# Hansheng Jiang

Last updated: September 2024

CONTACT Email: hansheng.jiang@rotman.utoronto.ca

Website: hanshengjiang.github.io

Address: 105 St George St, Toronto, Ontario M5S 3E6, Canada

**EMPLOYMENT** University of Toronto

Rotman School of Management

Assistant Professor of Operations Management and Statistics 2023–present

Affiliated Faculty at School of Cities, University of Toronto 2024–present

**EDUCATION** University of California, Berkeley

Ph.D. in Industrial Engineering and Operations Research 2023

Minors in Statistics and Electrical Engineering

University of Science and Technology of China

B.S. in Mathematics 2017

Journal Papers & Manuscripts

 $\alpha$ - $\beta$  denotes alphabetical order.

† denotes industry collaborators and underline denotes student collaborators (at the time of authorship).

[J1] Hansheng Jiang, Junyu Cao, Zuo-Jun Max Shen. Intertemporal Pricing via Non-parametric 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.
  - 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 ( $\alpha$ - $\beta$ ). **Learning** While Repositioning in On-Demand Vehicle Sharing Systems.
  - 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.
- [J5] Lin Zhao, Hansheng Jiang, Mengshi Lu, Zuo-Jun Max Shen, Kemal Güler<sup>†</sup>. **Supply Chain Forecast Sharing Under Asymmetric Forecast Preferences.**
- [J6] Junyu Liu, Hansheng Jiang, Zuo-Jun Max Shen. **Potential Energy Advantage of Quantum Economy.**

### Media coverage

## Conference Papers & Manuscripts

# [C1] Zeqi Ye, Hansheng Jiang. Smoothness-Adaptive Dynamic Pricing with Nonparametric Demand Learning.

Proceedings of The 27th International Conference on Artificial Intelligence and Statistics (AISTATS), PMLR 238:1675-1683, 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 70.3 (2024): 1343-1356.

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**

### **NSERC** Discovery Grant

2024-2029

- ♦ Role: Sole PI
- Title: Digital Platform Transformation: Bridging Behavioural Insights with Data-Driven Operations

CANSSI Ontario Multidisciplinary Doctoral (Mdoc) Training Program

2024-2029

- ♦ Role: Co-PI (PI: Qiang Sun)
- ♦ Funds to support one PhD student (Mdoc trainee) for their five-year study

Dobson Business & Climate Project Research Travel Grant

2023

### STUDENT SUPERVISION

Zeqi Ye (B.S. '2024, Nankai University)

Next stop: PhD student at Northwestern IEMS

Co-author of paper [C1]

# 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

2020 Finalist, MSOM Data-Driven Research Challenge Winner, IISA Best Student Paper Award in Theory & Methods 2020 2017-2022 Berkeley Fellowship Prestigious multi-year fellowship for incoming PhD students selected campuswide Cross-disciplinary Scholars in Science and Technology (CSST) program, UCLA 2016 2015 Hua Luogeng Mathematics Scholarship 2015 & 2016 National Scholarship Top 1% in University of Science and Technology of China Gold Medal, International Genetically Engineered Machine competition (iGEM) 2015 First Prize, China Mathematical Olympiad (Hubei Province) 2012 2011 & 2012 Silver Medal, China Girls Mathematical Olympiad International competition for female students from all over China and invited nations

**TEACHING** 

University of Toronto

Instructor

**Operations Management** 

RSM270 (undergraduate core course): Spring 2024, Fall 2024

*Instructor & New Course Developer* 

Nonparametric Models and Methods for Data-Driven Decision-Making

RSM3090 (PhD course): Fall 2024

University of California, Berkeley

Instructor

STAT 153 Introduction to Time Series: Spring 2023

Graduate Student Instructor

UGBA 141 Production & Operations Management: Spring 2022

IEOR 173 Introduction to Stochastic Processes: Spring 2020

IEOR 262A Mathematical Programming: Fall 2019

Grader

UGBA 106 Marketing: Fall 2020

IEOR 263A Applied Stochastic Processes: Fall 2018

University of Science and Technology of China

Undergraduate Student Instructor

MATH 100201 Multivariate Real Analysis: Spring 2016

ACADEMIC SERVICE Journal Refereeing

Annals of Statistics

INFORMS Journal on Computing

*Operations Research* 

Management Science

Manufacturing & Service Operations Management

Transportation Science

#### **Conference Refereeing**

International Conference on Learning Representations (ICLR)

Conference on Neural Information Processing Systems (NeurIPS)

Fairness, Accountability, and Transparency (FAccT)

### **Award Competition**

Reviewer, MSOM Supply Chain Management SIG 2023, 2024

Reviewer, MSOM Technology, Innovation, and Entrepreneurship SIG 2024

Judge, Best Paper Award Competition by Chinese Scholars Association for Management Science and Engineering (CSAMSE) 2023, 2024

#### **Session Chair**

INFORMS Annual Meeting 2022, 2023

### Advisory

Mentor, INFORMS Mentor Match Program 2023–2024

Coach, Franz Edelman Laureate McDonald's China 2023–2024

Observer, Franz Edelman Competition Committee 2023–2024

### University Service

#### Admission

Reviewer & Interviewer, OMS PhD Admission 2024

Interviewer, Master of Management Analytics (MMA) Admission 2023

#### **Rotman Commerce Events**

SCMG × Kinaxis Keynote Event 2024

Professor Coffee Chat 2023

### **PRESENTATIONS**

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

Rotman Young Scholar Seminar	07/2024	
POMS-HK Conference, HKUST	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 (RMP) Conference, Chicago Booth (Online) 06/2022		

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

ι.	1011		
	YinzOR Conference (Long Talk), Carnegie Mellon University	08/2023	
	INFORMS Annual Meeting, Indianapolis	10/2022	
	INFORMS Annual Meeting, Anaheim	10/2021	
	Revenue Management & Pricing (RMP) Conference, JHU Carey (Online)	06/2021	
	MSOM Data-Driven Challenge Finalist Presentation	11/2020	
	INFORMS Annual Meeting, Online	10/2020	
	INFORMS Annual Meeting, Seattle	11/2019	

"Smoothness-Adaptive Dynamic Pricing with Nonparametric Demand Learning" International Symposium on Mathematical Programming (ISMP), Montreal 07/2024 Revenue Management & Pricing (RMP) Conference, UCLA Anderson 07/2024 "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" MSOM Conference, University of Minnesota 06/2024 Modeling and Optimization: Theory and Applications (MOPTA), Lehigh 08/2023 IEEE/ACM 7th Symposium on Edge Computing, Seattle 12/2022

Professional EXPERIENCE

Amazon

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

Research Scientist II Summer 2021 Research Scientist I Summer 2020

Alibaba

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

Student Researcher Summer 2019

University of California, Los Angeles

Department of Statistics

Research Assistant Summer 2016

MISCELLANEOUS Computing: Python, R, SQL, LATEX, HTML, Gurobi, AMPL

Recreation: Culinary enthusiast, progressing tennis aficionado, and delighted keeper of a Ragdoll cat