Haobo Zhang

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Education

Georgia Institute of Technology

Aug 2024 - Present

MS in Operations Research

- o GPA: 4.00/4.00
- Coursework: Linear Optimization*, Stochastic Processes I*, Theoretical Statistics, Computational Statistics, Monte Carlo Methods.

Shanghai Jiao Tong University

Sep 2020 - Jun 2024

BA in Economics & BS in Mathematics and Applied Mathematics

- o GPA: 3.70/4.30
- SJTU Scholarship for Outstanding Undergraduates for the 2021, 2022 and 2023 academic years.
- Coursework: Machine Learning, Computational Text Analysis, Data Structures and Algorithms, Financial Engineering, Econometrics, Microeconomics, Macroeconomics, Behavioral Economics, Accounting, Mathematical Analysis[†], Linear Algebra, Probability and Statistics, ODE, Number Theory, Topology, Real Analysis, Functional Analysis.

Hong Kong University of Science and Technology

Sep 2023 - Dec 2023

School of Business and Management Semester Exchange

- o GPA: 4.03/4.30
- Coursework: Applied Game Theory, Statistical Analysis of Financial Data in R, Simulation in Business and Management.

Research Experience

Stable Matching Process on Random Bipartite Graph Sequences

Shanghai, China

Co-advised by Prof. Jun Luo and Prof. Yan Wang

Feb 2024 - May 2024

- $\circ\,$ Proposed a two-sided dynamic matching model with restrictions imposed on matching at each time stage.
- Developed a corresponding matching mechanism that guarantees instant stability and convergence to universal stability.

Prediction of cryptocurrency returns based on market sentiment and blockchain address activity

Shanghai, China Jun 2022 - Oct 2022

Advised by Prof. Haibing Shu

- Created automatically updated databases of crypto-relevant texts and blockchain address activities.
- Constructed sentiment indices tailored to the cryptocurrency market, based on crypto-relevant texts.
- Formulated network indices to characterize blockchain address activities using social network analysis.
- Evaluated the constructed indices with linear models and validated their predictive powers for cryptocurrency returns.

Professional Experience

Model Engineer Intern

Shanghai, China

Ping An Asset Management Co., Ltd.

May 2023 - Aug 2023

- Conducted research on FOF investment, including fund performance evaluation and portfolio optimization.
- o Developed algorithms on financial market style indication and fund portfolio estimation.
- Supported the construction of factor data required for investment research platforms and financial models.

Data Researcher Intern

Shanghai, China

East Money Information Co., Ltd.

Jul 2022 - Sep 2022

• Conducted research on industry chains and supported the creation of industry chain graphs.

- o Performed statistical analysis on industry data and constructed industry chain databases.
- o Contributed to the development of the industry chain data research platform.

Skills

Programming Languages: Python, C/C++, Java, SQL, R, Stata, MATLAB.

Technologies: Linux, Git, Arena, Financial terminals, LATEX.

Miscellaneous

Teaching Experience: Tutor for ISyE 2027 Probability With Applications Spring 2025.

Languages: English (Fluent), Mandarin (Native).Clubs & Associations: SJTU *NIX User Group.

^{*}Passed PhD Comprehensive Exam

 $^{^{\}dagger} Honors \ Course$