Yanlin Qu

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Education

Stanford University — Stanford, CA
Ph.D. in Management Science and Engineering — *Expected Fall 2024*
Advisors: Peter W. Glynn and Jose Blanchet

University of Science and Technology of China (USTC) — Hefei, China
B.S. in Mathematics and Applied Mathematics — *Jun 2018*

Research Interests

- Applied probability and operations research
- Deep convergence analysis of general state space Markov chains
- Stochastic simulation involving Markov chains
- Robust decision making under uncertainty with application to online marketing

Preprints

- Y. Qu, J. Blanchet, P.W. Glynn, *Computable Bounds on Convergence of Markov Chains in Wasserstein Distance*
  - Submitted to Annals of Applied Probability, arXiv;
  - Applied Probability Society Best Student Paper Prize, 2023;
  - Applied Probability Society Conference Best Poster Award, 2023;
- Y. Qu, J. Blanchet, P.W. Glynn, *Estimating the Convergence Rate to Equilibrium of a Markov Chain via Simulation*
- Y. Qu, P.W. Glynn, *Bias of Markov Chain Sample Quantile*
- Y. Qu, P.W. Glynn, *Uniform Edgeworth Expansions for Markov Chains*
- Y. Qu et al., *Double Distributionally Robust Bid Shading for First Price Auctions, submitted*

Journal Publications

- P.W. Glynn, Y. Qu, *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

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

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
Moruo Guo Scholarship, the highest honor for USTC undergraduates	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

Professional Service

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

References

Peter W. Glynn, Professor, Stanford University — glynn@stanford.edu
Jose Blanchet, Professor, Stanford University — jose.blanchet@stanford.edu