience.
- Creative problem-solving skills and ability to effectively communicate and translate feedback, needs and solutions.
- Knowledge of and desire to work in an Agile development environment.
- Ability to communicate technical topics to people without a technical background.

- Ability to write clean, standardized, and code that performs optimally in highly concurrent environments.
- Experience with global development teams working on the same platform.
- Ability to manage multiple projects simultaneously with a strong attention to detail, delivering high quality output.
- Full-stack awareness from front-end to database design and development.
- Experience using source code control systems, such as Git or Stash.
- Knowledge of XML parsing, JSON parsing.
- Ability to convert mockups and designs into standards-based, cross-browser, responsive and accessibility-compliant HTML 5/CSS 3 Web sites.
- Proficiency in using web-design tools and technologies, including
  - Hand-coding HTML 5/CSS 3
  - Mobile-first, responsive design
  - Cross-browser compatibility and testing
- Proficiency in C#
- Experience with client-side frameworks (preferably React)
  - Angular or Vue or React
- Experience developing and/or interfacing with REST APIs
- A constant desire to grow, learn and explore new things.

### **Preferred Skills**

- Familiarity with accessibility guidelines such as WCAG 2.0/AA, 508 compliance and SEO best practices.
- Familiarity with relational databases and SQL, particularly Microsoft SQL Server.
- Experience with static code analysis tools (PMD, FindBugs, Checkstyle, etc).
- Experience with Cloud Technologies (Google Cloud, AWS or Azure).
- Docker Containers.
- Experience with LMS systems.

### **Description**

We are looking for a Data Scientist to join Pearson's AI Products and Solutions team. Our mission is to enable the development of AI-first, outcome-driven products to improve learning experiences. The position provides the opportunity to engage in cutting-edge research on a cross-functional team and contribute to developing products that have an impact on millions of learners around the globe. Our primary focus is currently Aida™ Calculus ( <https://www.pearson.com/us/higher-education/products-services-teaching/learning-engagement-tools/aida.html> ).

### **What You'll Do**

- Be responsible for defining, developing and leading a small team (2-3 direct reports) of highly skilled data scientists in collaboratively tackling an ambitious R&D agenda.
- Provide technical and scientific leadership when designing a plan of execution and addressing unforeseen challenges and problems.

- Lead by example and excel as a senior scientific contributor through active hands-on participation.
- Collaborate and communicate effectively with both technical and non-technical stakeholders and partners as well as senior management and leadership.
- Assist in the creation and execution of an R&D strategy focused on developing AI capabilities that enable pioneering educational products. Help define project scope, priorities, and appropriate distribution of resources.
- Accomplish results by communicating honestly; setting expectations, monitoring, and appraising job results; coaching, counseling, and disciplining employees; developing, coordinating, and enforcing systems and policies.

## **Qualifications**

### Who You Are

- You have an advanced degree in a relevant field such as computer science, statistics, and data science.
- You have 5 years relevant experience.
- Ideally, you have prior experience leading a team.
- You have strong technical and scientific prowess and experience showcasing strong coding skills using Python. Preferred experience includes git version control in shared team repositories, cloud technologies (e.g. Amazon AWS, Google Cloud Platform), containers (Docker), and web application development (including API, REST, JSON).
- You have a passion for and demonstration of conducting research while maintaining an end-product vision.
- You are skilled at Agile project planning and oversight.
- You have a knack for creative problem solving, willingness to learn new technologies and skills, and ability to mentor peers.

## **AI UI Mobile Development Lead**

### **Description**

At Pearson, we're committed to a world that's always learning and to our talented team who makes it all possible. From bringing lectures vividly to life to turning textbooks into laptop lessons, we are always re-examining the way people learn best, whether it's one child in our own backyard or an education community across the globe. We are bold thinkers and standout innovators who motivate each other to explore new frontiers in an environment that supports and inspires us to always be better. By pushing the boundaries of technology — and each other to surpass these boundaries — we create seeds of learning that become the catalyst for the world's innovations, personal and global, large and small. Pearson is an Equal Opportunity and Affirmative Action Employer and a member of E-Verify. All qualified applicants, including minorities, women, protected veterans, and individuals with disabilities are encouraged to apply.

We are looking for a passionate mobile UI lead, to be embedded in the AI product solutions team,

that will contribute to the creation of innovative A.I. app experiences in education. Our mission is to deliver the development of AI-first, outcome-driven products to improve learning. The position provides the opportunity to engage in delivering cutting-edge solutions within a cross-functional team. Above all, your work will contribute to developing products that have an impact on millions of learners around the globe.

### **As a Mobile Lead You Will**

- Analyze & Design - Design solutions that effectively model the customer's requirements, taking into account performance, maintainability/complexity, market trends and innovation, controlling costs, system robustness and scalability, and long term quality initiatives. Follow established design patterns and recommend new design patterns.
- Prototype - on different cutting edge cross platform stacks
- Implement - Implement designs following Pearson coding standards and industry best practices.
- Review - Participates in and reviewing requirements, design, code, and test case (both manual and automated) reviews
- Test - Work closely with other teams (e.g., QA, devOps, configuration management, end users) to release high quality software. Create testable code and implement automated unit, integration, and functional tests as part of all development activities.
- Document - Complete project documentation as required, including logging status, risk, progress, and effort on assigned work.

### **Qualifications**

#### **Required Education & Experience:**

- B.S. in Computer Science or equivalent, with strong fundamentals and problem solving skills
- Experience in modern mobile SDKs (Android, iOS)
- Accomplished Mobile developer especially in crossplatform stack (React Native) and/or native (Android & iOS) with strong team leading skills
- Delivered at least one production quality app to Google Play or Apple Store
- 10 years experience with complete development process: design, test, build, deploy, repeat in a cloud environment
- 5 years experience using industry standard DevOps tools (CI/CD, Jenkins, GoCD, Git, scripting, Gradle, Maven, Docker/containers, Kubernetes, etc...)
- Familiarity with API development, HTTP, async processing, parallel processing, distributed computing
- Expert knowledge in software source control: Gitlab, Git, or BitBucket
- Expert experience with mobile programming languages (JS, Swift, Java)
- 5 years experience with Analytics, logging, monitoring, metrics (SDKs from Firebase and Google is a plus)
- 5 years experience creating APIs, Web Services (RESTful), API documentation.
- Familiar with various testing platforms
- Experience building and maintaining scalable solutions in a distributed environment.

- Agile methodologies (e.g. Scrum, Kanban, XP, etc.)
- Experience in defining and completing non-functional requirements such as Accessibility, Security, I18N, Performance, and/or Scalability
- Excellent verbal & written communication skills
- Self-starter, able to work solo and part of a cross functional team
- Ability to work with 3rd party vendors, manage interactions and project needs

### **Description**

It's fun to work in a company where people truly believe in what they're doing. **With the recent changes in Education industry (majorly online)**, It's become more important to drive and deliver highly scalable, reliable and engaging education experience to our Customers.

We are the world's learning company with more than 24,000 employees operating in 70 countries. We combine world-class educational content and assessment, powered by services and technology, to enable more effective teaching and personalized learning at scale. We believe that wherever learning flourishes so do people.

### **Summary**

Manager Software Development leads a software development team in the implementation and design of software solutions for complex and difficult business and engineering problems. The position demands someone who can communicate effectively with team members, analyze problems, and create solutions that meet functional as well as non-functional needs such as scalability, reliability, and extensibility. You will engage with an offshore team and ensure delivery of all development related team tasks.

### **Duties And Responsibilities**

- Leads cross-functional offshore teams (including development staff, TPM, and QA) in the design and implementation of new software as well as maintains and enhances existing software
- Serves as the sole onshore development resource in support of the application during US business hours.
- Works with product stakeholders and analysts to help decompose requirements into manageable stories and tasks for the offshore team and assist in the estimation of those stories
- Create solutions by partnering with architects and peer team leads responsible for other domains to understand how best to leverage existing capabilities and APIs.
- Works with devOps teams to ensure CI/CD pipeline is streamlined and reliable -- also engages with DevOps teams to ensure scalability and availability are up to standards via monitoring/alerting, auto-scaling, and infrastructure-as-code practices are followed. Ensures that code adheres to strict standards for accessibility, security, object-oriented practices and performance
- Actively participates in requirements, architecture, and design meetings
- Writes documentation for both internal and external consumers, covering design artifacts, code, and fixes
- Design, execute, utilize and maintain software engineering applications.

- Prepare all required Technical Proposal pertinent to software engineering.
- Administer support for Business Development, Systems Engineering and SR Technical personnel.
- Supervise training and development of software engineering staff.
- Assign work to software engineering personnel and evaluate plus manages their performance.
- Support to recruit engineering personnel, technical staffing and project teams formation.
- Supervise engineering deliverables.
- Manages continuing support and provide system metrics for client facing products.
- Present practical input for strategic technology decisions.
- Support preparation of Technology Roadmap.
- Comply with all professional departmental as well as company best practices.
- Present project management backup as required.
- Help translation of business requirements into technical needs and actions.
- Supervise reporting responsibility for independent software contractors, software engineers and outsourcing partners.
- Ensure software engineering personnel is suitably trained to perform all job function and suitably use project and software related tools.

## **Qualifications**

### **QUALIFICATIONS:**

- **Significant experience or knowledge required in the following areas:**
- Java
- Spring Boot
- Serverless Architecture
- AWS Lambda
- Microservice Architecture
- Unit Testing / Test Coverage
- Continuous Integration/Build Automation
- Agile development

### **Nice to Have**

- Experience in Education Domain
- Ability to design and present content in most comprehensive manner

## **EDUCATION And/or EXPERIENCE**

Bachelor's degree in Computer Science / MIS or equivalent experience required. Minimum five (5) years experience in software engineering and design.

### **Data Engineer**

### **Description**

We are the world's learning company with more than 24,000 employees operating in 70 countries. We combine world-class educational content and assessment, powered by services and technology, to enable more effective teaching and personalized learning at scale. We believe that wherever learning flourishes so do people.

### **Duties**

- Assembling large, complex sets of data that meet non-functional and functional business requirements.
- Identifying, designing and implementing internal process improvements including re-designing infrastructure for greater scalability, optimizing data delivery, and automating manual processes
- Building required infrastructure for optimal extraction, transformation and loading of data from various data sources using GCP and SQL technologies
- Building analytical tools to utilize the data pipeline, providing actionable insight into key business performance metrics including operational efficiency and customer acquisition
- Ability to explore new API capabilities the cloud native platforms like NLP, Auto ML, recommendation AI etc and quickly bring solutions to life in a dynamic fashion.

### **Minimum Qualifications**

#### **Qualifications**

- Bachelor's degree in Engineering, Computer Science, Statistics, Mathematics, a related quantitative field, or equivalent practical experience.
- 6 months of experience in consulting, business intelligence, analytics, or an equivalent analyst position with experience in SQL and an additional object-oriented programming language (e.g., Python, Java).

### **Preferred Qualifications**

- Experience designing and building scalable and robust data pipelines to enable data-driven decisions for the business.
- Effective problem solving and analytical skills. Ability to manage multiple projects and report simultaneously across different stakeholders.
- Structured thinking with ability to easily break down ambiguous problems and propose impactful data modeling designs.
- Attention to detail and effective verbal/written communication skills.

Pearson VUE ([www.pearsonvue.com](http://www.pearsonvue.com)) is the global leader in computer-based testing for information technology, academic, government and professional testing programs around the world. Pearson VUE provides a full suite of services from test development to data management, and delivers exams

through the world's most comprehensive and secure network of test centers in more than 180 countries, where we validate the skills and knowledge of millions of individuals every year.

### **Principal Product Manager, International**

*Location: Santa Clara, CA*

At Chegg, we start by putting students first. We help students across the world feel confident with their course-work, ace their classes and enter the workforce, empowered. Chegg Study is a key enabler to this mission, as a product that helps students with step-by-step problem solving, video/flashcard tutorials and high-quality learning resources.

As an International Product Manager, you'll be in charge of driving Chegg's growth internationally, one of the company's top strategic priorities. You will lead the International team to deliver organization-wide objectives and have an immediate impact on scaling Chegg to the next wave of users. Ideal candidates will already have international consumer product experience and are familiar with market-specific regional social and regulatory requirements.

#### **In This Position You Will**

- Develop a clear, compelling vision for your product, informed by student stories and needle-moving business impact
- Get buy-in with Chegg's executive leadership and stakeholders on the Why and the What to realize the vision and accomplish our BHAG goals
- Leverage a deeply analytical mindset to ask the right questions and wield both - data and instinct - to make the right short-term trade-off
- Have stellar execution against the roadmap with clear scoping and effective prioritization
- Champion an end to end experience for the international user's journey spanning content localization, product localization, marketing funnels, subscription packages and SEO needs.
- Be able to build relationships across the organization, earn trust and elevate the team to its highest potential
- Be flexible and adaptable to feedback from all sides and continually take the team forward
- Be passionate and excited about Chegg's opportunity internationally and exemplify Chegg's Students First mission in everything you do.

#### **The Ideal Candidate Will Have**

- B.S. with at least a minor in Computer Science or related engineering discipline OR equivalent training or work experience
- 10+ years of work experience, at least 5 years as a Product Manager
- 3+ years of experience driving international consumer product experience in companies of a similar scale
- Excellent verbal and written communication skills with proven success managing global teams
- Familiar with testing strategies that provide early, scrappy learnings that inform the larger strategy: Optimizely, Opt-in monster, SEO

The National Science Foundation today announced the creation of a new program that will significantly advance research in AI and accelerate the development of transformational, AI-powered innovation by allowing researchers to focus on larger-scale, longer-term research.

The National Artificial Intelligence Research Institutes program anticipates approximately \$120 million in grants next year to fund planning grants and up to six research institutes in order to advance AI research and create national nexus points for universities, federal agencies, industries and nonprofits.

"Advances in AI are progressing rapidly and demonstrating the potential to transform our lives," said NSF Director France Córdova. "This landmark investment will further AI research and workforce development, allowing us to accelerate the development of transformational technologies and catalyze markets of the future."

"The National Science Foundation is at the cutting edge when it comes to this Administration's efforts to prioritize AI research and development. These institutes will advance our national strategy for U.S. leadership in AI, leverage important multisector R&D partnerships and support groundbreaking AI innovation for the benefit of the American people," said Michael Kratsios, Chief Technology Officer of the United States.

The program, led by NSF in partnership with the National Institute of Food and Agriculture, U.S. Department of Homeland Security's Science & Technology Directorate, U.S. Department of Transportation's Federal Highway Administration and U.S. Department of Veterans Affairs, has both planning and institute tracks. The planning track will support planning grants for up to two years and \$500,000 to enable teams to develop collaborative plans and capacity for full institute operations. The institute track will support cooperative agreements of \$16 million to \$20 million for four to five years (up to \$4 million per year) for the creation of AI Research Institutes in an initial set of high-priority areas:

- Trustworthy AI
- Foundations of Machine Learning
- AI-Driven Innovation in Agriculture and the Food System
- AI-Augmented Learning
- AI for Accelerating Molecular Synthesis and Manufacturing
- AI for Discovery in Physics

The AI Research Institutes program will support the advancement of multidisciplinary, multi-stakeholder research on larger-scale, longer-time-horizon challenges in AI research than are supported in typical research grants.

"These institutes will accelerate the transition of AI innovations into many economic sectors while also nurturing and growing the next generation of AI researchers and practitioners," said NSF Acting Assistant Director for Computer and Information Science and Engineering Erwin Gianchandani.

"This long-term, substantive and highly visible investment in AI research and workforce development will realize the potential of AI and enable the U.S. to maintain global leadership."

The AI Research Institutes program demonstrates NSF's continued leadership in AI, building upon decades of support for transformative AI innovations, workforce development, and advanced and scalable computing resources enabling AI.

Current search engines understand how humans use language, but they do not understand the language itself. They match the words in a query to the words in a document and words that are linked somehow to the document (e.g., "Click here to get the employee handbook") to find documents that might satisfy the query. Then they use statistical methods and the behavior of other people who searched for similar information to rank these potential matches. Although current technology works well most of the time, it sometimes fails badly because the search engine does not really understand the meanings of the documents that it ranks. Recently, companies, research organizations, and volunteer communities have begun to create large knowledge graphs that describe important, essential, or well-known information. Knowledge graphs are similar in spirit to Wikipedia, but they are designed to be used by computers instead of humans. For example, a knowledge graph might contain the entities "Cleveland Cavaliers" and "LeBron James", and these two entities might be connected by an "employs" relationship. Information can be entered by people with moderate expertise, and by machine learning software, thus it is practical to build large knowledge graphs that cover a wide range of human knowledge. Freebase, which is now owned by Google, is a well-known knowledge graph that contains 2.5 billion "facts" about 44 million "topics" and is growing rapidly. Currently knowledge graphs are used for just a few well-defined tasks, for example, to produce the info boxes that Google displays next to some search results. New methods of using knowledge graphs for more varied tasks are of significant scientific and commercial interest. This project develops new methods of using knowledge graphs to improve the accuracy of search engines, especially for vague, ambiguous, or poorly-specified queries. The search engine uses the knowledge graph to identify the probable meanings of query terms, and then uses this knowledge to improve its ability to identify documents that match those meanings. The project is of practical significance for its potential to improve search engine accuracy on queries that are currently difficult. It is of scientific significance for its potential to inject greater understanding of meaning and relationships into search engines. The project is of educational significance because it provides opportunities for graduate student to do class projects and independent studies that lead to participation in the National Institute of Standards and Technology's (NIST) annual TREC conference, which is a semi-competitive annual event that attracts some of the best research groups from around the world.

Knowledge graphs are less structured than typical relational databases and semantic web resources but more structured than the text stored in full-text search engines. The weak semantics used in these semi-structured information resources is sufficient to support interesting applications, but is also able to accommodate contradictions, inconsistencies, and mistakes, which makes them easier to scale to large amounts of information. The typical use of a semi-structured resource treats it like a structured resource that has somewhat restricted functionality. The application must understand the semantics associated with each type of entity, attribute, and relation that it uses. Although this approach is effective, the need to

understand the semantics of entity types and relation types limits the application's ability to automatically incorporate new types of information as the resource evolves and grows. This project develops new methods of using semi-structured information resources that make fewer assumptions about the structure and semantics of a semi-structured knowledge resource, thus enabling them to make full use of the resource as it grows and evolves. The resource is treated as a network of entities and relations that are each described by a "bag of words" description. Entities and relations are retrieved using extensions of full-text retrieval methods. Evidence such as estimates of authority or related language models can be associated with entity and relation types, and propagated along specific network links to improve entity and relation models. This project applies this general architecture to make several improvements in the accuracy of a full-text search engine, for example, providing an alternative method of answering entity-attribute queries and a more stable and effective method of query expansion. Research results are disseminated through scientific publications, open-source software, and the project's web site (<http://www.cs.cmu.edu/~callan/Projects/IIS-1422676/>)

Information Retrieval (IR) refers to finding information from large amounts of text, and is among the most useful technologies for overcoming information overload. For example, Web search engines are now essential tools for everyone to find information on the Web. Existing IR systems are inherently non-optimal because the retrieval decision is made primarily based on the current query and the document collection without considering information about the user and search context. This project seeks to eliminate this limitation of the existing retrieval methods and formally develop a new retrieval paradigm called user-centered adaptive information retrieval (UCAIR), in which user information and search context are both exploited to improve retrieval performance. This project includes research on: (1) developing a new UCAIR framework based on Bayesian decision theory; (2) developing new language models to exploit user information and search context to improve retrieval accuracy; (3) developing new retrieval methods to optimize the long-term retrieval utility over an entire retrieval session; (4) developing new retrieval methods to leverage user similarities to better infer one particular user's information need based on information about other similar users; and (5) developing prototype UCAIR systems for searching the Web and bioinformatics literature. The project will advance the state of the art of IR through developing a unified formal framework for UCAIR, a variety of retrieval methods for exploiting user information and search context to improve retrieval accuracy, which will directly lead to more effective information retrieval applications in all domains. The research results will also enhance the current IR curricula, improving education of information technology workforce. The project Web site <http://sifaka.cs.uiuc.edu/ucair/> will be used for research results dissemination.

A well-prepared, innovative science, technology, engineering, and mathematics (STEM) workforce is crucial to the Nation's prosperity and security. Future generations of STEM professionals are a key sector of this workforce, especially in the critical scientific areas described in the [Big Ideas for Future NSF Investments](#). To accelerate progress in these areas, the next generation of STEM professionals will need to master new knowledge and skills, collaborate across disciplines, and shape the future of the human-technology interface in the workplace. As a result, NSF recognizes the need to support development of and research on effective educational approaches that can position the future STEM workforce to make bold advances in these Big Ideas.

In response to this need, the NSF's Education and Human Resources Directorate seeks to invest in projects that can educate the STEM workforce to advance discovery in the six research Big Ideas: Harnessing the Data Revolution; The Future of Work; Navigating the New Arctic; Multi-messenger Astrophysics; The Quantum Leap; and Understanding the Rules of Life. In addition to developing and implementing novel educational and/or training programs, these projects should simultaneously generate new knowledge about effective STEM education, by studying such programs and exploring related issues.

Specifically, NSF accepts proposals to support education research and development projects focused on re- or up-skilling the existing workforce; developing the skilled technical workforce; and/or preparing those at the undergraduate, graduate, or postdoctoral fellow/early career levels. We encourage projects to partner with industry, public, and private sectors to define the needs of tomorrow's workforce and develop educational and learning strategies to meet those needs. Proposals should address near-, mid-, and long-term challenges and opportunities facing the development of STEM professionals or anticipate new structures and functions of the STEM learning and teaching enterprise. Proposers are encouraged to include approaches that have the potential to increase and diversify participation in STEM. All proposals should contribute to one or more of the six research Big Ideas.

EHR is particularly interested in supporting innovative education research and development in two Big Ideas: [The Future of Work at the Human-Technology Frontier](#) (FW-HTF) and [Harnessing the Data Revolution for 21st Century Science and Engineering](#) (HDR). Projects of interest include: innovative uses of technology and big data to understand learning; educational approaches that prepare tomorrow's innovators to use technology and big data to understand the natural world; effects of advances in intelligent agents on STEM teaching and learning; and evaluation of disruptive educational interventions on long-term student outcomes.

Outcomes of these projects can enable the Nation to: better prepare its scientific and technical workforce for the future; use technological innovations effectively for education; and advance the frontiers of science. Proposals should describe projects that build on available evidence and theory, and that will generate evidence and build knowledge, while contributing to the education of the future STEM professionals.

Using Machine Learning and sound analysis, we have developed a prototype operator advisory tool, with which to distinguish between diamond-rich materials and gangue.

The advisory tool receives a sound stream from an alluvial diamond mining drill head, analyses the sound signal in the interesting frequency range, and

classifies signal features, so as to estimate the current mining material entering the drill head. After evaluating three different techniques of sound analysis and classification, the winning procedure has been selected on the basis of accuracy on a blind test set. This procedure takes the following steps:

Training of classification model:

- 1) Input suitable training sound data
- 2) Select interesting frequency range with band-pass filter
- 3) Construct a supervised Support Vector Machine classifier on the auto-correlation sequence of mining gravel, partial gravel & clay, and clay only.
- 4) Validate classifier

Application of classification model:

- 1) Input a suitable sound stream buffer every second
- 2) Select interesting frequency range with a band-pass filter
- 3) Calculate auto-correlation sequence of filtered sound signal
- 4) Classify sound window with trained classifier
- 5) Present current mining material state in a simple linear gauge display that changes colour to indicate different material states. Mining gravel is indicated in green; end-of-mining is coloured red. Partial gravel-clay takes orange.

# Classification of mined material and detection of end of mining based on sound

## Description

**Problem:** Marine diamonds are found in a gravel layer that lies under other sediments and on top of a "footwall" layer that is typically clay. Mining techniques use various forms of suction, such as a suction drill, to remove the sediment and gravel and extract diamonds on board a ship. There is currently no precise way of knowing when the end of the gravel layer has been reached during mining. Manual observations are made of the mined material on board a ship to roughly determine the depth of the gravel, but these observations are subjective and sporadic and thus error-prone. It also takes the material roughly one minute to reach the surface which means that

adjustments to mining depth cannot be made in real time. It is likely that significant improvements in mining efficiency can be made if it is known in real-time when the footwall has been reached.

**Challenge:** Use audio of the mined material traveling through and impacting on a metal pipe to identify characteristics of the mined material in real-time. Ultimately, the goal is to identify the end of the diamondiferous gravel, but there are a number of smaller steps towards this end that would be useful outputs of this challenge. Having this information will allow mining to occur more precisely and avoid situations of under or over mining. The audio is recorded with a hydrophone or accelerometer, attached to the suction pipe, close to the seafloor where the mining occurs. A challenge with this data is that mixing of different geological layers has occurred by the time the material is recorded. So it is generally not possible to detect a discrete footwall event by ear.

Outputs: Useful outputs can be any combination of the following:

1. Measure particle impact frequency (counts/sec) in real-time.
2. Measure particle impact strength in real-time.
3. Determine if distinct classes corresponding to different materials can be identified in the mining audio (e.g. using unsupervised classification). Determine if it is possible for these classes be separated / unmixed from each other and if their relative proportions can be determined over time.
4. Provide a visual representation of the audio (that could combine the above information and or use other techniques) that allows an operator to judge when footwall has been reached.

## Data Description

Numerous audio recordings of mining from two different drill-ships are available. The data is in 44kHz, 16bit, stereo wav format with the accelerometer data in the left channel and hydrophone data in the right channel.

# Fragmentation in Next Generation Cave Block Mining

## Description

Block cave mining is a mass underground mining method that is increasingly being proposed for a number of deposits worldwide, thus the scope for a better understanding of block caving behaviour. The cave mine of the future runs like a “rock factory” with little to no manual interference, using automatised and autonomous processes where possible and optimised scheduling and sequencing of ore blocks. Newcrest’s Cadia East operation, when completed in 2017, will be Australia’s largest hard rock underground mine at a depth of 1,200m.

Challenges:

- a) Capture and analyse information about rock fragmentation at the drawpoint. Can this be scaled to continuous monitoring of all drawpoints?
- b) Give an accurate representation of the whole cave back shape, position, and rate of movement via remote monitoring. [Data Description](#) Lidar data of drawpoint in .csv; Trimble high fidelity laser data in .bin (cloudcompare)

## Mine Control



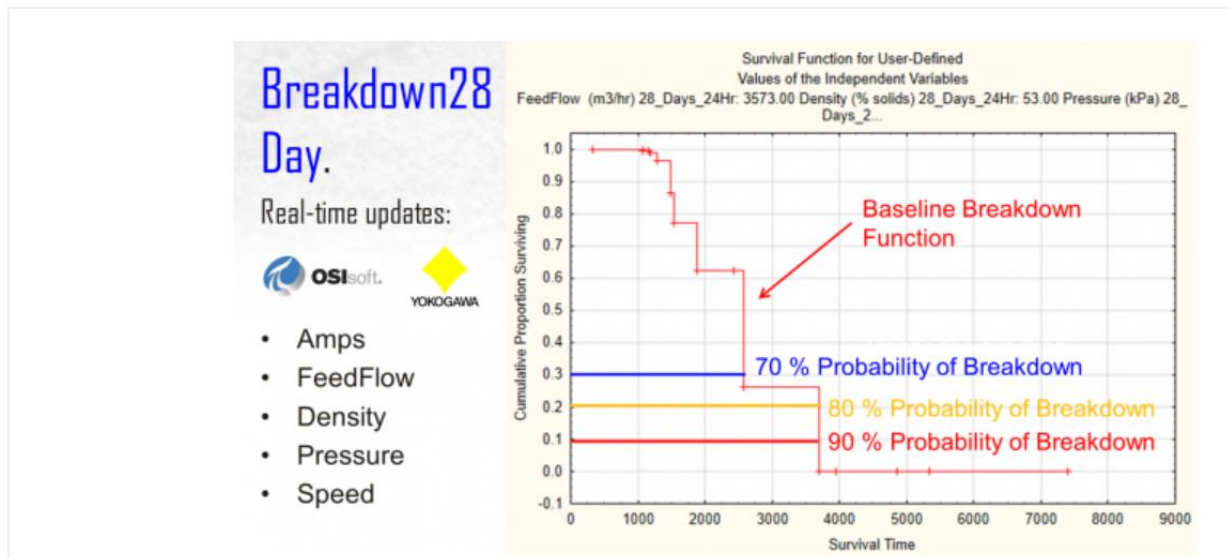
## Pump Maintenance. Done Right.

Unplanned pump failures cost the Australian resource sector over \$9B annually. Connecting pumps to Mine Control's cloud servers, will allow us to manage data analysis and reporting.

Applying machine learning across thousands of these connected pumps, Mine Control will provide tailored reporting to individual assets.

We shall also provide a hardware sensor solution, enabling more accurate data output and analysis.

## Real-time\_Breakdown\_Predictor



## Real-time Breakdown Algorithms.

Our Solution:

Real-time breakdown algorithms to automatically alert managers/superintendents when pump is 28 days, 7 days and 24 hours from breakdown:

Breakdown28Day, Breakdown7Day, Breakdown24Hr.

Coded into Process Control System (PLC) using existing monitoring equipment.

PLC sends customisable automatic emails to maintenance and plant managers/supervisors e.g.:

Blue alert email 70% probability 28 days from breakdown  
Amber alert 80% probability 7 days from breakdown  
Red alert 90% probability 24 hours from breakdown

# Predictive Maintenance for Cyclone Feed Pumps

## Description

Cyclone feed pumps are critical components in a processing plant and downtime can cost over \$50k per hour. There is an opportunity to significantly reduce downtime by analysing and correlating 12 months' of existing data and developing a system that can detect and predict maintenance requirement of cyclone feed pumps. Newcrest's ultimate goal is a system that is: "capable of predicting future performance of pumps, trained on past data."

**Challenge:** What does predictive maintenance look like? Real time failure alerts? Predictive parts ordering? ...

## Data Description

12 months+ Equipment operating data (flow, amps, speed, pressure, density, etc.) in csv, Records of breakdowns, disruptions and unplanned maintenance, planned maintenance schedules (and actuals)

# Auto-Correlation of Borehole and Imaging Data

## Description

Correlating coal seams and plies across multiple boreholes can be a labour intensive process, requiring substantial effort to keep geological databases up to date as new boreholes are drilled and geological interpretation changes

over time requiring revision of old logged boreholes. Using existing boreholes with their associated logging date and location data, interpret the seam and ply intervals in new boreholes using the geologists log, location data and geophysical data. In addition, downhole cameras and acoustic scanners are regularly used to capture information. Interpretation of the geological structures in these images is a time consuming manual process and large amounts of additional data is left behind and not used. There is potential to unlock geological information and improve the correlation model.

**Challenge:** Can you create a prototype to interpret and correlate coal seams in real time?

### Data Description

The Data: Geologists borehole log and down hole wireline geophysical data such as Density, Natural Gamma, Sonic and Resistivity, surveyed GPS location i.e. X,Y,Z.

Additional: Downhole camera and acoustic scanner data

Track barrels using IOT technology over low powered long range WANs. Geofence facilities and deliver using cloud-based technologies.

The Internet Of Things (IOT) is only at the beginning of what is capable. The introduction of low powered long range WANs will make machine-to-machine communication even more cost effective. Up until now, using 3G or WIFI created expensive devices and extra costs connecting these devices to a network. The introduction of low powered long range WANs means that a device - with a cost of a \$1 to connect to a network - will enable IOT to reach its full potential.

Tracked attaches a device to each barrel so that its location is always known. This solution differs from a WIFI or NFC (scanner) solution because no extra buy in from facilities or changes to the workflow is needed. The barrel is simply tracked. This will enable a business to gain insight and answer

question like - has the sample arrived at a facility? Has it arrived on time? Has it not moved for some time? Where is it? When does it expire and oxidise? There are many more will be answered using tracked.

## Wifi enabled trackers to record information on sample drums.

Our solution is to help labs better estimate the quality of coal seams based on their samples by tracking the location and atmospheric data, specifically heat and humidity, of each sample as they are sent from geologist to analyst to lab. We track this information by inserting low-cost wifi-enabled sensors into each sample bag and attached to the head of the drum. Each drum will collect the information, but we hope to expand this capability to each individual sample in future iterations. All information will be recorded locally and then synced to a server upon connecting to wifi. This will be accessible to anyone in the chain, allowing someone who is expecting a sample to see who had it last. This increase in accountability will allow drum recovery much sooner, instead of things “turning up” months later. The atmospheric data will also be of importance to the lab, allowing them to better model the coal’s oxidation. This will allow them to work back and see a more accurate picture of the quality of coal in the ground.

## Skunk Missile is a rapid, easy-to-use, in-field mineral composition analysis tool.

This product is a quick solution to a big problem; and saves time and expenses. It is a step by step process to first determine the difference in mineral in a given sample by panning the sample and separating it through gravity or density.

The sample is then heated up on a heating plate, which takes around 60 seconds including heating and cooling. Once heated, it is monitored under an infra-red camera, where this process allows us to discern the difference between the minerals. This is due to the fact that some minerals cool down quicker than others, and we discovered that Quartz cools down the quickest, followed by Zircon and then Titanium, which retain their heat longer.

The percentage of heavy mineral vs trash and even the individual constituents of the trash can then be calculated. A software interface is used to display the composition of the mineral sample.

This entire process takes approximately 60 seconds overall, significantly reducing the time spent to find the overall mineral content. This process is very efficient and easy to conduct as there is minimal training required; geologists already have the skill set and the design is easily integrated into the everyday work flow. The equipment does not take up much space and therefore can be easily transported from point A to B. A geologist can simply plug it into a laptop as a peripheral device and process the data on it.

The final product will look like a portable camping cooker that can be easily propped on either a tripod or some type of stationary flat surface, including heating and cooling elements and 2 cameras (infra-red and normal).

## Oil Analysis Workflow & Prediction

Our system helps streamline and predict, and prioritise maintenance events on machinery based on machine learning algorithms. This data is then used in a streamlined workflow system to ensure critical incidents are attended to immediately, reducing turn around time 10 days.

This is done by providing immediate alerts to technicians onsite, informing them immediately when a potential incident is found. A follow up action is then delivered through the app once further manual testing is performed.

# WesTrac/AWS Predictive Maintenance using Oil Samples

## Description

### WestTrac & Amazon Web Services

The current environment within the mining community is that of an appetite to utilize big data to improve efficiency and productivity and reduce costs. Predicting maintenance and equipment downtime events is critical to delivering on time maintenance and keeping critical equipment up and running in the field. Currently WesTrac test, analyse, interpret and tracks thousands of oil samples from a wide variety of equipment at its Fluid Lab.

Equipment down time and failures accounts for \$ billions of lost efficiencies at mining sites across Australia and the world. Improving the oil analysis process and using new data analysis and predictive techniques to understand and solve failure events is key to reducing down time events.

The challenge will be how to improve the oil analysis interpretation process and utilise the oil sample test data set to better understand, track, and predict future maintenance events.

IT, a 5,000+ employee organization, accelerates Intel's growth through best-in-class IT solutions and services. IT drives productivity and scalability, executes on security, privacy and operations, all through creating a winning culture. This specific position is to serve as the General Manager to manage its Data and Artificial Intelligence organization (DAI). This is a global organization of ~500 employees.

- Lead and manage a global organization consisting of ~500 data, analytics and AI professionals specializing in data management, analytics and AI solutions.
- Create the strategic direction, vision and execution of DAI focusing on driving a competitive advantage for Intel through artificial intelligence, business intelligence and advanced analytics.
- Execute on vision to deliver standardized, high quality connected data to lead Intel's digital transformation.
- Grow IT's analytics solutions and Intel's self-service capabilities to accelerate insights in all areas of Intel business.
- Drive a change across Intel to enable critical work transformation using AI by building strong partnerships with customers and influence the highest levels of management.
- Shape and structure DAI to become a business value driven organization. Grow a business value and customer obsession mindset.
- Drive for implementation of industry level, state-of-the-art best practices of scalable, high quality Data and AI reusable software to cut TTM and reduce TCO.
- Create a culture of innovation, value, efficiency, and collaboration to empower and motivate DAI professionals.
- Shape the organization into a competitive advantage for Intel through attracting top talent, investing in career development and training plans, and developing management and leadership strength.
- Role model Intel values, culture and leadership practices to grow pipeline of managers and leaders.

- Partner and collaborate with industry leaders to influence advancement in the field and bring novel approaches into Intel to maximize value.
- Deep expertise of artificial intelligence, analytics, data management quality & governance and Big Data technologies.
- Deep understanding of Intel's businesses, priorities and strategic direction to identify high value opportunities to transform critical work, maximize value to customers and influence senior management to drive change.
- Strong analytical skills and ability to understand existing business processes. Ability to identify threats and opportunities for commercial succession of the enterprise and articulate evolving priorities of the business.
- Established record of success building high-performance teams, attracting and retaining top talents, developing leaders and driving necessary organizational change.
- Possess exceptional interpersonal skills, display cultural sensitivity and role model servant leadership.
- Deep understanding of enterprise IT from business, technology and operational perspectives, knowledgeable of ITIL, Six Sigma, Waterfall and Scaled Agile Framework (SAFe)
- Ability to align and utilize Intel internal partners and processes for end user and ecosystem value; seen as industry leader and can represent Intel externally; expert influencer at highest levels of Intel.
- Strong leadership, management communication, and presentation skills with experience managing and influencing relationships with internal business customers at executive and senior management levels.
- Ability to collaborate across multiple IT organizations, business partners and stakeholders; operate in an ambiguous environment, think beyond the current boundaries, and question the status quo structure/functions and recommend and effect changes.
- Deep knowledge of the semiconductor industry beneficial.
- Demonstrated results and accountability for broad leadership, building of followership and role modeling of Intel's cultural attributes of:
- Customer obsessed - seek to understand what matters most to our customers, listening more and talking less.
- One Intel - "we" before "me". We work across boundaries, collaborating across the aisle and around the world.
- Fearless - We are bold. We take risks and challenge ourselves. We fail fast, iterate and continuously improve.
- Truth and Transparency - allows the best ideas to emerge and speeds our ability to solve problems faster.
- Inclusion - Inclusion runs through each attribute and is integral to our culture evolution

Artificial Intelligence (AI) is at the forefront of a gold rush in technology that hasn't been witnessed since the launch of the internet. As an industry, AI is predicted to continue being one of the fastest growing spaces for growth through 2025, and Appen is at the forefront of this growth."

Appen collects and labels images, text, speech, audio, video, and other data used to build and continuously improve the world's most innovative artificial intelligence systems. Our expertise includes having a global crowd of over one million skilled contractors who speak over 180 languages

and dialects, in over 70,000 locations and 130 countries, and the industry's most advanced AI-assisted data annotation platform. Our reliable training data gives leaders in technology, automotive, financial services, retail, healthcare, and governments the confidence to deploy world-class AI products. Founded in 1996, Appen has customers and offices globally.

At Appen, we value performance, honesty, humility, and grit. We persevere and remain focused, whilst maintaining agility to achieve quality outcomes and exceed expectations. We're truth tellers – respectfully of course. We take accountability for our actions, and believe in giving and receiving direct feedback. We give credit where credit is due, and show gratitude to others for their contributions. We seek diverse perspectives as we recognize the value in teamwork and collaboration. Through grit, we take ownership, and we don't give up.

We are looking for an energetic, engaging, and experienced leader to provide additional strategic and operational leadership for our Customer Success and Professional Services teams in support of Appen's Data Annotation Platform.

As the leader of our talented and fast-growing teams you will be responsible for engaging and championing key stakeholder relationships and driving customer adoption/utilization while achieving Appen's customer value realization projects resulting in a healthy and sustainable Commercial, Enterprise and Global accounts growth. You will engage with key leaders and inspire teams to help customers adopt Appen's Data Annotation Platform as both a product and service while helping to promote a new way to work within their own organizations.

You must be a hands-on leader who enjoys spending time with customers while also being able to think and act strategically. One way to do this is by enhancing our methodical Value Realization Framework that has success criteria directly linked to the value that a customer derives from their investment. And we do not guess, we use data, analysis, and insightful scorecards to drive successful results for our customers. You will work in a dynamic, high-growth environment across a variety of teams and talented team members to serve progressively larger and more complex customers as the business grows extensively.

At Appen, Professional Services are typically multi-phase, annual organization-wide engagements deployed by Professional Services Engineers to our highest-value customers and Global Account support. The scopes of work include deployments focused on large-scale adoption as well as an increasing focus on technical services, trainings, platform support and customized implementations.

Dedicated Customer Success Managers (CSMs) act as trusted advisors to our most important customers and work in close partnership with Account Executives and Professional Services to provide lifecycle management focused on adoption and utilization of Appen's high-value customers.

**Reporting to the Senior Vice President, the Vice President of Customer Success and Professional Services will be responsible for:**

As Appen's VP of Customer Success and Professional Services, based in the San Francisco Bay Area, you will report to the SVP of Client Services. Your direct reports will be responsible for all commercial

and technical aspects of our platform accounts, and you will partner with Appen's Sales Leaders co-create industry focused playbooks across our global customer base.

Your primary strategic objective will be to develop the right focus and balance of Customer Success and Professional Services for quick customer adoption and utilization of Appen's Data Annotation Platform by building awesome relationships and drive lifetime value realization. You will drive a vision to make Appen's Customer Success and Professional Service experiences a sustained competitive differentiator in the market and ensure Appen becomes the Data Annotation Platform of choice for some of the largest and most impactful companies in the world.

- Create and execute an operational methodology & customer management process which builds on our data driven Value Realization approach to Customer Success and Professional Services; continue to iterate and improve on this process in collaboration with Sales, Customer Success, Professional Services and other cross-functional teams.
- Continuously improve Appen's Dedicated Customer Success Management and Professional Services strategies and drives ARR and Committed Revenue growth.
- Lead and own Customer Success and Professional Services' P&L responsibility and deliver on ambitious annual growth targets.
- Execute a strategy that balances paid, milestone driven engagements delivered by Professional Service Engineers with lifecycle management delivered by CSMs.
- Enhance Appen's Value Realization industry-based playbook of approaches to improve customer utilization, build stakeholder and champion relationships, and create mission-critical project portfolio.
- Create successful conditions for customer's growth and expansion through project delivery and high customer satisfaction NPS scores
- Ensures customers understand & use the platform and its nuances with thorough Training and closely monitors all aspects of customer's data utilization and adoption of the platform
- Continue to refine value-based metrics and scorecards which allow for a fast and predictable snapshot of account health.
- Scale the Customer Success & Professional Services teams through engagement, recruitment, training, and development.
- Ability to lead a multi-disciplinary team, including individual contributors, first, and second-line management.
- Partner with Sales, Marketing, Product Management and Client Services teams to define and implement the ideal customer journey for all accounts.
- Partner with Sales and Client Services Teams to increase the number of customer Platform champions and increase the reference ability of customers.
- Work with Sales, Marketing and Product Management to standardize common service delivery tools and infrastructure.
- Model what it means to be a consultative presence with domain expertise in the field to the Sales and Customer Success teams by supporting customer meetings.

**To be successful in this role, applicants should have**

- **Required Knowledge, Skills and Abilities**
- You are naturally customer focused and are keenly driven to satisfy their requirements and needs

- You have a demonstrated understanding of SaaS business models, technology adoption/utilization, and customer satisfaction
- You are comfortable being hands-on, detail-orientated and shifting between the tactical and strategic actions with effective executive and team communication skills and techniques
- You are driven to serve the growth needs of the team by leveraging a career mentoring approach and advocating employee advancement opportunities.
- Must be an inspirational communicator and motivator of the Customer Success and Professional Services Teams
- An advocate for Appen's customers internally and externally. You will be on stage. You need to inspire.
- You have a thoughtful and strong philosophy about the role of Customer Success in SaaS companies.
- You have built successful Professional Services teams and experienced every part of the full life cycle from scoping and quoting through delivery.
- Expertise servicing large, complex enterprise customers across a variety of verticals with a SaaS subscription pricing model. The organizations you have led emphasize consultative, proactive support and delivering tangible, high-value customer outcomes.
- General management capability; experience meeting the demands of a P&L and building a self-sustaining business.
- Analytical by nature, you value data-driven decisions and transparency.
- Intrinsically motivated by helping others succeed – team members and customers.
- Highly entrepreneurial, not fazed by change or ambiguity.
- Within SaaS Customer Success and Professional Services Models you have expert-level knowledge of leading and a proven track record in a high-growth environment of:
  - Leading in global, matrixed organization.
  - Designing and executing a strategy that balances paid, milestone engagements with lifecycle management through CSMs.
  - Driving (directly or indirectly through your team) strategic CS and PS engagements for \$1M+ accounts.
  - Architecting and building project staffing structures for Professionals Services.
  - Working effectively with Partners to extend CS & Services coverage outside of core markets.
  - Managing a P&L that is under analysts' scrutiny.
  - Input in designing, implementing, and improving new services capabilities, including go-to-market pricing, packaging, and enablement.
  - Being seen directly as a trusted advisor to executive champions in priority accounts.
  - Influencing Sales and Product teams as customer advocate
  - Working cross-functionally across Sales, Customer Success, Marketing, Product, Finance, and Legal.
  - Up to 25% estimated travel time for customer, internal and other business needs
- **Qualifications and Experience**
- You have 15+ years of total account management experience in a SaaS or similar company.
- You have 5+ years being a manager for a Customer Success team at a global SaaS company.
- You have 5+ years in a leading and managing a Professional Services organization at a global SaaS company.

Experfy is a Harvard Innovation Lab incubated startup and has created an AI-enabled Future of Work technology talent platform where Fortune 500s can directly access pre-vetted high-end

technologists who can be deployed almost immediately to work remotely on critical projects. Experfy was selected by Deloitte to build Deloitte's Future of Work platform - a major strategic initiative to transform technology, talent and workplaces. This partnership, combined with the COVID-19 rapid transformation to remote workforces is fueling Experfy's growth and need to expand and scale our team.

### **The Opportunity**

Experfy is seeking a hands-on Vice President, Engineering to lead and scale our next stage of growth. In this role, you will be responsible for executing on our overall AI product and technology vision, shaping our product strategy and driving our software development execution with emphasis on Machine Learning and Big Data. You will lead and manage our growing 20-person software development and engineering team in Eastern Europe and the US, while planning integrations with our partners. This is a strategic, yet very hands-on, solution-oriented and client-facing role given our current early stage.

### **Your Responsibilities**

- Lead and enhance our Agile methodology, including all activities of development, engineering, testing, and production systems and ensure that design requirements are met with consistency of user experiences
- Implement standards and procedures to ensure that quality standards are met, are consistent and that the team produces clean code and understands the importance of test coverage
- Collaborate with product management and be accountable to implementing the product road map and project plan on time, achieving KPIs with a high level of quality
- Oversee the planning and delivery of complex engineering and development projects
- Recruit world-class talent, manage the appropriate development methodologies, and create the proper organizational structure to drive a high performing development team to deliver these applications to the market with relentless execution
- Keep abreast of and influence technology trends, standards, and stakeholders which will further enhance adoption of our platform

### **What you Bring to the Team**

- 10+ years of executive-level technology experience in software companies, with experience preferably in the talent platform space (HCM, Staffing, RPO, etc.), preferred
- Successful experience managing off-shore and distributed teams
- Advanced experience using Ruby on Rails, Javascript/EmberJS, including 10+ years' earlier career experience as a software developer
- Experience with product personalization of talent platforms using Machine Learning, NLP and Big Data.
- Proven success managing complex projects using Agile development methodology
- Excellent leadership skills, including the ability to develop trust and credibility, lead by example, develop and motivate high-performing teams
- Thrive in a fast-paced dynamic and entrepreneurial environment with a sense of urgency and accountability
- Strategic problem-solver who is also hands-on and gets to the root cause of issues

- Exceptional executive presence, business acumen, and presentation skills
- Self-motivated, positive and “can do” attitude
- Strong verbal and written communication skills
- Bachelor’s degree in Computer Science, Management Information Systems or related engineering field

Bestow is a digital life insurance company built on full stack technology and AI. In a world in need of greater financial resilience and protection, Bestow democratizes access to smart financial products and powers some of the world’s leading consumer platforms. We are reimagining and rebuilding a 400-year-old, \$7 trillion industry to create a brighter future for millions of families. And we’re just getting started.

The Bestow team is a diverse band of first principles thinkers on a mission to do good. We’re fortunate to be backed by leading investors and partners including Valar Ventures, NEA, 8VC and MunichRe.

Do you love data and the science of data? Do you enjoy building diverse teams working on hard problems? Are you passionate about creating solutions that will help protect people and their families? If yes, then read on.

Bestow is hiring a VP of Data who understands how to apply modern data science techniques to real world problems. We are looking for a highly-motivated leader that wants to grow a nascent data team into a best-in-class data science organization.

As the VP of Data, you will be responsible for creating and executing vision of how data can be leveraged to transform the life insurance industry. Your team will consist of data analysts, engineers and scientists responsible for collecting, managing, and analyzing data to provide solutions for our business needs. We are a market leader in revolutionizing the way insurance is sold online and we need a leader that will elevate our data-focused culture.

This position reports directly to our President and is expected to have a high impact on the organization.

### **What You Will Do**

- Set the vision and strategy for data/data science with a focus on creating customer value
- Provide vital business intelligence that drive resourcing and product strategy decisions
- Integrate data collection, data quality, and core model output into production; apply data mining techniques to uncover actionable business insights
- Ensure and improve data integrity, data accuracy, data governance, and data quality
- Grow a data engineering team capable of building a scalable data infrastructure
- Establish best practices for big-data technologies, tools, and own processes related to model section, accuracy, and efficiency
- Identify new data sources
- Collaborate with all teams to find growth levers and optimization opportunities
- Offer actionable business recommendations based on empirical data and external factors

- Collaborate with engineering, product and finance to provide informed, data-backed insights on that drive revenue and improve consumer experience

### **A Little About You**

- 10+ years experience in algorithmic engineering, data science, or machine learning
- 5+ years of experience in managing, and mentoring data science, data engineering, and analytics teams
- Experience in data mining and machine learning tools, pipeline workflows for modeling, tuning, logging and deployment to end users and languages including MySQL, Python, R, etc.
- Ability to apply statistical modeling and algorithmic tools to solve business problems
- Understanding of SQL, asking and answering questions of large datasets across a variety of systems and platforms, such as relational and non-relational databases and cloud-based object storage services
- Experience in cross-functional organizations where your team collaborates and integrates with other teams across the organization
- Have strong technical domain know-how to coach and grow the team
- Familiarity with bringing data science tools into production

Northwestern Mutual (NM) has been helping families and businesses achieve financial security for over 161 years. Through a distinctive, whole-picture planning approach including both insurance and investments, we empower people to be financially confident. We combine the expertise of our financial professionals with a personalized digital experience and leading-edge technology to best serve our clients.

Data is a critical driver of this approach, and a cornerstone for how NM engages with its customers. To help guide the effort, NM's Chief Data Officer (CDO) is seeking a highly strategic, analytical, organized, and motivated Vice President, Core Data to lead two major data engineering areas: Analytics Data Engineering and Core Data Operations. By providing single threaded leadership across these two domains , you will help ensure a cohesive technical approach to data at NM.

You will also lead Core Data Operations within CDA. These systems ensure data flows through low latency operational systems, with high uptime requirements. These core data systems also expose data as APIs to customer facing applications.

You will also lead a team of Data Analytics Engineers and Machine Learning Engineers in NM's newly formed Core Data & Analytics department (CDA). You will collaborate with Data Scientists, Analytics Analysts, and Business Analysts throughout the organization to help unlock the value of NM's data through insights, predictive analytics, and operationalized data science. You will lead the development of NM's Enterprise Data Warehouse, aggregating data from throughout the company into a single customer view. You will lead the development of a Business Intelligence (BI) function that provides self-service tooling that empowers the organization, while providing governed access to canonical data for analytics to ensure consistency of key data entities throughout the enterprise.

### **Your Responsibilities Include But Are Not Limited To**

- Lead multiple teams of Services Data Engineers focused on exposing data as performant and reliable APIs.
- Hire and lead a team of data analytics engineers in the development of data pipelines that transform and aggregate data from throughout NM's systems into an enterprise data warehouse
- Lead the development of a data analytics ecosystem that incorporates both an EDW and Data Marts
- Build and evolve NM's data science/ML platforms, with a focus on rapid iteration and operational deployment of predictive models
- Evaluate and make the call on technical solutions, architecture, and platforms
- Accelerate NM's ability to ingest and aggregate data from external data sources, consolidate with internal data, and leverage to drive insights
- Help architect BI solutions that accommodate a de-centralized business analytics organization.
- Develop an organizational structure and operating model in which data engineers thrive in cross-functional teams (with analysts, data scientists, etc ) that are embedded and dedicated to business and product areas
- In collaboration with the CDO, lead strategic planning, roadmap development, and operational planning for your teams

**You will know you are successful if...**

- The Operations and Analytics parts of NM's data technology ecosystem work together in a cohesive and harmonious way
- NM's data analytics platforms make step function advancements under your leadership, with major EDW and BI platform delivery milestones in 2020 and beyond
- The value of NM's data is unlocked through both descriptive enterprise reporting and operationalized predictive analytics
- You successfully collaborate with your peers to deliver solutions that successfully combine new platforms and older systems
- Your stakeholders are delighted by the excellence, impact, and delivery-focused mindset of your team

**Required Skills**

- 12+ years in Data and/or Services Engineering, with 5+ years leading teams
- Deep public cloud experience (AWS preferred) is a must
- Deep experience building, scaling and deploying high traffic APIs
- Expert in leading teams that implement both streaming (e.g. Kafka, Kinesis) and batch (e.g. Airflow, AWS Glue, Informatica) data transport technologies
- Deep expertise in Cloud Data Warehouse technology (e.g. Redshift, Snowflake) and/or managing an enterprise data lake
- Expert in implementing an operating Business Intelligence platform solution and creating self-service solutions with robust metadata layers that empower a dispersed community of business analysts
- Performs work independently as well as a team influencer and team contributor
- Exhibits superior analytical, evaluative, and problem-solving abilities

- Very comfortable with ambiguity and enjoys creating structure out of chaos
- Experience with Agile/Scrum development methodology
- Delivers excellent verbal and written communication to include expression of facts and ideas, interpretation of information and the ability to make clear and convincing presentation
- Ability to navigate the levels of audiences and articulate ideas to both technical and non-technical audiences
- Sets and manage priorities judiciously
- Maintains strong self-motivation and team motivation through high degrees of collaboration

### **Desired Background**

- Experience deploying, and operating machine learning pipelines
- Experience working in a hybrid (on-prem and cloud) infrastructure environment

A career in our Service Management practice, within Cloud Computing and Networking services, will provide you with the opportunity to focus on the joint business relationship between PwC and Google, HP, Microsoft, Oracle, SAP, and other cloud based platforms to bring new and innovative services to some of the largest companies. We help our clients adopt the cloud to transform Information Technology, scale and streamline operations and create new cloud based businesses through our strong alliances. You'll be at the forefront of helping organisations around the globe adopt innovative technology solutions that optimise business processes or enable scalable technology. Our team helps organisations transform their Information Technology operations into additional sources of revenue by improving Information Technology service delivery, cost efficiency, and customer satisfaction. As part of the team, you'll help our clients design and implement process strategies to address gaps in their cloud service delivery and service management proficiency.

To really stand out and make us fit for the future in a constantly changing world, each and every one of us at PwC needs to be an authentic and inclusive leader, at all grades/levels and in all lines of service. To help us achieve this we have the PwC Professional; our global leadership development framework. It gives us a single set of expectations across our lines, geographies and career paths, and provides transparency on the skills we need as individuals to be successful and progress in our careers, now and in the future.

### **Responsibilities**

PwC Professional skills and responsibilities for this management level include but are not limited to

As a Director, you'll work as part of a team of problem solvers, helping to solve complex business issues from strategy to execution.

- Arrange appropriate assignments and experiences to support others' learning and development.
- Seek out different ways to use current and relevant technological advances.
- Analyse marketplace trends - economical, social, cultural, technological - to identify opportunities and create value propositions.
- Deploy methods to keep up with, and stay ahead of, new developments and ideas.

- Offer a global perspective in stakeholder discussions and when shaping solutions/recommendations.
- Drive and take ownership for developing networks that help deliver what is best for stakeholders.
- Proactively manage stakeholders to create positive outcomes for all parties.
- Uphold the firm's code of ethics and business conduct.

Demonstrates thought leader-level abilities as a team leader, emphasizing the following areas:

- Understanding customers' overall applications portfolio, IT and business priorities and success measures to design implementation architectures and solutions (Microsoft and 3rd party solutions) using PaaS, DevOps & Advanced Application coding;
- Applying technical knowledge and customer insights to create a modernization roadmap;
- Using integrated development environments (e.g. Visual Studio, Visual Studio Code, Eclipse, XCode, WebSphere) targeting Android, iOS, Linux, Windows, public clouds (i.e. Azure, AWS);
- Understanding scalable architectures using Azure App Service, API management, serverless technologies, container orchestration (e.g. Kubernetes, Cloud Foundry etc.), API management, microservice frameworks etc.;
- Architecting solutions to meet business and IT needs, establishing technical viability of new projects and successful deployments, while orchestrating key resources and infusing key Infrastructure technologies (e.g. Windows and Linux IaaS, Security, Networking, etc.), Application Development and DevOps technologies (e.g. App Service, containers, serverless, cloud native, etc.) as appropriate;
- Establishing all solutions exhibit high levels of performance, security, scalability, maintainability, and appropriate reusability and reliability upon deployment;
- Developing thorough relationships with key customer IT decision makers, who drive long-term cloud adoption within their company to enable them to be cloud advocate;
- Demonstrating experience designing, developing, and shipping solutions on Azure or another public cloud;
- Developing and communicating sound plans by determining the time, complexity and processes required to successfully achieve the final outcome;
- Understanding domain specialization of cloud infrastructure solutions (i.e. Windows and Linux IaaS, SAP, BCDR, Security, management, storage, networking, OSS, containers and Infra as a code technologies);
- Using Cloud application development solutions (e.g. PaaS, Serverless, API Management);
- Using Container orchestration (e.g. Kubernetes, Cloud Foundry);
- Working with continuous integration technologies (e.g. Jenkins, Spinnaker, Azure for DevOps, Chef, Puppet);
- Working with web application server technologies, cloud application design, software architecture and practices (design/development/deployment, Agile, SCRUM, ALM);
- Assessing the Customers' knowledge of Azure platform and overall cloud readiness to support customers through a structured learning plan and establish its delivery through partners;
- Collaborating with other Cloud Solution Architects in developing complex end-to-end Enterprise solutions on the Microsoft Azure platform; and,

- Maintaining technical skills and knowledge of market trends and competitive insights; collaborate and share with the technical community.

### **Preferred Knowledge/Skills**

Demonstrates thought leader-level abilities as a team leader, emphasizing the following areas:

- Understanding development practices like DevOps and CI/CD tool chains (i.e. Jenkins, Spinnaker, Azure DevOps, GitHub);
- Using one or more of the following programming languages including C++, C#, Java, Node.js, JSON, PHP, Perl, Python, Ruby on Rails, or Pig/Hive; and,
- Working with integrated development environments (e.g. Visual Studio, Visual Studio Code, Eclipse, XCode, WebSphere) targeting Android, iOS, Linux, Windows, public clouds (i.e. Azure, AWS).

Demonstrates thought leader-level abilities as a team leader, emphasizing the following areas:

- SQL including OSS (postgre, MySQL etc), Azure SQL;
- NoSQL Databases including OSS (Maria, Mongo etc), Cosmos DB;
- Big Data including SQL DW, Snowflake, Big Query, Redshift;
- Advanced Analytics including Azure Data Bricks, visualization tools as PowerBI, Tableau;
- Data Governance;
- Data Science;
- Machine Learning including Azure ML, ML Server; and,
- Artificial Intelligence including BOT framework and Cognitive Services.

Are you excited by the disruptive potential of quantum technology? Do you want to help startups and enterprises understand the challenges and opportunities of quantum computing (QC)?

Amazon Web Services (AWS) is the pioneer and recognized leader in Cloud Computing. Our web services provide a platform for IT infrastructure in-the-cloud that is used by hundreds of thousands of developers and businesses around the world. These customers range from start-ups to leading web companies to Global 2000 companies in financial services, pharmaceuticals, and technology. One of our missions at AWS is to give customers access to the most innovative technology available and help them continuously reinvent their businesses.

Quantum Computing is a technology that holds promise to be transformational in many industries. To help our customers on this journey we are looking for a Principal Solutions Architect professional to develop AWS' in collaboration with service and business stakeholders, and grow the AWS quantum computing ecosystem.

The ideal candidate will possess a business and scientific background that enables them to drive an engagement and interact at the highest levels of large Enterprises and Enterprise partners. The candidate will have the technical depth and business experience to easily communicate the potential and challenges of Quantum Computing, different hardware platforms and frameworks in the AWS cloud to scientists, engineering teams, and C-Level executives. This requires deep familiarity with classical state-of-the-art approaches to quantum computing, as well as target use cases using HPC

and ML in the cloud.

As the ideal candidate, you will be responsible for helping customers understand the value proposition of Quantum Computing on AWS, creating the most compelling content and demos to help customers understand the use cases and value propositions, and building the right programs to increase awareness and adoption. You will also be a Quantum Computing trusted advisor to customers and internal teams; helping develop the Quantum Computing knowledge and skills of Solutions Architects, as well as the technical field community. Additionally, you will work with the Amazon Braket (AWS' fully-managed, end-to-end quantum computing service) engineering and product management teams to shape the product vision and prioritize features. You will get to work on a leading technology field and growing business; and have a material impact, every day. You will be able to facilitate relationships with senior personnel, as well as easily interact and give guidance to technical experts, researchers, software developers, IT pros, and system architects. This requires a demonstrated ability to think strategically about business, product, research, and technical challenges.

This is an opportunity to be at the forefront of science and technological transformations, as a key leader.

#### Roles & Responsibilities

- Architect advanced solutions leveraging AWS Quantum Computing services, working closely with our customers to deeply understand their business needs and to design technical solutions that take advantage of the AWS Cloud platform and Quantum Computing services.
- Demonstrate the viability of each solution through mechanisms like proof-of-concepts and/or prototypes.
- Build "Machine Learning & Quantum Computing, better together" best practices, and develop a strong partner go-to-market strategy.
- Craft and develop compelling audience-specific messages and tools (product videos, customer success stories, advanced demos, white papers, presentations, how to guides etc.)
- Evangelize AWS Quantum Computing services and technologies through forums such as AWS Blogs, white papers, reference architectures and public-speaking events such as AWS summit, and user-group events.
- Collaborate with AWS field sales, professional services, training and support teams to help partners and customers learn and effectively use AWS Quantum Computing services.
- Serve as a key member of the business development and account management teams helping to ensure customer and partner success on the AWS Quantum Computing platform.
- Act as a technical liaison between customers, service engineering teams and support; providing updates on customer progress and ensuring execution by partners.
- Gaining recognition and credibility as a regular attendee, panelist and keynote speaker for multiple internal and external events.
- Delivering compelling presentations, product demos, roadmap reviews, sample solutions and discussions to drive adoption of AWS' Quantum Computing platform, and developer tools.
- Identifying leads for potential engagement needing pre-sales support
- Collaborating with internal teams to define the product road map, market positioning and developer program initiatives

- Assessing training requirements and coordinating with various training teams on scheduling and delivery of training to both internal and external audiences.

### **Basic Qualifications**

- 10+ years experience either in product management, business development, sales engineering, consulting; preferably on cloud or hosted services.
- Strong knowledge and industry experience with HPC, GPUs, deep learning, server-less architectures, distributed systems, and service oriented architecture.
- 2+ years of working in a Quantum Computing related industry role
- Solid business and financial acumen;
- Strong analytical skills, and demonstrated ability to turn detailed data analysis into useful strategic insight in order to drive customer adoption and make appropriate recommendations to the business;
- Experience with, and detailed knowledge of managed services market and insights related to cloud computing and IT;
- Strong verbal and written communications skills are a must, as well as leadership skills.
- Demonstrated ability to work effectively across internal and external organizations is key

### **Preferred Qualifications**

- MSc or PhD in a quantum computation related field (Quantum Physics, Quantum Chemistry, Computer Science) and proven academic track record
- 2+ year(s) of experience in high-performance computing; preferably cloud or hosted services
- 2+ year(s) of experience in ML; preferably cloud or hosted services
- Experience with sales engineering to Fortune 1000 and/or Global 2000 organizations;
- Experience with cloud computing and or related fields (IT, software, etc)
- Relevant business experience.

As a senior Product leader for our Search & Discovery platform, you will be at the forefront of this challenge. Your mission is to continuously improve how our search algorithms simultaneously satisfy multiple objectives - traveler needs for relevance along with business needs for monetization and supplier incentives. You will work with leaders across the company to ensure we are operating a healthy two-sided marketplace – one that not only matches travelers with optimal search results and recommendations, but also takes into account the needs and interests of our suppliers (hotels, property managers, home-owners). In partnership with Data Science, your team will own defining how we merge Sponsored Listings into Search Results, how we give visibility to new suppliers in the marketplace and how we build feedback loops to influence suppliers to behave in a way that promotes long-term marketplace health and efficiency.

We are looking for a Product leader with experience in platform thinking, building functionality for a two-sided marketplace and hiring and growing a skilled, globally distributed team. The right candidate will balance pragmatism with innovation and forward-thinking leadership. You will need to deliver business value quickly while investing strategically in capabilities that have longer-term but potentially much higher pay-offs. You should be an empathetic listener, capable of understanding and envisioning opportunities with a diverse set of partners. . Leading with humility and accountability and serving as an excellent coach who can mentor, grow and bring out the best in people will be essential to your success.

## **What You'll Do**

- Establish a vision and strategy for continuously improving how Expedia Group's Search and Discovery Platform satisfies multiple objectives.
- Define appropriate metrics to measure how optimally we're meeting each objective and set clear targets to constantly strive for improvement.
- Develop strong feedback loops with peers leading our portfolio of brands and partner-facing teams. Direct your team in building functionality that consumers of the platform are eager to adopt and see as adding value.
- Set up a Marketplace Governance process, for evaluating requests to use Ranking as a "lever" to influence longer-term partner or traveler behavior.
- Determine dependencies critical to success and work with your peers in Data Science, Analytics and other Platform teams across EG to establish effective operating models. Work with Engineering to drive sensible tradeoffs between product and architecture investments.
- Ensure your team is focused on outcomes and is executing with quality to continuously deliver customer value and business return on investment.
- Communicate strategy, plan and progress through a regular cadence of written and oral communication. Actively listen and help the team grow and improve from their mistakes.

innovation horizons of what is most valuable now and what potential the future may hold for RTI's business pillars. Leading RTI's innovation lab, Lab 58, the Director will manage the processes to discover, create, and mature ideas into commercial solutions—focusing both on ideas that could accelerate RTI's growth and impact and ideas that could improve the efficiency and quality of the work we provide for our clients today. The Director will work with RTI leadership to identify the largest threats and growth opportunities for Lab 58 target and will explore the roles that emerging technologies and new business models could play in achieving success. The role will involve exploring build, partner, and buy options—managing a technical team that can conduct rapid experimentation and lean development, as well as developing partnerships with start-ups, academics, and businesses, to maximize the pace and value of innovation at RTI through collaboration, investment or acquisition.

## **Essential Duties**

- Work with RTI CIO and RTI executive team to identify the types of threats and opportunities on which to focus.
- Build innovation pipeline across innovation horizons that allows to manage risk while preparing the organization for the future.
- Create and install a repeatable innovation development process with a team of software developers and business development experts to improve speed to market.
- Identify and explore use cases for RTI to leverage/integrate emerging technologies (eg, AI/ML, immersive tech, and blockchain).
- Increase revenue pipeline and explore new product/service opportunities leveraging emerging technologies (eg, AI/ML, immersive tech, and blockchain), working closely with internal and external stakeholders.
- Develop and execute a communication strategy for Lab 58 aimed both at internal stakeholders and external stakeholders (existing and potential clients/partners), including writing articles and

making presentations about Lab 58 and to support RTI-wide marketing with technology (eg, VR/AR).

- Collaborate with RTI's Global Technology Solutions (GTS) group and others at RTI to enable Lab 58 to operate efficiently and to prepare to transition successful processes, technologies, and products/services out of Lab 58.
- Collaborate with RTI Commercialization team to identify and explore opportunities that involve IP development and licensing.
- Identify and recommend potential investment opportunities, working closely with external venture capitalist partners and RTI's Corporate Development team.
- Develop and revise as needed a multi-year strategy that defines measurable success metrics – including both direct impacts (eg revenue), and indirect impacts (eg, revenue and learning, reducing cost/time to explore new ideas, reducing uncertainty of new ideas) – and adjust Lab 58 processes accordingly.

### **Education And Experience**

- PhD and 10 years of related work experience; Masters' degree and 14 years of related work experience; Bachelors' degree and 20 years of related work experience; or equivalent combination of education and experience.
- Experience managing a virtual reality lab, space, or facility preferred.
- Experience with applied data analysis and visualization methods.
- Experience with R&D and product management – designing, developing, testing, and refining new products and services.
- Experience designing and developing R&D experiments/pilots and building prototypes and products that eventually entered the market, including product management roles and experience, the use of lean development/rapid prototyping approaches, and engagement with target customers.
- Experience with corporate innovation management, including some or all of the following: assessing emerging/disruptive technologies, identifying and assessing potential opportunities and threats, and designing and managing pilots and iterative experiments aimed at key assumptions.

### **Skills And Abilities**

- Proven ability to influence and develop innovation as a key part of the culture of an organization.
- Ability to work with diverse stakeholder groups to develop relationships of mutual value and collaborate on specific activities.
- Demonstrated success managing against programmatic and financial targets and deliverables.
- Comfort with dynamic environment—the end-point will be clear, but along the way the process will likely not be very linear; ability to identify when to stop work streams is critical to efficiency.
- Ability to quickly learn new topics and identify key success factors for specific use cases – technologies, subject matter areas, business models, etc.
- Ability to operate independently and in a matrixed environment.
- Ability to manage and prioritize a large number of activities—identifying and proposing new prioritization frameworks when needed.

- Demonstrated skills in Artificial Intelligence / Machine Learning.
- Excellent oral and written communication and presentation skills.
- Excellent interpersonal and relationship building skills.

## **Head of Machine Learning**

### **San Francisco, California**

#### **Description**

We have created a training data platform that acts as a central hub for humans to interface with AI and are looking to expand our engineering team to meet the demands of our burgeoning customer base. We are looking for a Head of Machine Learning to help build infrastructure for data scientists. You will help us reach our vision to become the go-to software platform for data scientists to collaboratively manage their data and train neural networks, all in a tight feedback loop.

#### **General Requirements**

- Expert in deep learning and computer vision
- Excellent developer with experience building production-scale data pipelines and web applications in Python
- Intimate experience with deep learning frameworks (TensorFlow, Pytorch, Caffe, Keras)
- Previously built and shipped ML products
- Comfortable with speaking at tech and industry conferences
- Masters or PhD in CS, or equivalent from a top research university, with focus on Computer Vision

#### **Responsibilities**

- Build and implement computer vision algorithms that significantly speed up labeling
- This is an opportunity for a Machine Learning Engineer with a specialisation in Computer Vision to take their talents to a Medical Imaging company who are continuing to grow despite the current climate. They're investing heavily into new technologies to innovate this space. This position calls for a seasoned leader in cutting-edge deep learning practices who enjoys being a technical lead and is ready to report in the CTO

- 

- **THE ROLE**

- · Manage a cross-functional team of ML and Computer Vision Engineers
- · Work on projects advancing the accuracy of recognition of medical images
- · Manage a blossoming engineering team; partnering with business leaders on coding challenges
- · You will ensure all pipelines are aligned for machine learning and computer vision model development
- · Build and maintain strong professional relationships

- **Your Skills And Experience**

The successful Head of Machine Learning will likely have the following skills and experience:

- · Ability to hit the ground running and lead a highly technical team on Day 1!

- · Extensive experience building machine learning and computer vision models into production
- · Experience in the medical imaging space required
- · History of using Python, C++, PySpark and AWS
- · Deep learning experience with TensorFlow, Keras, PyTorch in production
- · Experience building object detection models
- · Leadership experience of both teams and projects
- · PhD in Computer Science or STEM field preferred

**Role Summary: This experienced Director will manage all architectural research and development activities in the area of Cloud Delivered Mobility Services, Artificial Intelligence based orchestration layer, and Network-based next generation Cloud applications.**

The Platform Architecture group focuses on all aspects of the information and entertainment experience in and outside of the vehicle, for both the driver and passenger, including device integration, Intelligent Body and Cockpit, Autonomous Driving, Energy and Propulsion, and Service Platform for cloud delivered services. The position's responsibilities include personnel management, multi-million dollar development program management, financial planning, internal reporting, network management, support and mentorship of engineering team in engineering related matters, and quality control of automotive grade SW product deliverables.

#### **Role Responsibilities:**

##### **Overall Snapshot of Responsibility would include:**

1. Define overall mission and strategy for Platform Architecture Team
2. Lead and mentor architecture and development activities
3. Strategic planning for the project portfolio in the area of mobility products and cloud intelligence based mobile applications and services
4. Rapid prototyping and validation
5. Approaches for cloud oriented connected car applications
6. User-interface architecture for mobile and automotive systems
7. Expertise in data security and cryptography
8. Overseeing research teams and projects at partner companies
9. Developing conceptual functional prototypes
10. Evaluating computing architectures, tools and algorithms
11. Establishing business contacts with key industry partners
12. Experience tracking the automotive and consumer electronics industry
13. Experience in creation and maintenance of team and project budget
14. Professional experience in presenting engineering topics in trade shows and to executive level audience

WorldRemit is changing the way people send money internationally. We've taken something complicated and made it as simple as sending a text. And we're growing. Fast.

To do this, we need to hire bright people who can work autonomously and make the right decisions.

#### **Who we're searching for...**

The purpose of the **Group Head of Data Analytics & System Optimisation, Financial Crime** is to perform Threat Analytics, AML coverage assessment, model development, scenario effectiveness

assessment, AML & Sanctions platform enhancement and optimization, and metrics and reporting development.

**Key Responsibilities and duties:**

- Ownership of Payment Screening configuration (Sanctions and PEPs), including testing/assurance of the control effectiveness
- Ownership of the global approach for post-Transaction Monitoring, incorporating establishing a global approach to AML typologies, customer segmentation, business rule identification/implementation, testing/assurance
- Establish and lead a team of specialists to implement technical and functional soundness of AML models and tools
- Work in partnership with Technology to develop and drive initiatives that transform and modernize the capabilities and services of company's AML Transaction Monitoring program and platforms
- Development/implementation of our approach to batch screening (including definition of screenable records, minimum data standards, screening configuration/frequency)
- Design and implementation of Segmentation model (Customer and Third Parties)
- Design and implement risk-based alert scoring
- Perform periodic and event driven Tuning & Optimization of AML scenarios and models
- Perform quarterly AML system effectiveness assessment
- Perform Annual Risk & Typology Coverage assessment
- Support any requests from external regulators or internal audit
- Act as SME and Program Lead for AML Tuning & Optimization initiatives
- Maintain standards for segmentation methodology, scenario tuning methodology, peer grouping, BTL/ATL testing
- Lead an analytics team to continually assess current and future state of surveillance, platform, policies, and procedures
- Lead the AML Compliance technology strategy and implementation

**Qualifications:**

- Bachelor's degree in relevant subject (e.g. Mathematics, Economics, Computer Science, Data Science, MIS, Information Management or Statistics)
- At least 15 years in technology delivery, with at least 10 years experience in Fraud, AML, Risk, Compliance and/or Corporate Security technologies.
- Extensive professional experience including comprehensive experience in Banking/Compliance/Technology/AML Transaction Monitoring domains
- SME in financial crime compliance covering product lines such as correspondent banking, wealth management, brokerage, trade, and asset management
- Knowledge of and experience implementing and optimizing AML Platforms (required), and Bridger (preferred)
- Demonstrated experience in Tuning, Optimization and threshold calibration of AML models
- Excellent skills with creating and delivering impactful presentation required
- Solid program management/work flow management experience required
- Desired skills, certification(s), degree(s) and/or license(s):
- Advanced degree preferred
- Excellent verbal and written communication skills

- Excellent skills with creating and delivering impactful presentations
- Demonstrated experience in with Oracle, SQL, SharePoint, Jira preferred
- Exposure to Predictive/Data Analytics, R, Python, Machine Learning, AI, Big Data preferred
- ACAMS certification preferred
- Should be able to interpret complex requirements, analytical ability, a self-starter and decision-making capabilities

### **Principal Investigator (Research Scientist) Job Description**

At SoarTech, our focus is in the development of artificial intelligence (AI) that reasons like humans do, to automate complex tasks, simplify human-machine interactions, or model human behaviors. Our philosophy is three-fold: to be an augmentation to, not a replacement of, the human; to think “top-down, not bottom-up;” and to be transparent so that decisions and processing are communicated to the human and in human-like terms. SoarTech is growing and we are looking for individuals interested in helping research, develop, and implement this exciting technology into everyday operations.

The Principal Investigator (Research Scientist) at SoarTech leads research, development, and transition activities of new technology. This includes developing and executing new concepts for addressing some of the most challenging issues associated with the use of AI and, as such, helps in the creation of R&D proposals and has authority over the execution of projects including research outcomes, engineering accomplishments, transition, and budget oversight. The Principal Investigator also publishes study results as first author or co-author. This position requires personal initiative to accomplish technological innovation and creativity in support of new business development and project execution. This position serves as the primary programmatic liaison with the sponsor.

We are currently seeking PIs for our Autonomous Platforms business area:

#### **Autonomous Platforms and Robotics:**

- **Autonomy:** Like Human Behavior Models in simulation, our intelligent agents are the mechanism for decision-oriented control. Decision-oriented control is capable of working with single or multiple platforms for task and mission planning and can learn behaviors from demonstration.
- **Human-machine interaction:** Dialogue-based, mixed-initiative interaction control systems and speech interfaces such as our Universal Controller make the job of tasking a robot or autonomous vehicle as natural as possible through the integration of speech, sketch, voice, and haptics to create an efficient Human-Robot Interface under diverse operational situations. Our interfaces are designed to be platform independent and meet industry standards.
- **Situational Awareness:** Intelligent display of information on Operator Control Units enables the human and machine to share situation awareness necessary for team decision making. A management-by-exception control scheme allows operators to spend less time interacting with the system and more time doing other important tasks.
- **Trustworthy Autonomy:** Providing cyber-resilient, fail-safe autonomous systems increases trustworthiness. Autonomous platforms have intrinsic challenges unique from systems where humans have more control. We architect systems to support meta-level reasoning, bounding autonomy within tactical-level behavioral constraints, detecting and reacting to potential problems, and alerting users through explanation-based reasoning.

**Duties and Responsibilities for Principle Investigators:**

- Support and collaborate with others, both within and outside SoarTech, to develop successful research and development proposals for external funding that align with SoarTech's strategic direction.
- Lead and collaborate with others, both within and outside SoarTech, in the translation of scientific research into engineering practice.
- Disseminate findings through peer-reviewed publications, presentations at scientific and community meetings, internal and external seminars, and other venues.
- Provide leadership and management of research and development projects.
- Develop a program strategy and implementation plan including short- and long-term goals and objectives for research programs.
- Stay current in area of research interest through reviews of the relevant literature and participation in industry-wide forums and discussions.
- Pursue a technology strategy in support of company initiatives that satisfy both specified and unspecified sponsor needs, and that support stakeholders ranging from end users to high-level decision makers.
- Create and nurture large-scale and long-term opportunities by understanding sponsor funding profiles and how they are likely to change during the next several years; develop an accurate assessment of high-probability funding opportunities.
- Provide consultation, review or co-investigator collaboration on colleagues' projects and studies, as well as mentorship to junior-level investigators.
- Location can, at times, be flexible; some travel will be required.
- Performs other duties as assigned.

**Required Skills and Experience:**

- Ph.D. or equivalent level degree.
- Familiarity with and insight into direction of DoD research community; ability to help position SoarTech for growth in that industry specifically including DARPA, ONR, AFRL and/or RDECOM.
- Ability to integrate ideas from multiple disciplines.
- Familiarity with the DoD research community players, processes and procedures (e.g., the military services and DARPA competitive BAA processes).
- A strong first author publication record in peer-reviewed journals with demonstrated expertise in an established area of research interest.
- Experience in developing effective collaborations with academic and industrial partners.
- Experience in one of the following (or a similar field): human behavior modeling, cognitive modeling, machine learning, multi-agent systems, deep learning, agent-based social simulation, intelligent user interfaces, complex adaptive systems, decision support systems, simulation, robotics, data fusion, and/or game development is desired.
- Demonstrated professional maturity.
- Excellent communication skills, including facilitation, negotiation, and collaboration.
- Leadership, mentoring, and other skills needed to support teams and to work with subcontractors and prime contractors to accomplish common goals.

**Preferred Skills (Not Required):**

- Established record of research accomplishment, including a history of obtaining significant external funding in the DoD research community.
- Experience with contracts and other legal documents desired, including experience in federal government acquisition process.
- A general understanding of Project Management best practices for scheduling, budgeting and risk management.

The Director of Digital Health is the business line leader accountable for the overall strategy and financial performance of their practice as well as employee and client satisfaction within their vertical. They are responsible for launching and developing technology-enabled solutions to proactively react to their changing market. They are looked at as one of the leading experts in cloud solutions, artificial intelligence, and other emerging technologies. They are expected to perform as the subject matter expert to develop client solutions and will oversee and grow a team of employees and consultants.

### **Key Responsibilities**

The Director – Advisory Services - Digital Health will have the following key responsibilities which include, but are not limited to:

### **Solution Development and Management**

- Creating a vision and roadmap for Digital Health solutions with a laser-focus mindset on execution and go-to-market to customers
- Building partnerships with software and technology companies, such as Amazon and Microsoft, that may be required to launch Digital Health solutions
- Generating a comprehensive strategy for digital health that demonstrates seamless integration of Nordic's broader suite of solutions and services
- Establishing financial projections and planning to achieve annual revenue and profitability as well as operational goals, such as bookings and revenue, utilization, customer satisfaction, and securing key partnerships
- Collaborating with internal partners to develop and deliver Digital Health's sales and marketing strategy, including pitch decks, RFPs, website content, and additional client-facing materials, as well as recruiting prospective Nordic employees
- Establishing quality control of service delivery while maintaining Nordic's reputation of quality and value while serving as an escalation point to assist in rapid resolution of any client, team member, or operational challenge
- Acting as an industry expert, staying current on healthcare-related topics, including product innovations and competitor research, and seeking professional development by attending seminars, trade shows, and other pertinent events to help grow the business
- Working to continually optimize processes and workflows to improve client and consultant experiences, generate efficiencies, and achieve cost savings
- Working on business operations projects that may be assigned on an ad hoc basis and may assist other corporate initiatives as necessary

### **Leadership and Teamwork**

- Demonstrating Nordic's maxims with enthusiasm, optimism, and courage
- Fostering a team-oriented culture rooted in respect, high ethics and integrity, camaraderie, collaboration, and effective communication

- Building strong cross-functional teams to achieve success in shared goals, understanding that multiple perspectives and talents build stronger teams and results
- Collaborating with other members of the leadership team to ensure all Nordic departments and functions work together to ensure we effectively serve our client and consultant needs
- Directly managing, mentoring, and developing a team of direct reports focused on attracting, placing, and growing the assigned practice team members, with an emphasis on creating a team and culture that is empowered to execute

### **Skills and Experience**

- Must demonstrate and embody Nordic's Maxims
- Bachelor's degree, or equivalent experience, required
- Prior experience with technologies in data warehousing, application development, or emerging technologies (such as: artificial intelligence and RPA)
- Deep experience implementing data warehousing solutions using platforms such as Amazon Redshift, Snowflake, Azure Synapse, Google Cloud Platform OR driving large -scale cloud migrations from on-premise to cloud is required
- Building high value solutions using robotic process automation technologies or artificial intelligence tools is highly desired
- 10+ years' experience with healthcare systems as a vendor, consultant, or direct health system employee
- 5+ years' experience as a senior leader of a division or department, including responsibility for financial performance and experience leading service-oriented teams within a healthcare, consulting, or healthcare IT vendor organization
- In-depth knowledge of EHR services, associated technologies, and workflows
- Proven experience developing and executing go-to-market strategies
- Passionate about leveraging emerging technology to solve hard healthcare problems
- Exhibits strength in managing and relating to people, including the ability to deliver feedback and inspire and motivate others to succeed
- Exhibits strong business acumen, including an understanding of financial metrics and how to lead a professional services team in alignment with organizational goals
- Strong attention to detail and ability to manage multiple priorities while meeting customer service and employee commitments as well as project timelines
- Proven ability to communicate, influence, and work effectively with all levels of an organization, as well as with diverse candidates, consultants, and client bases
- Ability to adapt quickly to changes in the work environment and to alter approach or method to successfully lead change
- Reacts well under pressure
- Proficient with Microsoft Office products, CRM technologies, and other collaboration tools, including virtual meeting technologies
- Excellent written and verbal communication skills
- Must be able to work independently as well as within a team environment

The Vice President (VP) of Data Science's role for DMG is to provide detailed support in all phases of the analytic lifecycle supporting the organization. The responsibilities include but not limited to finding and establishing data and reporting best practices while spearheading projects and working with the Executive Team in establishing a long-term vision for the organization, while building out a

road map of data science development and applications. This position reports directly to our Chief Executive Officer and is expected to have a high impact on the organization.

### **Duties and Responsibilities**

- Identify, scope, and scale new commercial opportunities, build commercial products and partnerships, and deliver customer insight
- Ownership of complex data reporting processes, frequency, and usefulness to company
- Maximizing the use of data to make the company more efficient, productive and drive cost savings
- Create innovation through applied mathematics
- Designs, develops and programs the methods, processes, and systems to consolidate and analyze unstructured, diverse "big data" sources to generate actionable insights and solutions
- Prepares thematic maps, reports, charts, tables, and other analytic visualization to support business needs
- Proactively develops quarterly plan of analytic deliverables tied to brand and company objectives
- Ensure data effectiveness including financial impact and accuracy
- Takes periodic review and audit of reports as to the usefulness of the reports, their outcomes and decrease reports that are ineffective
- Keeps up to date with technical as well as industry developments, analytics software/tools, trends, and recognized best practices for data intelligence
- Leading, coaching, and managing analysts across multiple analytic teams and projects
- Analytic thought and team leadership focused on building analytic community, enhancing solutions and methodologies, and driving value back to the business
- Developing a plan to meet critical organization initiatives
- Ability to create and implement initiatives across the company to all levels of employees
- Determine how to leverage data science, machine learning, and other analytical techniques to offer actionable insights both internally & externally
- Implement data best practices and play a critical role in building the data-informed culture throughout the Company
- Be a thought leader and evangelist to drive adoption and knowledge at all levels of the organization
- Participate heavily with the executive team, help set business strategy, represent product data science, initiate and debate key strategic topics and opportunities from your team's work, and drive bold high-impact decisions
- Collaborate with cross-functional partners in product, engineering, operations, finance, and marketing to define and build data-informed business strategy and roadmaps
- Partner with data engineering team, technology architects and software developers to empower our lines of businesses with business intelligence
- Integrate data collection, data quality, and model output into production; apply data mining techniques to uncover actionable business insights
- Ensure and improve data integrity, data accuracy, and data quality

### **Qualifications**

- Experience in Data Science and Analytics working in a fast-paced environment
- Must be highly analytical
- Prior experience working with code or a background in computer science, engineering, or applied analytics

- Experienced with statistical process control, process monitoring and diagnostics.
- Experience in Modeling and Machine Learning: Experienced with advanced mathematical modeling techniques including both supervised and unsupervised learning algorithms
- Experience in a complex, cross-functional organization where your teams need to collaborate and integrate with other teams across many disciplines
- Passionate to innovate solutions, delight users, and inspire colleagues
- Strong strategic business acumen, change management, and continuous improvement champion
- Extensive experience with data exploration, data cleaning, implementation of advanced statistical and machine learning algorithms, as well as rigorous model validation and evaluation

Evisort is on a mission to change how companies interact with their most important legal documents, their incoming and outgoing contracts. The company was founded in 2016 out of Harvard Law and MIT research to develop artificial intelligence (AI) algorithms to help companies rapidly and accurately mine contracts for data. Evisort's AI understands meaning and context in legal language, virtually eliminating the need to screen contracts. Evisort helps companies, such as Netflix and Disney, to organize, understand, and extract data from their contracts. With Evisort, information locked away in documents becomes searchable, and key contract terms and important dates can be surfaced to the right people at the right time to accelerate legal review, reduce costs/risks and improve business compliance.

We are backed by some of the most prominent VC's with Microsoft being a leading investor in our last round of financing. Come join us and see what all the fuss is about.

### **Head of SRE/Devops**

As the Head of the Site Reliability and Devops team you will be responsible for the production infrastructure of our SAAS platform. You will apply engineering leadership and deep knowledge of infrastructure and software development to lead the operation and expansion of our platform's products as we continue down our path of accelerated growth.

### **What You'll Do**

- Manage, innovate, and create processes, software and tooling that continuously improve the availability, scalability, latency, and efficiency of Evisort's platform.
- Manage on-call rotations of engineers.
- Work cross-functionally to build fast, reliable, and resilient production systems.
- Recruit, grow, manage and inspire a collaborative, efficient and happy team.

### **Background Requirements**

- Bachelor's degree in Computer Science or equivalent experience.
- Experience in Unix/Linux systems, IP networking, performance, and application issues.
- Experience growing and building highly effective teams.
- 5 years of experience managing teams of software engineers.
- Experience in system design, algorithms, data structures, complexity analysis, and software design
- Experience working in software product development.
- Experience working with stakeholders and collaborating across organizational boundaries.

- Ability to perform technical deep-dives into code, networking, systems and storage configuration
- Ability to conduct discussions with executive team.
- Excellent communication skills.

Are you interested in working on state-of-the-art problems in inventory placement, marketplace optimization, network design and fulfillment? The Inventory Planning and Control (IPC) Science team is responsible for the optimization of Amazon's current supply chain, designing systems for predictive modeling of inventory and in designing future supply-chain networks. We are looking for motivated scientists with strong leadership skills who desire to work at the intersection of machine learning, operations research, engineering development, and advanced large-inventory systems. Applications include adaptive systems for buying and pricing, seller economic modeling, real-time supply-chain optimization, robotics and control and dynamic resource management systems design. The ideal candidate is a motivated individual with strong skills in both robust, stochastic and combinatorial optimization with application to networks and/or with strong machine learning background including robotics and marketplace dynamical systems modeling. The qualified candidate will hold an advanced quantitative degree in the mathematical sciences, is comfortable with research methodologies and can tackle abstract business and engineering problems and deliver solutions at Amazon's breakneck pace.

### **Responsibilities**

- Work alongside engineering and planning to enable large-scale system optimization and predictive modeling.
- Embed with engineering and partners closely with operations, business, and IT groups. Provide analysis using mathematical modeling tools to benchmark existing operations/processes as well as to identify opportunities for improvement in the production environment
- Communicate with senior management and cross-functional teams
- Be accountable for the quality of system design for business applications. Delivers production systems for planning that are fast, robust and stable
- Build and validate prototypes to demonstrate the benefits from proposed changes to the decision systems and operational processes.

### **Basic Qualifications**

#### **BASIC QUALIFICATIONS**

- PhD in Operations Research, Statistics, Applied Mathematics, Engineering, Computer Science or related field
- 7+ years of experience designing predictive modeling and/or optimization solutions for very-large scale applications
- Project management experience working with tech and other cross-functional teams
- Knowledge of tools for large-scale data systems and the ability to manipulate data (e.g. SQL, Python, Perl, or Ruby).
- The ability to communicating technically, at a level appropriate for the audience.
- Experience designing and implementing large-scale modeling solutions and experience with leveraging such models to provide guidance for strategic and tactical business decision making.

- Excellent written and verbal communication skills with both technical and business people.
- Strong problem solving ability and dealing with ambiguity.

### **Preferred Qualifications**

#### **PREFERRED QUALIFICATIONS**

- Experience prototyping and developing software in traditional programming languages (C++/Java/Python/Perl)
- Experience implementing models and analysis tools through the use of high-level modeling languages (e.g. R, Julia, Matlab as examples)
- Understanding of technical project management techniques (e.g. Agile, scrum, Kanban etc.) for effective communications with technical partners

every new chip and advanced display in the world. Our expertise in modifying materials at atomic levels and on an industrial scale enables customers to transform possibilities into reality. Our innovations make possible™ the technology shaping the future. To achieve this, we employ some of the best, brightest, and most talented people in the world who work together as part of a winning team.

Interested in accelerating the AI and Big Data inflection across industries? Are you customer-obsessed, experienced, entrepreneurial, and looking for your next challenge?

The *Applied Materials' AI and Big Data team* is actively recruiting for a highly motivated, energetic, and accomplished Director, Hardware Architect to lead and drive SoC technical designs and roadmaps. The ideal candidate oversees and analyzes key SoC architectural and implementation trade-offs such as power, performance, area, cost, and TTM while considering technological innovations.

This role requires strong communication, in addition to being comfortable with working through ambiguities. You will have the opportunity to mentor other engineers for the best standards, methodologies, and practices in systems development.

### **Key Responsibilities**

- Translate requirements into SoC technical specifications and detail micro-architecture
- Review, influence and challenge SoC partition decisions with innovations in fundamental technologies
- Perform SoC feasibility analysis and make recommendations to senior management regarding SoC architecture options enabled by technology innovations
- Develop and document SoC architecture specifications that serve as the reference for engineering and execution
- Create SoC specifications, block diagrams, hardware partition and data flows
- Define, simulate, and model SoC performance vs. power (performance per watt)
- Specify, and document SoC power management techniques and user-level behaviors
- Partner closely with System Architects and join hands-on developing test-plan, prototype bring-up and debugging efforts

- Serve as the technical lead throughout the full development lifecycle, end-to-end; from scoping, planning, conception, design, implementation, and testing; to documentation, delivery and maintenance of SoC Solutions
- Drive SoC technology roadmaps in areas of expertise to drive innovation and meet the needs of the long-term product roadmap
- Mentor engineers for the best standards, methodologies, and practices in system development

### **Key Requirements**

- BS/MS/PhD in electrical engineering or computer engineering
- 10+ years of experience in an SoC hardware architecture role
- Experienced self-starter architecting or implementing micro-architecture for advanced SoC
- Experience working as a Technical Lead in one or more areas of SoC Applications: Mobile, Battery operated consumer, AI or Data Center
- Background in advanced silicon technology enabling SoC innovations
- Strong communication skills & ability to clearly document technical solutions & architectures

We have an exciting opportunity for the role of Python Developer (Data Science). Please check the job description as below and let me know your interest. In case you are not looking for any change, I'd appreciate if you could refer to any friends/ colleagues who might be interested in it. Thanks.

**Job Title** – Python Developer (Data Science)

Job Location - Reston, VA. (Locals only)

Duration: 4+ Months

### **Job Description -**

Python Developer (NLP/Data Science)

**Team:** Item Cloud (this is the innovation team that works on new innovative products.

**Project:** developing algorithms/data sets to support reading assessment development; any similar experience would be helpful - data for linguistics, etc.

### **Skill Matrix:**

- AWS
- Bachelors Degree
- English syntax and semantics
- Linux/Unix command line, Git version control, and regular expressions
- NLP/Data Science background
- NLP solutions using both rule-based and machine learning methods
- AWS machine learning tools such as SageMaker
- deploying algorithms to the AWS cloud
- Linguistics
- transformer/encoder architectures

### **Key responsibilities:**

- Implement innovative algorithms to solve challenging problems in the Natural Language Processing space
- Curate high-quality datasets

- Perform analyses, interpret results, and distill key findings to stakeholders

**What we're looking for:**

- Creative problem solver with a NLP/Data Science background who is willing and able to learn the ins and outs of a new problem space and contribute to both the planning and execution of innovative technical solutions
- Strong understanding of English syntax and semantics, with Linguistics coursework a plus
- 1-3 years of hands-on experience developing and evaluating NLP solutions using both rule-based and machine learning methods
- Strong documentation practices and communication skills
- Excellent Python skills
- Experience using NLTK, spaCy, or Stanford NLP
- Experience working in the AWS cloud
- Proficient with Linux/Unix command line, Git version control, and regular expressions
- Familiarity with multiple machine learning techniques with hands-on experience using scikit-learn, Keras, TensorFlow, or PyTorch
- Bachelor of Science Degree or higher in computer science, statistics, or other related STEM discipline

**Preferred:**

- Familiarity with AWS machine learning tools such as SageMaker
- Experience deploying algorithms to the AWS cloud
- Working understanding of deep learning, especially transformer/encoder architectures

Want to help the largest global enterprises derive business value through the adoption of Artificial Intelligence (AI) and Machine Learning (ML)? Excited by using massive amounts of disparate data to develop ML models? Eager to learn to apply ML to a diverse array of enterprise use cases? Thrilled to be a part of Amazon who has been pioneering and shaping the world's AI/ML technology for decades?

At Amazon Web Services (AWS), we are helping large enterprises build ML models on the AWS Cloud. We are applying predictive technology to large volumes of data and against a wide spectrum of problems. AWS Professional Services works together with AWS customers to address their business needs using AI solutions.

AWS Professional Services is a unique consulting team. We pride ourselves on being customer obsessed and highly focused on the AI enablement of our customers. If you have experience with AI, including building ML models, we'd like to have you join our team. You will get to work with an innovative company, with great teammates, and have a lot of fun helping our customers. A successful candidate will be a person who enjoys diving deep into data, doing analysis, discovering root causes, and designing long-term solutions.

This is a customer-facing role and you will be required to travel to client locations and deliver professional services as needed.

**Major Responsibilities Include**

- Assist customers by being able to deliver a ML project from beginning to end, including understanding the business need, aggregating data, exploring data, building & validating

predictive models, and deploying completed models with concept-drift monitoring and retraining to deliver business impact to the organization

- Use AWS AI services (e.g., Personalize), ML platforms (SageMaker), and frameworks (e.g., MXNet, TensorFlow, PyTorch, SparkML, scikit-learn) to help our customers build ML models
- Research and implement novel ML approaches, including hardware optimizations on platforms such as AWS Inferentia
- Work with our other Professional Services consultants (Big Data, IoT, HPC) to analyze, extract, normalize, and label relevant data, and with our Professional Services engineers to operationalize customers' models after they are prototyped

### **Basic Qualifications**

- Bachelor's degree in a highly quantitative field (Computer Science, Machine Learning, Operational Research, Statistics, Mathematics, etc.) or equivalent professional or military experience
- Experience with ML fields, e.g., natural language processing, computer vision, statistical learning theory
- 6+ years of industry experience in predictive modeling, data science, and analysis
- Experience in an ML engineer or data scientist role building ML models
- Experience writing code in Python, R, Scala, Java, C++ with documentation for reproducibility
- Experience handling terabyte size datasets, diving into data to discover hidden patterns, using data visualization tools, writing SQL, and working with GPUs to develop models
- Experience writing and speaking about technical concepts to business, technical, and lay audiences and giving data-driven presentations

### **Preferred Qualifications**

- Master's degree or PhD in a highly quantitative field (Computer Science, Machine Learning, Operational Research, Statistics, Mathematics, etc.)
- Ability to develop strategic, baselined, data modeling processes; ability to accurately determine cause-and-effect relationships.
- Publications or presentations in recognized ML journals or conferences
- Deep technical skills, consulting experience, and business savvy to interface with all levels and disciplines within our customers' organization
- Demonstrable track record of dealing well with ambiguity, prioritizing needs, and delivering results in a dynamic environment

As one of the key pillars of the famous Amazon Flywheel, Selection is key to Amazon's topline growth. The Selection team within Amazon's SCOT (Supply Chain Optimization Technology) organization is responsible for driving thought leadership and innovation to optimize Amazon's selection and serving our customers by enabling them to find the items they need. We own systems that decide what selection Amazon should offer to its customers, leveraging cutting edge solutions that are at the cross section of core engineering, machine learning, operations research and econometrics.

This highly visible role requires a leader with a strong technical background with experience building scalable software systems. You will lead a team of strong software engineers and collaborate with multiple principle engineers to develop a software framework impacting 40+ systems in SCOT across

Buying, Placement and Forecasting. You will own highly scalable services that process billions of requests per week under tight SLAs. You will collaborate with other software development teams to define the interfaces between SCOT systems to solve highly impactful business problems in Amazon supply chain.

Responsibilities include

- Developing and driving software solutions across SCOT systems
- Prioritization and planning of projects and features
- Monitoring, validation, and operation of production services
- Career management and development of reports
- Product management and operations

### **Basic Qualifications**

- Bachelor's Degree in Business, Science, Technology, Engineering or Technology fields
- 6+ years experience in software development
- 2+ years managing software teams experience
- Excellent written and oral communication skills, as well as ability to think clearly, analyze quantitatively, problem-solve, support scope of requirements and prioritize
- Sound business judgment, proven ability to influence others, and strong analytical thinking skills
- Proven track record of delivering projects within scope, time, budget and quality

### **Preferred Qualifications**

- MBA or Master's degree in Engineering, Management, or Technology
- Experience in building software framework handling complex business use cases.
- Experience in supply chain, operations, or logistics.
- Strong bias for action and be able to work iteratively
- Experience in driving technical products or services with cross-functional teams

Want to disrupt an industry by delighting customers? Looking for a job where your work can have direct and massive impact? Excited to join one of the newest and most exciting AWS services? Come be a leader on a team that is building a product that will touch millions of people daily.

Amazon Connect is a highly disruptive cloud-based contact center that enables businesses to deliver engaging, dynamic, and personal customer service experiences. Amazon Connect is the result of the ten years of development that went into building the tools Amazon uses to provide its award winning customer service at massive scale and launching it as a publicly available AWS service. With Amazon Connect, you can create your own cloud-based contact center and be taking calls in minutes. Amazon Connect leverages the power of Artificial Intelligence and the large ecosystem of AWS services such as Amazon Lex, Amazon Polly, AWS Lambda, Amazon S3 and Amazon Kinesis to provide a truly frustration free, easy-to-use, extensible, and natural customer experience. With this technology, we are transforming an industry and the way customers interact with businesses and how agents service them.

We have a rapidly growing customer base and an exciting charter in front of us that includes solving highly complex engineering and algorithmic problems. We are looking for passionate, talented, and experienced Software Engineers to join us to innovate on this new service that addresses customer needs to build modern contact centers in the cloud. The position represents a rare opportunity to be a part of a fast-growing business soon after launch, and help shape the technology and product as we grow. You will be playing a crucial role in developing the next generation contact center, and get the opportunity to design and deliver scale-able, resilient systems while maintaining a constant customer focus.

Industry analysts have said, "Amazon Connect is quietly positioned to massively disrupt by enabling companies to focus on customer service, not service centers." and "Amazon is totally disrupting the customer contact center space as they have many other market-spaces with customer-centric solutions with open platform integration with assistance from the partner community."

As a software developer on our team, you'll own code end-to-end from design to development, and work closely with senior technical leaders within the team and across AWS. You'll have a sound understanding of computer science fundamentals and practical industry experience, working across the stack with technology involving modern web, SOA, NoSQL databases, AI, ML, Big Data and more.

Are you interested in working on state-of-the-art problems in inventory placement, marketplace optimization, network design and fulfillment?

The Inventory Planning and Control (IPC) Science team is responsible for the optimization of Amazon's current supply chain, designing systems for predictive modeling of inventory and in designing future supply-chain networks.

We are looking for motivated scientists with strong leadership skills who desire to work at the intersection of machine learning, operations research, engineering development, and advanced large-inventory systems. Applications include adaptive systems for buying and pricing, seller economic modeling, real-time supply-chain optimization, robotics and control and dynamic resource management systems design.

The ideal candidate is a motivated individual with strong skills in building robust, stochastic modeling systems for applications suited to their strong machine learning background including classification, synthetic controls, and robotics and marketplace dynamical systems.

As a Senior Applied Scientist you will solve complex problems and design the next generation of algorithms to drive the optimization of Amazon's Supply Chain. You will continue to contribute to the research community, by working with scientists across Amazon, as well as collaborating with academic researchers and publishing papers ([www.aboutamazon.com/research](http://www.aboutamazon.com/research)).

### **What You'll Do**

- Designing and implementing new features and machine learned models, including the application of state-of-art models in support of buying, pricing and inventory placement and selection.
- Conducting and coordinating process development leading to improved and streamlined processes for model development.
- Working closely with Product Managers to expand depth of our product insights with data, create a variety of experiments, and determine the highest-impact projects to include in planning roadmaps
- Providing technical and scientific guidance to your team members
- Communicating effectively with senior management as well as with colleagues from science, engineering, and business backgrounds
- Build and validate prototypes to demonstrate the benefits from proposed changes to the decision systems and operations.

To help describe some of our challenges, we created a short video about Supply Chain Optimization at Amazon - <http://bit.ly/amazon-scot>

Amazon is an Equal Opportunity-Affirmative Action Employer – Minority / Female / Disability / Veteran / Gender Identity / Sexual Orientation / Age

### **Basic Qualifications**

- PhD in Computer Science, Operations Research, Statistics, Applied Mathematics, Engineering or related field
- 4+ years of experience designing predictive modeling and/or optimization solutions for very-large scale applications
- Knowledge of tools for large-scale data systems and the ability to manipulate data (e.g. SQL, Python, Perl, or Ruby).
- The ability to communicating technically, at a level appropriate for the audience.
- Experience designing and implementing large-scale modeling solutions and experience with leveraging such models to provide guidance for strategic and tactical business decision making.
- Excellent written and verbal communication skills with both technical and business people.
- Strong problem solving ability and dealing with ambiguity.

### **Preferred Qualifications**

- 7+ year hands-on experience applying theoretical models in an applied environment
- Experience prototyping and developing software in traditional programming languages (C++/ Java/ Python/Perl)
- Experience implementing models and analysis tools through the use of high-level modeling languages (e.g. R, Julia, Matlab as examples)
- Understanding of technical project management techniques (e.g. Agile, scrum, Kanban etc.) for effective communications with technical partners

Are you passionate about Artificial Intelligence, Machine Learning and Deep Learning? Are you eager to build out the platform as a service and scale the product for all Customer personnas? Thrilled to be part of Amazon's AI organization that has been pioneering and shaping the world's AI technology? If you are someone who enjoys innovating, solving hard problems and working on the

cutting edge of technology, come join ADS (Alexa Data Services) team! The ADS organization focuses on providing ground truth data to Alexa engineers and scientists to build and improve ML models and continue evolve Alexa experience for Amazon customers.

As a Product Manager (technology) External Services, you will help craft and execute strategies to drive our customers' adoption and use of Amazon Data Services (ADS) products. You will provide advocacy and strategic technical guidance to help plan and build solutions using best practices, and proactively upkeep your customers' ADS services operationally healthy. The close relationships developed with your customers will allow you to understand their business/operational needs and technical challenges, and help them achieve the greatest value from ADS. Your technical acumen and customer-facing skills will enable you to effectively represent ADS within a customer's environment, and drive discussions with senior leadership regarding service adoption, incidents, trade-offs, support and risk management. This is not a sales role, but rather an opportunity to be the principal technical advisor and 'voice of the customer' to ADS leadership.

### **You Would Be Responsible For**

- Defining high-quality roadmap based on team strategy and vision
- Developing detailed and crisp business requirements for product specifications and service architecture
- Managing prioritization and trade-offs between customer experience, performance and operational support
- Working closely with engineering teams, design, and program management in an agile environment to deliver products to market
- Driving product launches, including working with public relations team, executives, finance, marketing, and legal stakeholders for your product
- Proactively identifying and resolving issues that may impair the team's ability to meet strategic, financial, and technical goals
- Interfacing and partnering with all levels of ADS, AWS and Amazon business leadership

We are looking for a candidate that is obsessed with delivering the most customer-centric experience on the planet, showing proven success in ownership, bias for action, and thinking big. This leader will need to exhibit excellent judgment, prioritizing between existing versus new customers and between features, architectural improvements, and operational excellence. We are looking for strong business owners who are comfortable sharing their vision with ADS senior leadership, but also working closely with engineering teams to dive deep into details to make ideas into reality.

### **You're a Good Fit If**

- You can think big, are able to break down the big picture, and deliver on goals that will get us there.
- You have an instinctive understanding of a good product, and can raise the bar on customer-focused thinking among team members with reasoned analysis.
- You can dive into technical details and ask engineers insightful questions about the services and dependencies you influence.

- You can think long-term, can balance conflicting interests, and converge on outcomes that earn trust and customer loyalty.

We need a passionate product management leader who dives deep and has shown demonstrated success in building strong business cases, managing high-growth, successful product launches, and driving customer success.

### **Basic Qualifications**

- BS or BA degree
- 5+ years of experience in product management.
- Strong technical acumen. Can dissect complicated technical problems, simplify experiences and innovate on behalf of our customers
- Both technically deep and business savvy to interface with and lead teams of all levels and disciplines within an organization, from engineers to senior leadership
- Experience collecting, analyzing, and summarizing data from disparate sources in order to drive conclusions and recommendations
- Have an entrepreneurial spirit and be able to work independently and effectively in a results-oriented, efficient environment
- Strong track record of delivering products and ensuring customer success
- Excellent written communication skills

### **Preferred Qualifications**

- Bachelor's degree in Computer Science (related field) or equivalent work experience
- Experience with the AI ecosystem and other related big data technologies
- 5+ years of product management experience in the cloud computing technology space
- Proficient in SQL
- Strong finance related skills relating to P&L management and pricing
- MBA or equivalent masters degree
- Understanding of the big data and cloud computing space

Alexa AI, the speech processing and personal assistant technology behind Amazon Echo, is seeking a Business Intelligence Engineer for our Alexa Machine Learning Data Platform organization, based out of Amazon's state-of-the-art Kendall Square/Cambridge, Massachusetts Development Center. If you are passionate about Big Data and Machine Learning in unparalleled scale, come join us!

At Amazon, we've been investing deeply in artificial intelligence for over 20 years, and many of the capabilities customers experience are driven by machine learning. Amazon.com's recommendations engine is driven by machine learning (ML), as are the paths that optimize robotic picking routes in our fulfillment centers. Our supply chain, forecasting, and capacity planning are also informed by ML algorithms. Alexa is fueled by Natural Language Understanding and Automated Speech Recognition deep learning; as is our drone initiative, Prime Air, and the computer vision technology in our new retail experience, Amazon Go. We have thousands of engineers at Amazon committed to machine learning and deep learning, and it's a big part of our heritage.

Within the Alexa Secure AI Foundations (SAIF) Data Platform organization, we're focused on ingesting, engineering, transforming and curating enormous amount of customer data, to enable

data scientists build ML solutions that push the boundary of Conversation AI and make Alexa even more intelligent and helpful in all aspects of life.

To be successful in this role, you will need to be a proven engineer, diligent task manager, communicator, and problem solver. You will work on large, complex initiatives, deal with ambiguity and advocate on behalf of the customers. Great candidates have the ability to use data, analytics, and engineering to drive changes themselves by acting on the outcomes. Come, be a part of the team that supports the end-to-end Alexa ML platform. We are pioneers that scale ML for thousands of scientists.

### **Responsibilities May Include**

- Engineering critical input and output metrics across the full operations spectrum
- Creating process performance metrics to measure operational performance, identify root causes and trends, and prescribe action plans for delivery stations around the globe
- Managing metrics across multiple projects simultaneously
- Working with technology and analytics teams to support the development of tools and dashboards
- Communicating with and supporting various internal stakeholders and external audiences

### **Basic Qualifications**

- 5+ years of experience as an analyst or engineer in the data/BI space
- Experience working directly with business stakeholders to translate between data and business needs
- Experience with data visualization using Tableau, Quicksight, or similar tools
- Experience with SQL

### **Preferred Qualifications**

#### **PREFERRED QUALIFICATIONS**

- Master's degree in Computer Science, Engineering, Information Systems, Statistics, Finance or related field
- Advanced ability to draw insights from data and clearly communicate them to the stakeholders and senior management as required.
- Expert in data analytics using Python libraries such as pandas, matplotlib, scikit-learn and Jupyter Notebook.
- Expert in writing and tuning SQL scripts
- Experience working in very large data warehouse environments
- Experience working in Spark (PySpark or Scala).
- Experience working in ETL concept and practices.
- Experience in a data engineer or BIE role with a technology company
- Experience conducting large scale data analysis to support business decision making
- Strong verbal/written communication and data presentation skills, including an ability to effectively communicate with both business and technical teams

- Advanced knowledge of BI tool such as Tableau, AWS QuickSight etc.

Safety and compliance Team within Amazon Fulfillment Technologies (AFT) – Safety team powers the physical engine at the heart of Amazon. AFT builds and operates the software, hardware, and processes that run the global network of fulfillment centers, which move billions of units of inventory while keeping our promise to customers for deliveries. We are constantly innovating in the ways we can automate and accelerate the delivery of products and packages using state of the art software and hardware technologies.

With the scale and growth of Amazon, the Safety and Compliance team is beginning to do extraordinary work to protect our customers, business partners, transportation systems and environment. Our research and technology teams are able to keep illegal, dangerous and recalled products out of the reach of customers. We are working towards reducing the carbon footprint and being socially responsible at a global level. We use Large Scale Distributed Processing, OO technologies, Big Data, IoT, Machine Learning, Natural Language Processing and Risk Modeling to solve the some of the most complex problems to protect and delight our customers.

Our team is looking for top-notch software developers who love listening to our customers, working as a team, and proactively taking the lead whenever necessary. Our mission is to innovate and build scalable and robust software solutions that deliver a great customer experience. These software solutions will directly impact Amazon's customers from product selection and order placement, to delivering products to our customers as quickly and cost effectively as possible.

What you'll do?

- Participate in the design, implementation, and deployment of successful internet-scale systems and services in support of our fulfillment operations and the businesses they support.
- Participate in the definition of secure, scalable, and low-latency services and efficient physical processes.
- Work with cross-functional teams delivering on demanding projects.
- Functionally decompose complex problems into simple, straight-forward solutions.
- Understand system interdependencies and limitations.
- Share knowledge in performance, scalability, enterprise system architecture, and engineering best practices.

### **Basic Qualifications**

- 2+ years of professional experience in software development
- Bachelor's or Master's Degree in Computer Science or related field
- Computer Science fundamentals in object-oriented design, algorithm design, problem solving, and complexity analysis
- Solid experience in OO programming languages such as C++, Java or C#
- Solid UNIX or Linux experience
- Experience with scaling and performance of large systems
- Outstanding interpersonal and communication skills
- Obsession with quality and customer experience - attention to detail coupled with ability to think abstractly

## **Preferred Qualifications**

- Experience taking a leading role in building complex software systems that have been successfully delivered to customers.
- Knowledge of professional software engineering best practices for the full software development life cycle, including coding standards, code reviews, source control management, build processes, testing, and operations.
- Background in distributed computing, service-oriented architectures and enterprise-wide systems.
- Experience in communicating with users, other technical teams, and senior management to collect requirements, describe software product features, technical designs, and product strategy.
- Experience mentoring junior software engineers to improve their skills, and make them more effective, product software engineers.
- Experience influencing software engineering best practices within your team.
- Full stack experience ranging from front-end user interfaces through to back-end systems and all points in between.
- Experience working with machine learning and artificial intelligence
- Knowledge of Python or Go

Amazon Personalize is a deep learning AWS Service that makes it easy for developers to create individualized recommendations for customers. We're building a large-scale machine learning platform and are looking for engineers with a background in Machine Learning.

If you're passionate about scaling machine learning models, pushing the boundaries on training times for deep learning models via sampling, distributed training etc and have prior experience in this space, let's talk.

You'll have strong ownership to deliver state of the art solutions and deliver measurable results. You'll be working on leading edge technology, built on AWS. You'll collaborate with product managers, scientists and other engineers to deliver production ready solutions that have a broad business impact.

## **Basic Qualifications**

- 2+ years of non-internship professional software development experience
- Programming experience with at least one modern language such as Java, C++, or C# including object-oriented design
- 1+ years of experience contributing to the architecture and design (architecture, design patterns, reliability and scaling) of new and current systems.

## **Preferred Qualifications**

- Experience with concurrent programming, and JVM based languages like Java, Scala
- Experience in scaling machine learning algorithms, and hyper-parameter optimization strategies
- MS or PhD in Math, Computer Science, Computer Engineering or equivalent subject expertise in AI and Deep Learning.

Machine Learning is evolving the way we are building new marketing products, programs and services and smartly marketing campaigns to increase customer engagement. The Consumer Behavior Analytics (CBA) organization is strategically and uniquely organized with SDEs, DEs, Product managers, Data/Applied Scientists and Economists to solve challenging predictive analytics problems at Amazon scale by providing data driven actionable insights.

Are you passionate about using Big Data & Machine Learning to build Optimization modelling?

If yes, we are setting up a new team in Seattle. We looking to hire Software Development Engineers to architect and build big-data system to help Amazon build a global marketing measurement platform based on Machine Learning techniques to measure & optimize Amazon's multi-billion dollar advertising spend.

Come and join as a founding member of this new product team.

### **Key Responsibilities**

- Participate in the full development life cycle, working within broadly defined parameters
- Independently own the delivery of an entire piece of a system or application on midsize to large complex projects
- Management and execution against project plans and delivery commitments
- Work closely with senior/principal engineers and senior/principal data engineers to develop the best technical design and approach for new a product/feature development.
- Builds software solutions where the problem may sometimes not be well defined. Designs and defines the interaction between the other component pieces
- Create and execute appropriate quality plans, project plans, test strategies and processes for development activities in concert with business and project management efforts.

Amazon.com is an Equal Opportunity-Affirmative Action Employer – Minority / Female / Disability / Veteran / Gender Identity / Sexual Orientation.

### **Basic Qualifications**

- Bachelor's degree or equivalent professional experience
- 5+ years of broad engineering experience including infrastructure and application development in Java, Python and or C/C++
- Proven track record of leading the delivery of large-scale, high-quality big data systems
- Experience with Agile Management, OO Modeling, UNIX, and database related projects
- Exposure to Big Data Ecosystem and hands-on knowledge of MapReduce (Hadoop, Spark, Pig) technology

### **Preferred Qualifications**

- Experience taking a lead role in architecting, designing, and building complex software systems.
- Experience with Data Lakes and/or Large analytic Systems
- Experience working on automated marketing technologies

- Familiarity with various AWS technologies (S3, DynamoDb, Kinesis, EMR, Cloudformation, Sagemaker, SNS/SQS) and related architecture pattern

Calling the adventurers ready to join a company that's pushing the limits of nanotechnology to keep the digital revolution rolling. At KLA, we're making technology advancements that are bigger—and tinier—than the world has ever seen.

Who are we? We research, develop, and manufacture the world's most advanced inspection and measurement equipment for the semiconductor and nanoelectronics industries. We enable the digital age by pushing the boundaries of technology, creating tools capable of finding defects smaller than a wavelength of visible light. We create smarter processes so that technology leaders can manufacture high-performance chips—the kind in that phone in your pocket, the tablet on your desk and nearly every electronic device you own—faster and better. We're passionate about creating solutions that drive progress and help people do what wouldn't be possible without us. The future is calling. Will you answer?

### **Group/Division**

KLA has always had a close relationship with physics and data. Our optical and electron beam inspection and measurement tools use cutting edge physics models, both for hardware design and as part of their algorithms. AI, including several traditional machine learning techniques and deep learning are routinely used to process this data to meet application requirements.

The AI & Modeling Center of Excellence, centered in KLA's R&D facility in Ann Arbor, MI, was setup with the mission of advancing KLA's traditional strengths in physics and data and providing implementation solutions for multiple KLA Inspection and Metrology products targeted at the semiconductor manufacturing industry.

As a part of this group, you will be part of a world class team of physicists, HPC system designers, machine learning and application engineers who build cutting edge solutions for modeling complex imaging techniques and semiconductor processes. You will also work with a data scientists and AI infrastructure engineers whose mission is to build and scale machine learning based solutions for our semiconductor customers.

We are looking for engineers in a few different fields. If you are passionate about Physics Modeling, High Performance Computing - HPC (including GPU), ML, Data, or Cloud technologies – this is the place for you!

### **Responsibilities**

- Research and innovate next-generation electromagnetic solvers and algorithms for semiconductor device and thin film metrology
- Develop numerical models and algorithms using Matlab
- Understand when the models and algorithms break down and develop testing procedures to validate assumptions in the models
- Work with Advanced Development and Applications teams to confirm the feasibility of the new algorithms

- Productize the new algorithms in C++/CUDA and integrate it into a C#-based software solution
- Document the theory and implementation of the new algorithms, and give presentations both internally and externally regarding the work
- Provide technical support during alpha and beta testing
- Maintain new and existing algorithms and software solutions throughout the life-cycle of our tools

## **Qualifications**

- Doctorate (Academic) in the physical sciences or engineering with at least 2 years of experience
- Strong background in numerical simulations, especially in computational electromagnetics
- Strong background in applied mathematics, especially in inverse problems, optimization algorithms, computational geometry, linear algebra, partial differential equations, and statistics
- Strong background in computer programming, especially in performance profiling, memory optimization, and parallel computing
- Proficient in machine learning algorithms, especially in the theoretical background of different ML models
- Proficient in C++, especially in writing production-quality, object-oriented code
- Experience in CUDA is a plus
- Experience in semiconductors (electrical properties, manufacturing, and metrology) is a plus
- Ability and willingness to travel worldwide to support projects at customer sites is a plus

Amazon is investing heavily in building a world class advertising business and we are responsible for defining and delivering a collection of self-service performance advertising products that drive discovery and sales. Our products are strategically important to our Retail and Marketplace businesses driving long term growth. We deliver billions of ad impressions and millions of clicks daily and are breaking fresh ground to create world-class products. We are highly motivated, collaborative and fun-loving with an entrepreneurial spirit and bias for action. With a broad mandate to experiment and innovate, we are growing at an unprecedented rate with a seemingly endless range of new opportunities.

Sponsored Products helps merchants, retail vendors, and brand owners succeed via native advertising that grows incremental sales of their products sold through Amazon. The Sponsored Products Ad Marketplace organization optimizes the systems and ad placements to match advertiser demand with publisher supply using a combination of machine learning, big data analytics, ultra-low latency high-volume engineering systems, and quantitative product focus. Our goals are to help buyers discover new products they love, be the most efficient way for advertisers to meet their business objectives, and to build a major, sustainable business that helps Amazon continuously innovate on behalf of all customers.

We are looking for Senior Applied Scientists who can help us take our products to the next level who has deep passion for building machine-learning solutions; ability to communicate data insights and scientific vision, and has a proven track record of execute complex projects.

As an Senior Applied Scientist in Machine Learning, you will:

- Conduct hands-on data analysis, build large-scale machine-learning models and pipelines
- Work closely with software engineers on detailed requirements, technical designs and implementation of end-to-end solutions in production
- Run regular A/B experiments, gather data, perform statistical analysis, and communicate the impact to senior management
- Establish scalable, efficient, automated processes for large-scale data analysis, machine-learning model development, model validation and serving
- Provide technical leadership, research new machine learning approaches to drive continued scientific innovation
- Be a member of the Amazon-wide Machine Learning Community, participating in internal and external MeetUps, Hackathons and Conferences
- Help attract and recruit technical talent

### **Basic Qualifications**

- PhD degree with 4 years of applied research experience or a Masters degree and 6+ years of experience of applied research experience
- 3+ years of experience of building machine learning models for business application
- Experience programming in Java, C++, Python or related language
- M.S. or Ph.D. in Computer Science, Information Retrieval, Machine Learning, Natural Language Processing, Statistics, Applied Mathematics, or related discipline.
- Breadth and depth in knowledge and applications of machine learning algorithms and best practices.
- At least 5 years of hands-on experience in building Machine Learning solutions to solve real-world problems.
- At least 3 years of experience with computer science fundamentals in object-oriented design, data structures, algorithm design, problem solving, and complexity analysis.
- At least 3 years of experience with, at least, one modern programming language such as Java, Python, Scala, C++

### **Preferred Qualifications**

- Ph.D. Degree in quantitative field with a strong Machine Learning background
- Experience in building large-scale machine-learning models for online recommendation, ads ranking, personalization, or search, etc.
- Experience with Big Data technologies such as AWS, Hadoop, Spark, Pig, Hive, Lucene/SOLR or Storm/Samza
- Strong proficiency with Java, Python, Scala or C++
- Experience in computational advertising technology is a big plus
- Published research work in academic conferences or industry circles
- Excellent oral and written communication skills, with the ability to communicate complex technical concepts and solutions to all levels of the organization

As Amazon's WWOps organization grows, workforce and capacity planning are increasingly essential to our talent decision making processes that focus on the most critical initiatives. As a Sr. Data Scientist, you will be leading the way in developing the most scientific process possible to solve these problems within the people analytics space.

In this role, you will closely partner with the WWOps HR, Operations, and Talent Acquisition leadership team. You will also work closely with cross-functional teams and leaders (most frequently with Finance, Recruiting, Talent Management) to understand business goals and priorities, in order to effectively and accurately strategize, plan, and execute initiatives as it relates to forecasting. Excellent interpersonal & communication skills, the ability to influence at an executive level, and the ability to tell customized end-to-end headcount progress-to-goal and movement story will be critical for success.

This Data Scientist role will design quantitative systems and forecasting models that generate multi-billion dollar predictions of the highest level of visibility and importance for Amazon's World Wide Operations Talent Acquisition. A successful candidate will be a problem solver who enjoys diving into data, is excited by difficult modeling challenges within unique spaces, and possesses strong communication skills to effectively interface between technical and non-technical teams. As a Data Scientist on this team, you will collaborate directly with business leaders to produce modeling solutions, you will partner with software developers and data engineers to build end-to-end data pipelines and production code, and you will have exposure to senior leadership as we communicate results and provide scientific guidance to the business.

The Team: How often have you had an opportunity to be a member of a team innovating and solving some of the world's toughest problems? You can expect all the challenges and benefits of a high growth business: lots of room for improvement and innovation, a close-knit team that cares about one another as humans, and a fast-paced environment. These will require a willingness to dive into the details, solve new problems as they arise, leverage high judgment and gut instinct, look around corners, and always obsess over customers. Everyone on the team wears multiple hats, and ownership our end-products is key.

### **Basic Qualifications**

- Bachelors/Masters/PhD degree in Machine Learning, Computer Science, Statistics, Applied Mathematics, Operations Research, or a related quantitative field and 4+ years of industry experience.
- 4+ years of relevant working experience in an analytical role involving data extraction, cleaning, manipulation ((e.g. SQL, Hadoop/Hive).
- 4+ years of experience with building, iterating and validating statistical models (e.g. R, Python).
- Experience with object-oriented programming languages.
- Expertise using SQL for acquiring and transforming data.
- Strong verbal and written communication, influencing and partnership skills.
- Ability to deal with ambiguity and convey rigorous mathematical concepts and considerations to non-experts.

### **Preferred Qualifications**

- Master Degree or PhD in Machine Learning, Computer Science, Statistics, Applied Mathematics, Operations Research, or a related quantitative field
- Experience working with data visualization tools and creating data visualization concepts (e.g. QuickSight, Tableau)

- Experience working with AWS RedShift or other distributed computing technologies
- Ability to develop experimental and analytic plans for data modeling processes, use of strong baselines, ability to accurately determine cause and effect relations
- Demonstrable track record of dealing well with ambiguity, prioritizing needs, and delivering results in a dynamic environment
- Excellent verbal and written communication skills with the ability to effectively advocate technical solutions to non-technical audiences
- 5+ years of experience with statistical analysis techniques including linear regression/least squares, experimental design, hypothesis design, confidence intervals, t-test etc

Our AI startup is a research company that is focused on hard problems that enterprises have. Today, most North American organizations haven't managed to deploy AI in production yet. The key reasons behind this include incomplete and noisy datasets, the exorbitant cost of finding, hiring and retaining esoteric talent required to put an AI/ML system in production, and the black box nature of neural-net based AI/ML models that sometimes result in predictions that can't be explained easily and may introduce bias. We are working on a number of research areas to address these issues. Our research will be packaged into easy-to-use pay-as-you-go cloud service(s) that will be accessible to all enterprises later this year. In the meantime, we are partnering with a few select organizations who want early access to our research, to apply it to the problems they currently have. You can always apply for an invitation to get early access.

### **Job Description**

Responsible for implementing various algorithms to do automated feature extraction and dataset augmentation, optimizing runtimes of neural network algorithms and building higher level abstractions for various common AI/ML techniques.

### **General Requirements**

Candidates will need to have a BS or MS from top notch CS programs with industry experience. We are looking for machine learning software engineers who have experience building at least one of the following:

- ML/AI models which are in production
- New neural network algorithms based on research papers
- Low level performance optimization of deep learning systems
- Machine learning platforms

The AI team within AWS is responsible for setting the AI strategy and delivering machine learning services across multiple segments and requirement to AWS customers. Today, the team delivers multiple computer vision services such as Amazon Rekognition for video and images, and Amazon Textract for documents.

As a Principal Product Manager for computer vision, you will be part of the larger product leadership community at AWS. This community plays a critical role in the broad business planning, working closely with senior executives to develop business targets and resource requirements, influences our long-term technical and business strategy, helps us hire a talented team of PMs and ultimately enables us to deliver innovative new solutions rapidly. You will be seen as the subject matter expert for your area of focus within Amazon AI.

A successful candidate will bring a passion for technology services, strong business acumen and

judgment, ability to define visionary, ground breaking products, desire to have an industry wide impact and ability to work within a fast moving environment in a large company to rapidly deliver services that have a broad business impact.

You will manage and be responsible for understanding customer needs and delivering some of our most strategic technical projects, and have a significant bottom-line impact on our business and competitive position.

### **Your Responsibilities Will Include**

Lead Product Definition – Own and drive the customer working backwards strategy, tenets, long-term goals and working backwards documents (press release, FAQ) including customer and market feedback, competitive analysis and business metrics to inform direction.

Define Product Vision – Including all aspects to future roadmap, investment, innovation and experimentation.

Execution of Product Planning and Development – Including customer goals and business requirements for product release, ensuring implementation is aligned with product goals and requirements, and ownership of product positioning.

Lead Product Launch – Own the GTM plan to deliver results that ensure the customer and business goals are met in operational launch plans.

Lead Operations – Including monitoring and response to customer feedback, continuous improvement and business growth

Lead interaction with Technical Team – Including helping the technical team make tradeoffs based on customer requirements, QA/testing of the product.

Lead and mentor technical product managers

Influence senior leaders across Amazon and communicate Amazon AI's vision, strategy, goals, status, and customer impact

Amazon is an Equal Opportunity-Affirmative Action Employer – Minority / Female / Disability / Veteran / Gender Identity / Sexual Orientation

### **Basic Qualifications**

- Bachelor's degree in Computer Science, Electrical Engineering, Information Systems or related field, or equivalent experience
- Passion for technology and Machine Learning
- Strong track record of shaping business strategy for technical products or services
- Superior written and verbal communications skills

- Superior analytical and quantitative skills; experience in data collection, model building, testing and validation.
- Experience translating customer needs into innovative and detailed product requirements for customer-facing online and mobile products/services
- Experience working with customers, technical teams, and management to collect requirements, describe software product features, and technical designs
- Exceptional attention to detail, organizational, and project management skills
- Must have shipped a customer- or developer-facing product or service

### **Preferred Qualifications**

- MBA
- MS or PhD degree in computer science, or related technical, math, or scientific field
- Knowledge of professional software engineering practices & best practices for the full software development life cycle, including coding standards, code reviews, source control management, build processes, testing, and operations
- Working knowledge of deep learning, machine learning and statistics.
- Experience in using Python, R, Julia, or Matlab or other statistical/machine learning software
- Strong communication and presentation skills
- Experience with statistical modeling / machine learning

People who use technology to solve hard problems. Including ones that did not exist a few years ago. We are a U.S. Federal subsidiary, drawing from the power of Accenture—one of only five Global Strategic Partners with ServiceNow. We deliver the integrated, mobile and interactive experience that the people in our country demand. We strengthen the nation's security with workflow automation, intelligent operations and machine learning. We're passionate and honest. And we thrive in a world of constant change.

### **You are:**

A proactive thinker who is willing to take a chance. Curious and self-motivated, you're willing to explore new technologies. You're ready to push boundaries—and yourself. You're here to improve the way our country works because you care. And you're ready to share your ideas with our team, knowing we'll listen.

### **The work:**

- Providing software configuration across various technical areas
- Analyze business requirements and develop technical requirements
- Develop and design and applications modules workflows and catalog requests
- Developing and delivering ServiceNow-based solutions for clients

### **Here's What you need:**

- 2+ years of JavaScript development in ServiceNow components
- US Citizen only and no Dual

**Bonus Points if you have:**

- Working knowledge of Linux operating system
- Understanding of JavaScript
- Web Services Integration (SOAP, REST, and JSON)
- System/Process Automation (Orchestration) experience
- Experienced in the System Development Life Cycle (SDLC) processes including client requirement analysis and system design
- You've managed a new SNOW implementation and/or SNOW upgrades
- You've got DevOps experience
- You got experience with governance/service management/operations
- You have experience managing remote teams
- You've got an ITIL certification

**Thornton Tomasetti** provides engineering design, investigation and analysis services to clients worldwide on projects of every size and level of complexity. We are a growing 1500+ person firm with 10 practices: Structural Engineering, Forensics, Applied Science, Renewal, Property Loss Consulting, Construction Engineering, Protective Design and Security, Facade Engineering, Sustainability and Transportation. We work on everything from landmark buildings to small-scale specialty structures, from the historic to the high performing, while balancing multiple objectives, including form, function, schedule, sustainability, constructability and budget. TALENT is at the core of our business.

The **Applied Science** practice leverages a unique combination of technologies and expertise to engineer practical solutions to problems of national and international importance. We apply expertise in solid and fluid dynamics, materials science, acoustics, risk assessments and computational simulation methods to solve complex problems. We perform research, mathematical modeling, software development and design to manage risks to life safety in military platforms and installations, ships and submarines, critical infrastructure, tall buildings, public facilities, industrial and petrochemical plants, and automotive and airborne vehicles. Military, government, corporate and academic clients value the validation of Applied Science's software and the critical insights gained from correlating analysis with testing.

Our 70 year record of success is driven by the sustained focus of our uniquely qualified and experienced staff of engineers and scientists. We have an immediate need for a Senior Engineer to perform analysis and design work in a demanding, innovative structural assessment capacity. Our interest is in highly motivated, imaginative engineers and scientists who seek to work on unique and challenging problems. Many of the topics of research and engineering in the Applied Science Practice are interdisciplinary and not direct extensions of collegiate coursework, so the successful applicant should be comfortable expanding their skill sets and tackling new problems.

**Essential Functions Of This Senior Engineer Position**

The emphasis is on the ability to address difficult physical problems, within the practical constraints of a consulting environment with tangible deliverables and deadlines. As part of a consulting project team engaged on projects in the technical areas of structural mechanics, material modeling and engineering R&D, the candidate must be able to:

- Formulate analytical approaches to address engineering and scientific problems,
- Demonstrate command of the application of advanced finite element methods and software for nonlinear behavior,
- Demonstrate proficiency in the creation, execution, interpretation and reporting of computational mechanics models,
- Demonstrate proficiency in the development of Artificial Intelligence / Machine Learning / Data Science approaches to the analysis of complex data sets,
- Demonstrate proficiency in the development of robust software implementations for these applications.

### **Requirements**

- M. Eng. or higher in structural engineering, mechanical engineering, applied mechanics, or related fields.
- This position is intended for engineers and scientists with 0-5 years' experience.
- Strong interpersonal skills and willingness to work in a success-oriented team environment.
- Must be able to obtain a US security clearance.
- The successful candidate will be supported to gain a professional engineering license on their respective area of technical focus.