

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

Work in progress, independent.

Incentivizing Data Sharing with Heterogeneous Privacy Costs

May 2025 – Present

Work 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 Blockchain Address Activity

Jun 2022 – Oct 2022

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

Ping An Asset Management Co., Ltd.

*Shanghai, China
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

East Money Information Co., Ltd.

*Shanghai, China
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, L^AT_EX.

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.

*Passed PhD Comprehensive Exam