job description

Data Scientist | Machine Learning Engineer

We are seeking skilled software engineers to deploy machine learning and related technologies to address complex and pressing problems in the financial services industry.  
  
Examples of such problems include the detection and interdiction of fraudulent activities such as theft and money laundering, the automation of credit decision-making, and the analysis and enhancement of customer transactions to enhance the customer's experience with the bank. To do this work well, we expect you to exhibit competence in the following disciplines:  
  
- Linear algebra - this is the foundation of machine learning and other algorithms, and we expect you to be fluent in the use of linear algebra.  
  
- Graph theory - graphical algorithms are used extensively in machine learning, and we expect you to understand how to use graphs to represent problems and also the principal techniques of graph analysis to solve such problems.  
  
- Probability theory - this is the foundation of Bayesian methods in machine learning, and we expect you to be fluent in this material.  
  
- Statistical learning - we expect you to understand linear methods for regression and classification, support vector machines, nearest neighbor algorithms, neural networks, and unsupervised learning methods.  
  
- Signal processing - a great deal of the work associated with preparing data for use by machine learning algorithms involves considerable pre-processing. Therefore, we expect an understanding of signal processing techniques such as filtering, principal/independent components analysis and related techniques.  
  
- Programming languages - ultimately, any solution must be implemented in a programming language, and we expect fluency in at least one of C++, Java or Python. This means not only the syntax and structure of the language of your choice, but also an understanding of the libraries and tools that accompany the basic language specification (e.g. STL and Boost for C++). Finally, this includes the "idioms" of software development - you should be aware of the meaning and usage of common design patterns.  
  
- Software engineering - algorithms and data structures are the heart and soul of software engineering, and in addition to having studied these concepts in an academic setting, we expect you to be fluent in their use in the daily work of software development.  
  
Additionally, you must be conversant with related concepts such as designing for re-use, efficient debugging and the use and role of version control in software development.  
  
Our client is a large organization operating in an industry regulated by the government, and this implies certain requirements and expectations.  
  
You should:  
  
- Be motivated to deliver results and disciplined about following up on your commitments.  
  
- Understand how to work well as part of multi-disciplinary and geographically distributed teams.  
  
- Be able to communicate well with people who have technical or business backgrounds.  
  
- Be tolerant of the procedures and rules of working in large organizations.  
  
-Work well with fuzzy or incomplete specifications that are subject to revision and change.  
  
- Be comfortable working by yourself or as part of a large team, because eventually, you will end up doing either or both.  
  
- Be scrupulous about complying with processes and procedures which are mandated by regulations.

job description

Deep Learning/Computer Vision Engineer

1. DEEP LEARNING / COMPUTER VISION ENGINEER

Great opportunity to be part of the next big thing. Augmented and Virtual reality company working on enterprise level marketing, education, and gaming projects. Come work for a team with a startup mentality backed by an enterprise corporation where innovation and creativity flourishes.  
  
Required Skills:

* 5+ years work experience in Data Science, Machine Learning, Deep Learning, and/or Artificial Intelligence techniques.
* Significant, demonstrable experience with state-of-the-art, real-time Object Detection techniques, classification performance metrics, and training set design, augmentation, and validation.
* Strong written and verbal communication skills.
* Strong experience with python, C++, and OpenCV required.
* Experience with the specification of various types neural net architectures in TensorFlow and/or Caffe required.
* Experience with Keras, NumPy, and SciPy highly desirable.

Required Education:

* M.S. in Computer Science, Physics, Electrical Engineering, or Math. Ph.D. preferred.

job description

Machine Learning / NLP Engineer

JOB DESCRIPTION  
  
The Role / Responsibilities:  
  
The Senior Research Scientist, Artificial Intelligence/Machine Learning is a core member of the Emerging Business Unit (EBU) team, reporting to the Senior Director, ML and AI, Emerging Business Unit. This is a newly formed, highly visible team that is key to long-term growth strategy that will lead our efforts to better understand and adapt to an environment characterized by widespread, technology-driven change. The EBU is charged with supporting innovation within our existing LOBs, developing opportunities in the "whitespace", enhancing our innovation process and understanding customers technology preferences.  
  
As such, the Senior Research Scientist, Artificial Intelligence/Machine Learning will, independently and in collaboration with the Senior Director, research, design, develop, and implement innovative Machine Learning, AI, deep learning, NLP, Data Science solutions that will advance the organization's capabilities across multiple business lines. On any day, the candidate could be doing any or all of the following:  
  
-Research emerging ML/AI/NLP/Data Science solutions and be conversant with latest developments in these fields  
  
-Brainstorm with internal stakeholders, and external clients to identify innovations in ML/AI/NLP to help advance automation, knowledge discovery, decision-making and insights, and streamline business processes or enable new capabilities,  
  
-Implement and prototype new algorithms and write code for novel ML/AI/NLP solutions,  
  
-Evaluate custom solutions through prototyping, POCs and quantitative metrics, and handing off solutions to stakeholder teams as needed -Discuss, brainstorm new advanced technology solutions with team members  
  
-Explain complex models to non-experts, in layperson terminology to clients, stakeholders and managers, while also being able to discuss intricacies of complex algorithms with experts in the field  
  
-Determine tradeoffs between internal technical implementation vs. partnerships with external teams/organizations/vendors for new technology-based solutions and capabilities  
  
-Prepare reports, presentations, for internal and external stakeholders, and as applicable, publish in peer-reviewed journals and magazines.  
  
-Attend, present at technical conferences, workshops, and meetups  
  
Qualifications:

* Advanced or basic degree (PhD with few years' experience, or MS / BS (with many years' experience)) in a quantitative field such as CS, EE, Information sciences, Statistics, Mathematics, Economics, Operations Research, or related, with focus on applied and foundational Machine Learning , AI , NLP and/or / data-driven statistical analysis & modelling
* Experience in applying AI/ML/ NLP / deep learning / data-driven statistical analysis & modelling solutions to multiple domains, including financial engineering, financial processes a plus.
* Strong Knowledge of the theory and applications of machine learning, AI, deep learning, data science, NLP, text analytics, unstructured data analytics, supervised/unsupervised learning. Experience with image and video processing is a plus.
* Strong, proven programming skills in Python, C/C++, Java, R , MATLAB, Scala, and with machine learning and deep learning and Big data frameworks including TensorFlow, Caffe, Spark, Hadoop. Experience with writing complex programs and implementing custom algorithms in these and other environments.
* Experience beyond using open source tools as-is, and writing custom code on top of, or in addition to, existing open source frameworks.
* Proven capability in demonstrating successful advanced technology solutions (either prototypes , POCs, well-cited research publications, and/or products) using ML/AI/NLP/data science in one or more domains,
* Experience in data management, data analytics middleware, platforms and infrastructure, cloud and fog computing is a plus
* Experience in data visualization solutions and data visualization tools is a plus
* Additional experience with GPU programming for training deep learning models, and cloud environments such as AWS, Azure is desirable
* Excellent communication skills (oral and written) to explain complex algorithms, solutions to stakeholders across multiple disciplines, and ability to work in a diverse team
* Experience in an applied R&D environment , working in an agile, innovation-lab culture to bring cutting-edge technologies to fruition, from initial concept to implementation

Job Description:  
   
•             Strong experience in Java, Python, SPARK and KAFKA experience.  
•             Strong experience in developing Spring Boot microservices on Pivotal platform (using Pivotal Cloud Foundry, Pivotal Application Services).  
•             Experience with medium-to-large data pipelines: implementing, testing and deploying.  
•             Experience with stream processing using Kafka.  
•             Experience with automated unit and integration testing for Kafka and Py Spark.  
•             Experience with Kafka Connect.  
•             Execute strategic engineering proof of concepts and product evaluations.  
•             Develop monitoring strategies for infrastructure, platforms and applications aligning with enterprise strategy and overall industry trends.