Data Analyst

Role:
This position is responsible for performing data engineering and data preparation that enable advanced analytics approaches. This individual must also work with the team to explore the suitability of established and cutting-edge machine-learning algorithms. These efforts will help build data science models that can produce better decision-making and outcomes for business and technology teams. The goal of this position is to help drive the development of internal solutions in the areas of conversational AI, content analytics, fraud detection, and others. The individual is expected to grow his/her technical skill set by learning and applying new algorithms, especially deep learning approaches, and understanding architectural frameworks needed to bring solutions into production.

Responsibilities:
- Use SQL as a common starting point for modeling data sets.
- Perform data munging and statistical analyses to better understand datasets before modeling.
- Perform feature engineering from large, complex datasets; tailor these features to specific modeling problems while capturing the intuition of business partners.
- Help develop data science approaches that leverage advanced statistical and machine learning algorithms, including neural networks and deep learning.
- Work with the data development and architecture teams to design solutions for launching successful analytics prototypes into production.
- Work closely with different stakeholders and business functions (e.g., Marketing and Client Education) within TD Ameritrade to derive important business insights and decide how data science can help achieve objectives.
- Present to TDA stakeholders to demonstrate capabilities, value proposition, alignment to strategy, and how data science solutions can be deployed within the firm.
- Collaborate with application development, universities, and Advanced Technology Group to identify and develop new analytical capabilities for the firm.
- Document technical design and data engineering approaches.
- Help develop a communication strategy for the launch and adoption of new capabilities.
- Participate in Think-Offs and Hackathons to demonstrate disruptive capabilities.
- Attend and present in data science conferences and meetups, and contribute to industry trends as it relates to advanced analytics and data science.
- Work in an agile and iterative manner to foster innovation.
Requirements:
- Graduate degree in a quantitative field (e.g., Statistics, Engineering, Math, Physics, Chemistry, etc.)
- Proficient programming capability in Python and unix/shell scripting
- Experience with advanced analytics, data science, and/or mathematical modeling
- Exposure to deep learning and natural language processing
- Knowledge in data engineering, databases (e.g., SQL, MongoDB), and platform architecture
- Excellent communication and collaboration skills to work across multiple groups within the organization
- Experience working on an Agile team