XUDONG ZHANG

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EDUCATION & SKILLS

University of Southern California, Marshall Business School ***May 2018***

- Master of Management Studies, Graduate Certificate in Business Analytics *GPA: 3.67/4.0*
- Relevant Coursework: Database Management, Machine Learning, Data Visualization, Fraud Analytics

Shanghai Jiao Tong University, School of Life Science and Biotechnology ***Jun 2016***

- Bachelor of Science in Bio-technology *GPA: 3.43/4.0*
- Majored in Bio-statistics and Genetic Engineering

Technical Skills & Certificates

- Programing Skills: Python / R / Linux / Scala / Java
- Data Science: Spark / PostgreSQL / MongoDB / Kafka / Tableau
- Cloud Technologies: AWS Certified Solution Architect Associate / AWS API Gateway
- Finance Domain: CFA Level 1 Passed / Self FX Trading / Algo Trading (Quantoqian)

WORK EXPERIENCE

Bloomberg LP, Singapore ***Jul 2018 - Now***

Commodities Data Analyst / TechOps

- Build ETL pipelines to ingest streaming/batching data from various APAC Commodity Exchanges (SHFE, SGX, TOCOM) by using Exchange API, Python and in-house tech stacks, handling 60 million data points per day **(PySpark, AWS S3, PostgreSQL, Apache Kafka/Airflow)**
- Conduct team-wide microservices code review, automate unit testing for continuous integration
- Design ad-hoc desktop Python tools to improve News/Research team's workflow, eg. geo shipping data filtering/aggregation and paragraph generation, saving 600 person-hours per year **(sqlite3/kivy/pyinstaller)**
- Develop an interactive dashboard over commodity taxonomy + user session data, providing actionable insights for Content Acquisition and Marketing Management team **(pymongo/sqlite/dask)**
- Provide front end support(L1) and maintenance on Bloomberg Commodity functionalities and database, also work as Data TechOps with Engineering team seamlessly in an agile workflow(L2)

OTHER TECH/FINANCE PROJECTS

Automated Trading on China A Stock Market (*live account*) ***Python: talib/scipy/pandas/jqdata***

- Apply a multi-factor strategy (smart money index and other financial report indicators) to 3000+ China listed stocks and monthly reposition the Top5 scored stocks
- 23.15% annualized return on back test (Jan2010 – Jun2019) and 32.10% on live account since July 2019 to year end
- ***Skills: Technical Analysis, Quantitative Research, Algorithm Trading***

Simulated Web Traffic Data Streaming Application (*github link*) ***Scala: kafka/spark/sbt, Shell, Python***

- Wrote local Python/Shell scripts to simulate web traffic data, writing each line in a streaming fashion to an Apache Kafka topic hosted on Ambari, Hortonworks Data Platform
- Used Kafka Connect and Spark Structure Streaming in Scala to read, process and finally write streaming messages to a file sink
- ***Skills: Cloud Data Platform, Streaming Data Generation & Ingestion***

Credit Card Fraud Detection (*app link*) ***R: caret/ggplot2/shiny/dplyr***

- Identified fraud transactions with over 98.2% accuracy and 81.2% ARPRC on hugely imbalanced (0.17%) transactional data by implementing Random Forest over other machine learning models Logit, Neural Networks
- Built a web-based application using R for card issuers to strategize and facilitate fraud detection based on customized preference/tolerance level
- ***Skills: Classification Modeling, App-based Data Deployment & Finalization***