

Jiacheng Zhang

Academic Qualifications

Ph.D. (Princeton University, 2021)

B.Sc. (Tsinghua University, 2016)

Present Academic Positions

Assistant Professor, Department of Statistics, The Chinese University of Hong Kong (08/2024 - now)

Previous Positions

Postdoctoral Researcher, Industrial Engineering & Operations Research Department, University of California, Berkeley, (08/2021 - 07/2024)

Previous Relevant Research Work

Xin Guo, Annan Hu, and Jiacheng Zhang (2024). "Optimization frameworks and sensitivity analysis of Stackelberg mean-field games". Submit in *Operation Research*.

Publications Records

Section A

1. "On Time-Consistent Equilibrium Stopping Under Aggregation of Diverse Discount Rates" with **Shuoqing Deng** and **Xiang Yu**, *Mathematics of Operations Research*. (2025)
2. "Itô's formula for flows of conditional measures on semimartingales" with **Xin Guo**, *Electronic Journal of Probability*. (2025)
3. "Agency problem and mean field system of agents with moral hazard, synergistic effects and accidents." with Thibaut Mastrolia, *Journal of Optimization Theory and Applications*. (2025)
4. "Major-Minor Mean Field Game of Stopping: An Entropy Regularization Approach" with **Xiang Yu**, **Keyu Zhang**, **Zhou Zhou**, *SIAM Journal on Control and Optimization*. (2026)
5. "Dimension-free error estimate for diffusion model and optimal scheduling" with **Valentin de Bortoli**, **Romuald Elie**, **Anna Kazeykina**, **Zhenjie Ren**, *Transactions on Machine Learning Research* (2026)

Section B

1. "Inverting the Markovian projection, with an application to local stochastic volatility models" with **Daniel Lacker** and **Mykhaylo Shkolnikov** *Annals of Probability* (2019)
2. "Superposition and mimicking theorems for conditional McKean-Vlasov equations" with **Daniel Lacker** and **Mykhaylo Shkolnikov**. *Journal of the European Mathematical Society*. (2022)
3. "Stationary solutions and local equations for interacting diffusions on regular trees" with **Daniel Lacker** *Electronic Journal of Probability*. (2023)

4. “Deep Learning for Population-Dependent Controls in Mean Field Control Problems” with Gokce Dayanikli and Mathieu Lauriere, *Proceedings of the 23rd International Conference on Autonomous Agents and Multiagent Systems*. (2023)

Professional Services

Reviewer -- SIAM Journal on Financial Mathematics, Latin American Journal of Probability and Mathematical Statistics, the book of ‘Machine learning in Financial Marker: A guide contemporary practices’, Digital Finance, Applied Mathematics and Optimization, Annals of Applied Probability.