Hansheng Jiang

Contact Info

Email: hansheng.jiang@rotman.utoronto.ca
Website: `hanshengjiang.github.io`
Address: 105 St George St, Toronto, ON M5S 3E6

Employment

Rotman School of Management, University of Toronto
Assistant Professor of Operations Management and Statistics   2023 – present

Education

University of California, Berkeley
Ph.D. in Industrial Engineering and Operations Research   2023
  ◦ *Minors* in Statistics and Electrical Engineering
M.S. in Industrial Engineering and Operations Research   2018

University of Science and Technology of China
B.S. in Mathematics   2017

Journal Papers

α-β denotes alphabetical order. <u>Underlined</u> are student or postdoc collaborators.

[J1] Hansheng Jiang, Junyu Cao, Zuo-Jun Max Shen. **Intertemporal Pricing via Nonparametric Estimation: Integrating Reference Effects and Consumer Heterogeneity.**
Manufacturing & Service Operations Management 26.1 (2024): 28-46.
  ⋄ Finalist, MSOM Data-Driven Research Challenge 2020
  ⋄ Media coverage

[J2] Hansheng Jiang, Adityanand Guntuboyina. **A Nonparametric Maximum Likelihood Approach to Mixture of Regression.**
Under revision for resubmission to *Journal of the American Statistical Association*.
  ⋄ Winner, Best Student Paper Award in Theory & Methods by the International Indian Statistical Association (IISA) 2020

[J3] Hansheng Jiang, Shunan Jiang, Zuo-Jun Max Shen, Chunlin Sun (α-β). **Learning While Repositioning in On-Demand Vehicle Sharing Systems.**
Submitted to *Management Science*.
  ⋄ Winner, YinzOR Student Conference Flash Talk Competition 2022

[J4] Mengzi Amy Guo, Hansheng Jiang, Zuo-Jun Max Shen. **Multi-Product Dynamic Pricing with Reference Effects Under Logit Demand.**
Under review.

[J5] Lin Zhao, Hansheng Jiang, Mengshi Lu, Zuo-Jun Max Shen, Kemal Güler. **Supply Chain Forecast Sharing Under Asymmetric Forecast Preferences.**
Under major revision at *Production and Operations Management*.

[J6] Junyu Liu, Hansheng Jiang, Zuo-Jun Max Shen. **Potential Energy Advantage of**

Quantum Economy.
    ◇ Media coverage

Conference Papers

[C1] Zeqi Ye, Hansheng Jiang. **Smoothness-Adaptive Dynamic Pricing with Nonparametric Demand Learning.**
Accepted to *27th International Conference on Artificial Intelligence and Statistics (AISTATS) 2024.*
Acceptance rate: 27.58%

[C2] Hansheng Jiang, Zuo-Jun Max Shen, Junyu Liu. **Quantum Computing Methods for Supply Chain Management.**
Proceedings of 2022 IEEE/ACM 7th Symposium on Edge Computing (SEC) (pp. 400-405). IEEE.

Other Works

[O1] Fišar, Miloš, Ben Greiner, Christoph Huber, Elena Katok, Ali Ozkes, and the Management Science Reproducibility Collaboration. **Reproducibility in Management Science.**
Management Science.
Note: As a member of the Management Science Reproducibility Collaboration

[O2] Hansheng Jiang, Ruijun Ma, Nganba Meetei. **Counterfactual Forecast of Demand Lifts: A Double Machine Learning Approach.**
Amazon Machine Learning Conference 2021 Causal Inference Workshop.

Grants

CANSSI Ontario Multidisciplinary Doctoral (Mdoc) Training Program Supervisor   2024
    — Joint with Qiang Sun

Dobson Business & Climate Project Research Support   2023

Student Supervision

I have had the pleasure of working with:
    ◇ Zeqi Ye (Undergraduate at Nankai University)
      Co-authored paper [C1]
      Next stop: Ph.D. student at Northwestern IEMS

Teaching

University of Toronto
Instructor
    RSM 270 Operations Management: Winter 2024 (Enrollment: 175)

University of California, Berkeley
    UGBA 141: Production & Operations Management, IEOR 173: Introduction to Stochastic Processes, IEOR 262A: Mathematical Programming, UGBA 106: Marketing, IEOR 263A: Applied Stochastic Processes

University of Science and Technology of China
MATH 100201: Multivariate Real Analysis

Professional Experience	Amazon
	Supply Chain Optimization Technologies (SCOT) Team, New York, NY

Research Scientist II Intern   Summer 2021

Built statistical models and conducted large-scale data analysis to analyze the impacts of delivery speed on demand

Research Scientist I Intern   Summer 2020

Developed a demand forecasting pipeline with fine granularity in time and space

Alibaba
Data Science Decision Support Team of Alibaba Cloud, Sunnyvale, CA

Student Research Intern   Summer 2019

Designed time series forecasting methods for cloud computing demand

University of California, Los Angeles
Department of Statistics

Research Assistant   Summer 2016

Studied generative statistical models for high-dimensional data

Honors & Awards	Second Place, Doctoral Dissertation Award Competition, Conference on SCM in the Post-Pandemic and AI Age 2023

Winner, YinzOR Student Conference Flash Talk Competition   2022

Graduate Division Conference Travel Grant, UC Berkeley   2021 & 2022

Finalist, MSOM Data-Driven Research Challenge   2020

Winner, IISA Best Student Paper Award in Theory & Methods   2020

Berkeley Fellowship   2017 – 2022
  Prestigious multi-year fellowship for incoming PhD students selected campuswide

Cross-disciplinary Scholars in Science and Technology program, UCLA   2016

Hua Luogeng Mathematics Scholarship   2015

National Scholarship in China   2015 & 2016
  Top 2 % in the School of Mathematical Sciences

Gold Medal, International Genetically Engineered Machine competition (iGEM)   2015

First Prize, China Mathematical Olympiad (Hubei Province)   2012

Silver Medal, China Girls Mathematical Olympiad   2011 & 2012
  International competition for female students from all over China and invited nations

Academic Service	**Journal Refereeing**
	Annals of Statistics
	INFORMS Journal on Computing

Management Science

Manufacturing & Service Operations Management

Transportation Science

Conference Refereeing

MSOM Supply Chain Management SIG 2023, 2024

MSOM Technology, Innovation, and Entrepreneurship SIG 2024

Fairness, Accountability, and Transparency (FAccT) 2023

Award Competition Committee

Observer, Franz Edelman Award Competition Committee 2024

Member of the Coaching Team for the Franz Edelman Award Finalist — McDonald's China

Judge, Best Paper Award Competition by Chinese Scholars Association for Management Science and Engineering (CSAMSE) 2023

Session Chair

INFORMS Annual Meeting 2022, 2023

Mentorship

Mentor, INFORMS Mentor Match Program

Internal Service

Admission

Reviewer & Interviewer, OMS PhD Admission 2024

Interviewer, Master of Management Analytics (MMA) Admission 2023

Presentations

"Learning While Repositioning in On-Demand Vehicle Sharing Systems"

POMS-HK	01/2024
School of Management, University of Science and Technology of China	12/2023
INFORMS Annual Meeting, Phoenix	10/2023
Data-Driven Urban Tech Workshop Poster Session, Cornell Tech	05/2023
YinzOR Conference, Carnegie Mellon University	08/2022
Revenue Management & Pricing Conference	06/2022

"Intertemporal Pricing in the Presence of Consumer Behaviors via Nonparametric Estimation"

YinzOR Conference Keynote Talk, Carnegie Mellon University	08/2023
INFORMS Annual Meeting, Indianapolis	10/2022
INFORMS Annual Meeting, Anaheim	10/2021
Revenue Management & Pricing Conference	06/2021
MSOM Data-Driven Challenge Finalist Presentation	11/2020
INFORMS Annual Meeting, Online	10/2020
INFORMS Annual Meeting, Seattle	11/2019

"A Nonparametric Maximum Likelihood Approach to Mixture of Regression"

IISA Student Paper Award Presentation   07/2020
Amazon SCOT Visiting BAIR Workshop, UC Berkeley   01/2020

"Quantum Computing and Operations Management"
Modeling and Optimization: Theory and Applications (MOPTA), Lehigh   08/2023
IEEE/ACM 7th Symposium on Edge Computing, Seattle   12/2022

Software	`IPRE`: Intertemporal pricing under reference effects [Code]
	`NPMLE`: Nonparametric estimation of mixture of regression [Code]

Miscellaneous	**Computing:** Python, R, SQL, LaTeX, HTML, Gurobi, AMPL
	Recreation: Culinary enthusiast, progressing tennis aficionado, and delighted keeper of a Ragdoll cat