

# RUIZHE JIA

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## 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

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### Academic Positions

**Stanford University, Management Science and Engineering Department** Aug. 2025  
*Assistant Professor* Palo Alto

### Non-Academic Positions

**Susquehanna International Group** Apr. 2024 – Apr. 2025  
*Quantitative Researcher* Philadelphia, PA & Nassau, Bahamas

## 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

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### Refereed Journal Publications (Accepted / In Press)

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

- **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

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- 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

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- **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

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

## ACADEMIC SERVICE

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- **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