Jiayu Kamessi Zhao

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EDUCATION

Massachusetts Institute of Technology, Cambridge, MA
Candidate for PhD in Operations Research; expected completion, May 2024
GPA: 5.0/5.0   Advisor: Daniel Freund

Columbia University, New York, NY
BA in Operations Research: Financial Engineering, May 2020
Summa Cum Laude

RESEARCH EXPERIENCE

Massachusetts Institute of Technology, Cambridge, MA   2020-Present
Research Assistant
My research interests lie at the intersection of online algorithms, stochastic decision-making, and game theory, with applications in revenue management and market design.

PAPERS

"On the Supply of Autonomous Technologies in Open Platforms", with D. Freund and I. Lobel. 2022. Working Paper.

"Balls, Bins, and Just a Few Opaque Promotions", with D. Freund and C. Hssaine. 2022. Working Paper.

"Overbooking with Bounded Loss", with D. Freund. 2022. Forthcoming at Mathematics of Operations Research. An earlier version appeared at the Twenty-Second ACM Conference on Economics and Computation (EC'21).

SELECTED TALKS

"On the Supply of Autonomous Technologies in Open Platforms." INFORMS 2022.

"Overbooking with Bounded Loss." Presented at EC'21; INFORMS 2021; ORC Student Seminar, 2022.

WORK EXPERIENCE

AllianceBernstein L.P., New York, NY   Summer 2019
Quantitative Research Intern
Formulated a market timing strategy to adopt stock-bond relative return before month end as a trading signal by verifying the existence of month-end re-balancing flows.

Columbia Business School, New York, NY   Summer 2018
Summer Research Intern
Validated the tendency for active funds to trade against passive flows by applying econometric and statistical tools to historical data on mutual fund portfolio disclosures

SKILLS AND ACTIVITIES

Programming Skills: Python, Julia, Gurobi, SQL, MATLAB, R
Softwares: LaTeX, Word, Excel, PowerPoint
Languages: English (proficient), Mandarin (native)

TEACHING EXPERIENCE

Massachusetts Institute of Technology, Cambridge, MA   Spring/Summer 2022
Teaching Assistant for *(i) Common Experience in OR* and *(ii) Intro to Operations*
Held recitation sessions and prepared materials on (i) deep-learning materials for computer vision and NLP models and (ii) pricing, contracting, and inventory management.

Columbia University, New York, NY   Fall 2018
Teaching Assistant for Ordinary Differential Equations/Probability for Engineers
Graded courses materials, held office hours, drafted homework solutions, and administered course logistics.

HONORS AND AWARDS

The Sebastian B. Littauer Award   2020
Honor from the Department of Industrial Engineering and Operations Research at Columbia University for outstanding promise of scholarly achievement

Tau Beta Pi Honor Society   2018-2020
Membership of the oldest engineering honor society for students with a history of academic achievement as well as a commitment to personal and professional integrity.

The Dean's List   2016-2020
Recognition of academic excellence by the Dean of Columbia Engineering.

C.P. Davis Scholar   2016
Recognition by Columbia University for intellectual pursuits, extracurricular achievements, and promise for future growth and exploration.

Medals in United States Academic Decathlon   2015
Gold Medal in Mathematics, Gold Medal in Science and Silver Medal in Social Science at the International Final of United States Academic Decathlon 2015.