Huizi (Hazel) Bing

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Education

Columbia University — New York, NY
Master of Science in Operations Research — Spet. 2016 - Feb. 2018
Wuhan University — Wuhan, China
Bachelor of Arts in Financial Engineering — Spet. 2012 - June 2016

Skills

Programming Languages: Java, Python(Numpy, Pandas, Sklearn, Flask), SQL, R(Shiny), HTML, CSS, JavaScript
Platforms: Tableau, MySQL/PostgreSQL, Git/Github, MongoDB, Amazon EC2, Google Cloud, Android Studio
Courses: Data Structure and Algorithms, Database, Probability and Statistics, Financial Derivatives

Work Experience

Morgan Stanley — New York, NY
Risk Data Analyst | Risk Infrastructure — Aug. 2018 - Current

- Develop, implement and maintain key risk reports covering FX, Rates and Equities analyzing weekly stress loss in different scenarios, programmed in VBA, SQL and Python
- Investigate data issues and explain variances of risk data, such as VaR and Greeks to ensure relevance
- Establish reports/data review process. Identify and implement solutions for internal and external requests, such as data quality improvements and reporting process automation
- Work with various groups (including IT, finance, risk managers and risk methodology) on providing ad hoc data requests and analyses, such as regulator data requests
- Conduct annual global risk inventory check and build dashboards for daily monitor and diagnosis analyses

OmniMarkets — New York, NY
Quantitative Analyst Intern — Mar. 2018 - May 2018

- Applied SVR and GBDT in option pricing prediction using 10-year historical data from Bloomberg
- Tuned model parameters by grid search and improved pricing accuracy over 40% compared to BS Model
- Organized weekly panel discussion for peer review, performed presentations to risk and management teams

Forwardlane — New York, NY
Data Science Intern — June 2017 - Aug. 2017

- Evaluated portfolio's performance using efficient frontier generated by Monte Carlo simulation; computed ex-ante analytics using Smart Risk APIs to understand portfolio structure
- Worked with ETF database using SQL Server and categorized ETFs by K-means
- Optimized portfolios and developed real-time automatic recommender based on clients' risk preference
- Implemented NLP techniques to create Q&A database from Morningstar, Bloomberg news

Projects

Movie Rating Prediction and Recommendation Engine

- Developed a recommendation system based on MovieLens Dataset with 26 million ratings on 45,000 movies, and conducted online analytical processing via Spark
- Designed a collaborative filtering algorithm based on similarity scores to provide personalized movie recommendations and developed user-based approaches to handle system cold-start problem
- Conducted model hyper-parameters tuning based on cross evaluation components and monitored data processing performance on AWS