DAOMING ZHANG

dz1173@nyu.edu | (201) 296-5557 | www.linkedin.com/in/daom1ngz

EDUCATION

NEW YORK UNIVERSITY   New York, NY
THE COURANT INSTITUTE OF MATHEMATICAL SCIENCES
Master of Science in Mathematics in Finance   Expected Dec 2022
UNIVERSITY OF MARYLAND   College Park, MD
Bachelor of Science in Applied Mathematics & Computer Science   May 2021
Awards: Dean's List (bestowed during all semesters due to academic excellence)

SKILLSET

Programming Skills: Java, Python (pandas, sklearn), SQL (MySQL, PostgreSQL), MATLAB
Coursework: Time Series Analysis, Machine Learning, Computational Finance, Systematic Trading Strategies

EXPERIENCES

HUIJIN ASSET MANAGEMENT   Jun 2021-Aug 2021
Intern, Assistant Product Manager   Shanghai, China
- Produced summary spreadsheets on disclosed related parties through fundamental, competitor and industry analysis, facilitating the IPO process for the Investment Banking Department
- Track daily P&L of existing funds with basic VBA functions on price data from WIND-Economic database, monitor abnormal value changes and signaled potential risks to operation managers

GUOSHEN SECURITIES   Jan 2020-Feb 2020
Intern, Fixed Income Risk Management Analyst   Shanghai, China
- Evaluated default risk of debtors based on their operation status and market environment presented in financial reports, and drafted risk disclosure document for the due diligence report
- Researched on economic compatitiveness and financial development across regions in China

PROJECTS

NEW YORK UNIVERSITY, COURANT INSITUTE
Portfolio Construction using Graph Sampling (Python)   Sep 2022-Current
- Create S&P500 tracking portfolio using graph-based approaches with lower expense
- Apply PCA to reduce dimensions of each stock's technical and fundamental indicator data
- Build stocks' network through Minimum Spanning Tree and Planar Maximally Filtered Graph, whose edges among nodes represent correlations of the results of PCA
- Backtest S&P500 active components (2017-2022), and construct portfolio with 10 central stocks and 10 peripheral stocks to reach minimum absolute tracking error regarding quartly returns

Risk Premium Strategy on WTI Futures (Python)   Mar 2022-May 2022
- Backtested carry-momentum strategy, reaction-function-based momentum strategy, and a combination of both on WTI Futures (2010-2021), with a buy-and-hold rolling portfolio as benchmark
- Optimized signal performance and reached annualized Sharpe Ratio of 0.95, transaction cost considered

UNIVERSITY OF MARYLAND
Analysis of San Francisco Crime Dataset (Python)   Oct 2020-Dec 2020
- Explore relationships among multiple criminal criteria on San Francisco crime data set (2016) with pandas and visualized crime occurrences and risk levels by interactive heat map with folium and seaborn
- Predicted crimes by machine learning models (e.g. Random Forest) on imbalanced data and evaluated models by multiple standards (e.g ROC curve)

ACTIVITIES

Volunteer: ESL Program**,** 2018 (high-school level English reading and writing tutoring)