

EDUCATION

Stanford University

Ph.D. in Management Science and Engineering

Advisors: Peter Glynn and Jose Blanchet

Stanford, CA, USA

Sep 2024

University of Science and Technology of China (USTC)

B.S. in Mathematics and Applied Mathematics

Hefei, Anhui, China

Jun 2018

RESEARCH INTERESTS

- Applied probability and operations research
- Computational Markov chain convergence analysis
- Stochastic simulation and deep learning
- Robust decision making under uncertainty

PREPRINTS

- Qu, Y., Blanchet, J., Glynn, P., *Deep Learning for Computing Convergence Rates of Markov Chains*, submitted
- Qu, Y., Blanchet, J., Glynn, P., *Computable Bounds on Convergence of Markov Chains in Wasserstein Distance*, submitted
- Qu, Y., Blanchet, J., Glynn, P., *Estimating the Convergence Rate to Equilibrium of a Markov Chain via Simulation*
- Qu, Y., Glynn, P., *Bias of Markov Chain Sample Quantile*
- Qu, Y., Glynn, P., *Uniform Edgeworth Expansions for Markov Chains*
- Qu, Y. et al., *Double Distributionally Robust Bid Shading for First Price Auctions*, submitted

JOURNAL PUBLICATIONS

- Glynn, P., Qu, Y., *On a New Characterization of Harris Recurrence for Markov Chains and Processes*, Mathematics, 2023

TEACHING EXPERIENCE

Teaching assistant for the following Stanford MS&E courses

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| ◦ 220: Probabilistic Analysis | Autumn 2019, Summer 2022 |
| ◦ 221: Stochastic Modeling | Spring 2020 |
| ◦ 321: Stochastic Systems | Spring 2023 |
| ◦ 323: Stochastic Simulation | Autumn 2020, Winter 2024 |
| ◦ 324: Stochastic Methods in Engineering | Spring 2021, Spring 2022, Winter 2023, Spring 2024 |
| ◦ 260: Introduction to Operations Management | Summer 2020 |
| ◦ 211: Introduction to Optimization | Summer 2021 |
| ◦ 125: Introduction to Applied Statistics | Winter 2020 |

HONORS AND AWARDS

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| Centennial Teaching Assistant Award | 2024 |
| Applied Probability Society Best Student Paper Prize | 2023 |
| Applied Probability Society Conference Best Poster Award | 2023 |
| Dantzig-Lieberman Operations Research Fellowship | 2021 |
| Guo Moruo Scholarship | 2017 |

CONFERENCE PRESENTATIONS

- *Estimating Convergence Rates for Markov Chains via Simulation*, 2021 INFORMS Annual Meeting
- *A New Class of Bounds for Convergence of Markov Chains to Equilibrium*, 2023 INFORMS APS Conference & Annual Meeting

PROFESSIONAL SERVICE

- Referee: Mathematics of Operations Research, European Journal of Operational Research