

# Haobo Zhang

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## Education

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### 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

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### Stable Matching Process on Random Bipartite Graph Sequences

Shanghai, China

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

Feb 2024 – May 2024

- 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

*Advised by Prof. Haibing Shu*

Jun 2022 – Oct 2022

- 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

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### 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

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

**Technologies:** CUDA, Linux, Git, Financial terminals, L<sup>A</sup>T<sub>E</sub>X.

## Miscellaneous

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

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

**Clubs & Associations:** SJTU \*NIX User Group.

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\*Passed PhD Comprehensive Exam