

RUIZHE JIA

ruizhe@stanford.edu ♦ Stanford, CA

EDUCATION

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|--|-----------------|
| Columbia University | New York, NY |
| · PhD in Operations Research | 2024 |
| · Advisor: Prof. Agostino Capponi | |
| · Dissertation Title: The Microstructure of Decentralized Exchanges | |
| University of California, Los Angeles | Los Angeles, CA |
| · M.A. in Mathematics & B.S. in Mathematics | 2018 |
| · Departmental Scholar, Departmental Highest Honors, Phi Beta Kappa, Magna Cum Laude | |

FULL EMPLOYMENT RECORD

Academic Positions

Stanford University, Management Science and Engineering Department	Aug. 2025
<i>Assistant Professor</i>	<i>Palo Alto</i>

Non-Academic Positions

Susquehanna International Group	Apr. 2024 – Apr. 2025
<i>Quantitative Researcher</i>	<i>Philadelphia, PA & Nassau, Bahamas</i>

GRANTS & FUNDING

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|---|------|
| • Stanford-IOG Research Hub (IORH) , Stanford University | 2025 |
| Funded by Input Output Global (IOG). Blockchain economics research. | |
| • Flashbots Research Grant | 2025 |
| MEV and market microstructure research. | |

TEACHING

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| • MS&E 247: Introduction to Decentralized Finance & Blockchain | Stanford, 2025–2026 |
| Undergraduate/Graduate course, 10 weeks | |
| • MS&E 347: Advanced Topics in Decentralized Finance | Stanford, 2025–2026 |
| Graduate seminar | |

PUBLICATIONS AND WORKING PAPERS

Refereed Journal Publications (Accepted / In Press)

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| • Liquidity Provision on Blockchain-based Decentralized Exchanges | (2024) |
| (with A. Capponi) | |
| <i>Forthcoming, The Review of Financial Studies.</i> | |
| Winner of the 2021 INFORMS Finance Section Best Paper Award. | |
| • Price Discovery on Decentralized Exchanges | (2022) |
| (with A. Capponi, S. Yu) | |
| <i>Forthcoming, The Review of Financial Studies.</i> | |

- **Maximal Extractable Value and Allocative Inefficiencies in Public Blockchains** (2022)
(with A. Capponi, Y. Wang)
Forthcoming, Journal of Financial Economics.
Winner of the Best Paper Award at the 2nd Annual CBER Conference.

Refereed Journal Publications (R&R / Under Review)

- **Proposer-Builder Separation, Payment for Order Flows, and Centralization in Blockchain** (2023)
(with A. Capponi, S. Olafsson)
Major Revision at Management Science

Refereed Journal Publications (Published)

- **Modeling Environmental Crime in Protected Areas Using the Level Set Method** (2019)
(with D. Arnold, D. Fernandez, C. Parkinson, D. Tonne, Y. Yaniv, A. Bertozzi, S. Osher)
SIAM Journal on Applied Mathematics, 79(3), 2019.

Refereed Conference/Symposia Proceedings (Published)

- **Do Private Transaction Pools Mitigate Frontrunning Risk?** (2023)
(with Agostino Capponi, Ye Wang)
Garg, J., Klimm, M., Kong, Y. (eds) Web and Internet Economics. WINE 2023. Lecture Notes in Computer Science, vol 14413. Springer, Cham., 681–681.
- **To EVM or Not to EVM: Blockchain Compatibility and Network Effects** (2022)
(with S. Yin)
Proceedings of the 2022 ACM CCS Workshop on Decentralized Finance and Security (DeFi'22), 23–29.

Non-refereed Publications (Published)

- **Blockchain Private Pools and Price Discovery** (2023)
(with A. Capponi, Y. Wang)
AEA Papers and Proceedings, 113: 1–5.
- **The Effect of Mortgage Forbearance on Refinancing: Evidence from the CARES Act** (2021)
(with A. Capponi, D. Rios)
CEPR Covid Economics, No. 68.

Working Papers

- **The Paradox Of Just-in-Time Liquidity In Decentralized Exchanges: More Can Sometimes Mean Less** (2023)
(with A. Capponi, B. Zhu)
- **Flows and Usage of Stable Coins during Crises: A Comparative Analysis** (2022)
(with A. Capponi, A. Sarkar, Y. Wang)

INVITED TALKS

- CBER Annual Conference (2025)
- UC Berkeley DeFi Course, Guest Lecture (2025)
- Columbia University Computational Finance Seminar (2025)

- National University of Singapore (2024)
- CBER Webinar (2023)
- SIG Program, INFORMS MSOM (2023)
- The 57th Annual Conference of the Canadian Economics Association (2023)
- University of California, Berkeley (2022)
- Chinese University of Hong Kong (2022)
- Crypto Economics Security Conference (2022)
- INFORMS Annual Meeting (2020, 2021, 2022, 2023)
- NFA Annual Conference (2021)
- SIAM Conference on Financial Mathematics and Engineering (2021, 2023)
- INFORMS Conference on Service Science (2021)
- 14th Financial Risks International Forum (2021)

SELECTED AWARDS & HONORS

- **TLDR Fellowship** (2023)
- **Winner of CBER Best Paper Award** (2022)
- **Winner of INFORMS Finance Section Student Paper Competition** (2021)
- **Deming Doctoral Fellowship** (2021)
- **UCLA Math Departmental Scholar** (2018)
- **Phi Beta Kappa** (2018)

MEDIA COVERAGE

- **Bloomberg:** “DeFi’s Highest Bidders at Center of Market-Moving Crypto Trades”
- **Cointelegraph:** “The trouble with automated market makers”

ACADEMIC SERVICE

- **Reviewer** for *Management Science*, *Journal of Corporate Finance*, *Operations Research Letters*, *Mathematical Finance*
- **Program Committee** for the 3rd Workshop on Decentralized Finance (DeFi) in Association with FC 2023, TLDR Conference 2024, and the 4th Annual CBER Conference