

EDUCATION

Massachusetts Institute of Technology

Doctor of Philosophy

Cambridge, USA

Sep. 2023 – Present

- **Academics:** GPA: 5.0/5.0
- **Advisor:** Prof. David Simchi-Levi

Peking University

B.S. in Statistics and Economics (double major)

Beijing, China

Sep. 2019 – Jul. 2023

- **Academics:** GPA: 3.87/4.0
- **Honor:** Elite program in computational and applied mathematics, Peking University

PUBLICATIONS

1. “Dynamic Service Fee Pricing under Strategic Behavior: Actions as Instruments and Phase Transition”, **Rui Ai**, David Simchi-Levi and Feng Zhu (NeurIPS 2024).
2. “On the Re-Solving Heuristic for (Binary) Contextual Bandits with Knapsacks”, **Rui Ai**, Zhaohua Chen, Xiaotie Deng, Yuqi Pan, Chang Wang and Mingwei Yang (NeurIPS 2024).

PREPRINTS

1. “A Reinforcement Learning Approach in Multi-Phase Second-Price Mechanism Design”, **Rui Ai**, Boxiang Lyu, Zhaoran Wang, Zhuoran Yang and Michael I. Jordan.
2. “No-regret Learning in Repeated First-Price Auctions with Budget Constraints”, **Rui Ai**, Chang Wang, Chenchen Li, Jinshan Zhang, Wenhan Huang and Xiaotie Deng.

WORK EXPERIENCE

Wizard Quant

Summer Intern, Research Department

Shanghai, China

Jun. 2024 – Aug. 2024

- Quantitative researcher at Wizard Quant

TEACHING EXPERIENCE

Peking University

Teaching Assistant, National School of Development

Beijing, China

Sep. 2022 – Jun. 2023

- Teaching assistant for Intermediate Microeconomics and International Trade

MIT

Teaching Assistant, Department of Mathematics

Cambridge, USA

Sep. 2024 – Dec. 2024

- Teaching assistant for Fundamentals of Statistics

SELECTED AWARDS AND HONORS

- Outstanding Graduate, Peking University 2023
- China Economic Research Scholarship (First Class), Peking University 2023
- Winning Prize in Probability and Statistics, S.-T. Yau College Student Mathematics Contest, China 2022
- Learning Excellence Award, Peking University 2022
- Merit Student, Peking University 2020, 2021
- First Place Prize, National Undergraduate Mathematics Competition in Beijing, China 2020, 2021
- Meritorious Winner, Mathematical Contest in Modeling, USA 2021
- Second Place Prize, National College Students Mathematical Modeling Contest in Beijing, China 2021
- First Prize, Chinese Physics Olympiad, Jiangxi province 2018
- First Prize, National High School Mathematics League, Jiangxi province 2017

ACADEMIC SERVICE

Organizing Committee: IJTCS-FAW 2022

Reviewer: NeurIPS 2024

ADDITIONAL INFORMATION

Programming Skills: Python, C++, Matlab, R, Julia, Stata, Latex

Language: Chinese (native), English (fluent)