

# Hansheng Jiang

Last updated: January 2024

## Contact Info

Email: [hansheng.jiang@rotman.utoronto.ca](mailto:hansheng.jiang@rotman.utoronto.ca)  
Website: [hanshengjiang.github.io](https://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

<sup>α</sup> denotes alphabetical order. Underlined are student or postdoc collaborators.

[J1] Hansheng Jiang, Junyu Cao, Zuo-Jun Max Shen. **Intertemporal Pricing via Non-parametric Estimation: Integrating Reference Effects and Consumer Heterogeneity.**  
Forthcoming at *Manufacturing & Service Operations Management* 2023+.  
◦ 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<sup>α</sup>, Shunan Jiang<sup>α</sup>, Zuo-Jun Max Shen<sup>α</sup>, Chunlin Sun<sup>α</sup>. **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.**

[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.**

*Proceedings of 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 IEEE/ACM 7th Symposium on Edge Computing (SEC) 2022.*

## 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.*

## Teaching

University of Toronto

*Instructor*

RSM 270 Operations Management

Winter 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

## Student Supervision

I have had the pleasure of working with:

- ◇ Zeqi Ye (Undergraduate in Statistics at Nankai University)  
Co-authored paper [C1]

## Academic Service

### Journal Refereeing

*Management Science*  
*Manufacturing & Service Operations Management*  
*Annals of Statistics*  
*INFORMS Journal on Computing*  
*Transportation Science*

### Conference Refereeing

MSOM Supply Chain Management SIG Conference  
Fairness, Accountability, and Transparency (FAccT)

### Award Competition Committee

Observer, Franz Edelman Award Competition Committee 2024  
Member of Coaching Team for Franz Edelman Award Finalists 2024  
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

Interviewer, Master of Management Analytics (MMA) Admission 2023

## 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

|                            |  |             |
|----------------------------|--|-------------|
| <b>Grants</b>              | CANSSI Ontario Multidisciplinary Doctoral (Mdoc) Grant<br>— Joint with Qiang Sun   | 2024        |
|                            | Dobson Business & Climate Project Research Grant \$2000  | 2023        |
| <b>Honors &amp; Awards</b> | 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<br>Prestigious multi-year fellowship for incoming PhD students selected campuswide   | 2017 – 2022 |
|                            | Cross-disciplinary Scholars in Science and Technology program, UCLA  | 2016        |
|                            | Hua Luogeng Mathematics Scholarship  | 2015        |
|                            | National Scholarship in China<br>Top 2 % in the School of Mathematical Sciences  | 2015 & 2016 |
|                            | Gold Medal, International Genetically Engineered Machine competition (iGEM)  | 2015        |
|                            | First Prize, China Mathematical Olympiad (Hubei Province)  | 2012        |
|                            | Silver Medal, China Girls Mathematical Olympiad<br>International competition for female students from all over China and invited nations                 | 2011 & 2012 |
| <b>Presentations</b>       | “Learning While Repositioning in On-Demand Vehicle Sharing Systems”<br>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”<br>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”<br>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,  $\text{\LaTeX}$ , HTML, Gurobi, AMPL

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