Haobo Zhang

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Education

Georgia Institute of Technology　　　　　　　　　　　　　　　　　　*Aug 2024 – Present*
MS in Operations Research

- GPA: 3.88/4.00
- **Coursework:** Stochastic Processes I*, Stochastic Processes II*, Linear Optimization*, Discrete Optimization, Simulation Theory and Methods, Computational Methods in Optimization, Theoretical Statistics, Computational Statistics, Monte Carlo Methods.

Shanghai Jiao Tong University　　　　　　　　　　　　　　　　　　*Sep 2020 - Jun 2024*
BA in Economics & BS in Mathematics and Applied Mathematics

- 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, Behavioral Economics, Topology, Real Analysis, Functional Analysis.

Hong Kong University of Science and Technology　　　　　　　　　　*Sep 2023 - Dec 2023*
School of Business and Management Semester Exchange

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

Research Experience

Mechanism Design for Data Markets with Competing Buyers under Differential Privacy　　　　　　　　　　　　　　　　　　　　　　　*Sep 2025 - Present*
Working in progress, independent.

Incentivizing Data Sharing with Heterogeneous Privacy Costs　　　*May 2025 - Present*
Working in progress, advised by Prof. Juba Ziani and Prof. Kate Donahue.

Stable Matching Process on Random Bipartite Graph Sequences　　　*Feb 2024 - May 2024*
Undergraduate thesis, advised by Prof. Jun Luo and Prof. Yan Wang.

- 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　　*Jun 2022 - Oct 2022*
Blockchain Address Activity
Undergraduate participation in research program, 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.
- ○ 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.
- ○ Performed statistical analysis on industry data and constructed industry chain databases.
- ○ Contributed to the development of the industry chain data research platform.

Skills

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

Technologies: CUDA, Linux, Git, Financial terminals, LaTeX.

Miscellaneous

Teaching Experience: Tutor for ISyE 3133 - Engineering Optimization (Fall 2025, Gatech); Tutor for ISyE 2027 - Probability With Applications (Spring 2025, Gatech).

Languages: English (Fluent), Mandarin (Native).

Clubs & Associations: SJTU *NIX User Group.

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*Passed PhD Comprehensive Exam