Brian Zi Qi Zhu · Curriculum Vitæ

bzz2101@columbia.edu

Education

Columbia University — New York, NY
Ph.D. (Candidate) Operations Research — 2027 (expected)
M.S. Operations Research — 2023

Yale University — New Haven, CT
B.A. Economics and Mathematics, summa cum laude — 2022

Professional Experience

Uniswap Labs — New York, NY
Protocol Research Intern — June – Dec 2024, July 2025 – Jan. 2026

Pantera Capital — San Francisco, CA
Research Fellow — March – May 2024

Federal Reserve Board of Governors — Washington, DC
Economic Research Intern — June – Aug 2021

Conference Proceedings

Auctioning Time to Mitigate Latency Races: Theory and Evidence from Blockchains (with A. Capponi)
Economics and Computation 2026 (Accepted), Working Paper
Selected presentations (* denotes by co-author): London Mathematical Finance Seminar*, Durham University QRFE Workshop, China International Conference in Finance 2026, Economics and Computation 2026, WBS Gillmore Centre Conference 2026 (upcoming)

Uniform-Loss Automated Market Making for Prediction Markets (with C. Moallemi and D. Robinson)
Advances in Financial Technologies 2026 (Accepted), Working Paper

Quantifying the Value of Revert Protection (with B. Bachu, C. Moallemi, D. Robinson, and X. Wan)
Financial Cryptography and Data Security 2025

What Drives Liquidity on Decentralized Exchanges? Evidence from the Uniswap Protocol (with B. Bachu, G. Liao, D. Liu, C. Moallemi, and X. Wan)
Cryptoasset Analytics Workshop 2025

Working Papers

Semantic Trading: Agentic AI for Clustering and Relationship Discovery in Prediction Markets (with A. Capponi and A. Gliozzo)
Working Paper

Privacy-Enhanced Payment Systems (with A. Capponi and M. Lee)
Working Paper
Selected presentations (* denotes by co-author): Bank of Canada*, Swiss National Bank*, GSU AI and FinTech Conference 2026*, European Financial Association 2025, INFORMS 2025

The Paradox of Just-in-Time Liquidity in Decentralized Exchanges (with A. Capponi and R. Jia)
Under Review at *Management Science*
Selected presentations (* denotes by co-author): U. Chicago Stevanovich Center Conference 2024*, China International Conference in Finance 2024, INFORMS 2025, Inter-Finance PhD Seminar

From Pools to Books: A Microstructure Mapping of DeFi Liquidity (with A. Capponi)
Under Revision at *Operations Research*
Selected presentations (* denotes by co-author): Bloomberg Quant Seminar*

Other Publications

Tokenizing Real-World Assets: What Changes, What Does Not, and Where Policy Stands (with A. Capponi)
Global Risk Institute, Report (2026)

Unsupervised machine learning reveals slab hydration variations from deep earthquake distributions beneath the northwest Pacific (with G. Mao, T. Ferrand, J. Li, Z. Xi, and M. Chen)
Communications Earth & Environment, Volume 3, Article 56 (2022)

Discussions

Durham University QRFE Workshop, Asian Blockchain and Crypto Conference 2026

Service

Journal: Finance and Stochastics
Conference: Cryptoasset Analytics Workshop, Designing DeFi, Advances in Financial Technology

Teaching

Monte Carlo Simulation (MSFE)	Spring 2026
Applied Financial Risk Management (MSFE)	Fall 2025
Continuous-Time Models (MSFE)	Spring 2024, Spring 2025
Foundations of Financial Engineering (MSFE)	Fall 2024

Awards and Honors

Ripple Fellowship	2023, 2026
Runner-Up, INFORMS Finance Section Student Paper Competition	2025
Finalist, Two Sigma Fellowship	2025
Pantera Fellowship	2024
Ellington Prize *Awarded to the best senior essay in financial economics at Yale University.*	2022
Phi Beta Kappa	2022

Personal

Citizenship: United States of America
Languages: English, Chinese (Mandarin)