

EMPLOYMENT	Columbia Business School NY, USA Postdoctoral Researcher in the Decision, Risk, and Operations Division 2024 - 2026 Mentors: Assaf Zeevi and Hongseok Namkoong
EDUCATION	Stanford University CA, USA PhD in Management Science and Engineering 2018 - 2024 Advisors: Peter Glynn and Jose Blanchet <i>Markov Chain Convergence Analysis: From Pen and Paper to Deep Learning</i> University of Science and Technology of China Anhui, China BSc in Mathematics and Applied Mathematics 2014 - 2018
RESEARCH INTERESTS	Multi-armed bandits Markov chain convergence analysis Deep learning for applied probability Stochastic simulation
PUBLICATIONS	<p>Y. Qu, J. Blanchet, and P. Glynn. Deep Learning for Markov Chains: Lyapunov Functions, Poisson's Equation, and Stationary Distributions. <i>Queueing Systems</i>, arXiv, 2026.</p> <ul style="list-style-type: none"> – <i>Special Issue: 40 Years of QUESTA</i> – NeurIPS 2025 Workshop MLxOR <p>Y. Qu, J. Blanchet, and P. Glynn. Computable Bounds on Convergence of Markov Chains in Wasserstein Distance via Contractive Drift. <i>Annals of Applied Probability</i>, arXiv, 2025.</p> <ul style="list-style-type: none"> – Applied Probability Society Best Student Paper Prize, 2023 – Applied Probability Society Conference Best Poster Award, 2023 <p>Y. Qu, J. Blanchet, and P. Glynn. Deep Learning for Computing Convergence Rates of Markov Chains. NeurIPS 2024 (spotlight).</p> <p>P. Glynn. and Y. Qu. On a New Characterization of Harris Recurrence for Markov Chains and Processes. <i>Mathematics</i>, 2023.</p>
PREPRINTS	<p>Y. Qu, H. Namkoong, and A. Zeevi. A Broader View of Thompson Sampling. arXiv, 2025.</p> <ul style="list-style-type: none"> – To be submitted to <i>Operations Research</i> – Job market paper <p>Y. Qu, T. Rokicki, and H. Yang. Rubik's Cube Scrambling Requires at Least 26 Random Moves. arXiv, 2024. (personal interest)</p> <p>Y. Qu, R. Kant, Y. Chen, B. Kitts, S. Gultekin, A. Flores, and J. Blanchet. Double Distributionally Robust Bid Shading for First Price Auctions. arXiv, 2024. (Yahoo intern)</p> <p>Y. Qu, J. Blanchet, and P. Glynn. Strong Limit Interchange Property of a Sequence of Markov Processes.</p> <p>Y. Qu, J. Blanchet, and P. Glynn. Estimating the Convergence Rate to Equilibrium of a Markov Chain via Simulation.</p> <p>Y. Qu and P. Glynn. Bias of Markov Chain Sample Quantile.</p> <p>Y. Qu and P. Glynn. Uniform Edgeworth Expansions for Markov Chains.</p>

TEACHING	I served as a teaching assistant for the following MS&E courses:	
	324: Stochastic Methods in Engineering	2021, 2022, 2023, 2024
	323: Stochastic Simulation	2020, 2024
	321: Stochastic Systems	2023
	221: Stochastic Modeling	2020
	220: Probabilistic Analysis	2019, 2022
	211: Introduction to Optimization	2021
	125: Introduction to Applied Statistics	2020
	260: Introduction to Operations Management	2020
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
	Guo Moruo Scholarship	2017
ACADEMIC SERVICE	I reviewed papers submitted to the following journals:	
	European Journal of Operational Research	
	Mathematics of Operations Research	
	Annals of Applied Probability	
	Operations Research	
REFERENCES	Peter Glynn Thomas Ford Professor Stanford University glynn@stanford.edu	Jose Blanchet Professor Stanford University jose.blanchet@stanford.edu
	Assaf Zeevi Kravis Professor of Business Columbia Business School assaf@gsb.columbia.edu	Hongseok Namkoong Assistant Professor Columbia Business School namkoong@gsb.columbia.edu