Haoran Xu

Email: haoran14@stanford.edu Website: hxjy.github.io

Education

Stanford University, Stanford, California
Ph.D. in Management Science and Engineering (MS&E) — Ph.D. Candidate
Advisor: Professor Peter W. Glynn
Co-advisor: Professor Gerd Infanger

Stanford University, Stanford, California
Master of Science in Management Science and Engineering (MS&E) — June 2021

National Chiao Tung University (NCTU), Hsinchu, Taiwan
Bachelor of Science in Transportation and Logistics Management (DTLM) — June 2019

Publications and Accepted Papers

Haoran Xu, Owen Shen, Peter W. Glynn, Yinyu Ye, and Patrick Jaillet. "A Single-Sample Polylogarithmic Regret Bound for Nonstationary Online Linear Programming." Accepted at NeurIPS 2026. arXiv preprint 2603.14673. [arXiv].

Owen Shen, Haoran Xu, Yinyu Ye, Peter W. Glynn, and Patrick Jaillet. "A Two-Layer Framework for Joint Online Configuration Selection and Admission Control." *Proceedings of the 43rd International Conference on Machine Learning (ICML 2026)*, PMLR 306:111357–111392. [PMLR].

Kuancheng Huang, Yu-Ting Lee, and Haoran Xu. "A routing and consolidation decision model for containerized air-land intermodal operations." *Computers & Industrial Engineering* 141 (2020): 106299. [DOI].

Papers Under Review

Haoran Xu, Peter W. Glynn, and Yinyu Ye. "Online Linear Programming with Batching." **Job Market Paper**. Under review at *Management Science*. arXiv preprint 2408.00310 (2024). [arXiv].

Working Papers

Haoran Xu, Peter W. Glynn, and Yinyu Ye. "Bridging the Discrete and Continuous Reward Theories for Online Linear Programming: The Key Role Played by the Support Size." SSRN preprint 7526320. [SSRN] (2026).

Work in Preparation

"Confidence Bounds of Stochastic Dynamic Programming by Sample Average Approximation and Information Relaxation" with Gerd Infanger and Peter W. Glynn

"Incorporating Forecasts into Sequential Decision Making Problems" with Peter W. Glynn

Other Research Projects

Stanford Campus Cooling and Heating Operations Project with Jacques de Chalendar (Sponsored by TotalEnergies)
Developed stochastic model predictive control algorithms for the operation of the cooling and heating system on the Stanford campus. — September 2022 – June 2024

Production Scheduling Project with Ming-Jong Yao (Sponsored by Trend Tone Imaging, Inc.)
Developed a mathematical programming model and a simulated annealing algorithm to support production scheduling decisions. — September 2018 – June 2019

Multi-country Container Consolidation Project with Kuancheng Huang
Developed an integer programming model and a heuristic algorithm based on Lagrangian relaxation for multi-country container consolidation. — September 2018 – June 2019

Teaching Experience

Stanford University, Teaching Assistant

- MS&E 221 Stochastic Modeling, Spring 2026
- CME 308 Stochastic Methods in Engineering, Spring 2025
- MS&E 221 Stochastic Modeling, Spring 2023

Stanford University, Course Administrator

- MS&E 321 Stochastic Systems, Winter 2026

Research Presentations

"Online Linear Programming with Batching"
INFORMS Annual Meeting 2025, Atlanta, Georgia

"A Routing and Consolidation Decision Model for Air-Land Intermodal Transportation"
2018 ATRS (Air Transport Research Society) World Conference, Seoul, South Korea