## Hansheng Jiang

Contact

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https://hanshengjiang.github.io

 $+1\ 510-833-8004$ 

**EDUCATION** 

University of California, Berkeley

Ph.D. in Industrial Engineering & Operations Research 2017 – 2023 (Expected)

Minors in Statistics and Electrical Engineering

Advisors: Zuo-Jun Max Shen and Aditya Guntuboyina (Department of Statistics)

University of Science and Technology of China

B.S. in Mathematics

2013 - 2017

RESEARCH Interests Sequential and data-driven decision-making, behavioral operations, nonparametric statistics, applications in retailing, supply chains, sharing economy.

PAPERS

- [1] Hansheng Jiang, Junyu Cao, Zuo-Jun Max Shen. Intertemporal Pricing via Nonparametric Estimation: Integrating Reference Effects and Consumer Heterogeneity. Manufacturing & Service Operations Management (Articles in Advance) 2022. [Link]
  - **Q** Finalist, MSOM Data-Driven Research Challenge 2020
- [2] Hansheng Jiang, Adityanand Guntuboyina. A Nonparametric Maximum Likelihood Approach to Mixture of Regression. Under revision for resubmission to Journal of the American Statistical Association. [Link]
  - **Q** Winner, Best Student Paper Award in Theory & Methods by International Indian Statistical Association (IISA) 2020
- [3] Mengzi Amy Guo, Hansheng Jiang, Zuo-Jun Max Shen. Multi-Product Dynamic Pricing with Reference Effects Under Logit Demand. Under review at Operations Research. [Link]
- [4] Hansheng Jiang\*, Shunan Jiang\*, Zuo-Jun Max Shen. Learning While Repositioning in On-Demand Vehicle Sharing Systems. In preparation for submission to *Management Science*. Manuscript available upon request. [Link]
  - **Q** Winner, YinzOR Student Conference Flash Talk Competition 2022
- [5] Lin Zhao\*, Hansheng Jiang\*, Mengshi Lu, Zuo-Jun Max Shen, Kemal Guler. Supply Chain Forecast Sharing Under Asymmetric Forecast Preferences. Under revision at *Production and Operations Management*. [Link]
- [6] Hansheng Jiang, Zuo-Jun Max Shen, Junyu Liu. Quantum Computing Methods for Supply Chain Management. Preliminary version submitted to ACM/IEEE Workshop on Quantum Computing. [Link]

Code & Software Reference Effects: Estimation and optimization under consumer heterogeneity. [Code] NPMLE: Nonparametric estimation of mixture of regression. [Code]

<sup>\*</sup> indicates equal contribution.

TEACHING EXPERIENCE	Instructor STAT 153 (Elective): Introduction to Time Series	Spring 2023 (Planned)
	Graduate Student Instructor  UGBA 141 (Elective): Production & Operations Manage IEOR 173 (Core): Introduction to Stochastic Processes IEOR 262A (PhD Core): Mathematical Programming	ement Spring 2022 Spring 2020 Fall 2019
	Grader UGBA 106 (Core): Marketing IEOR 263A (PhD Core): Applied Stochastic Processes Undergraduate Student Instructor	Fall 2020 Fall 2018

MATH 100201 (Core): Multivariate Real Analysis

## Industry Experience

#### Amazon

Supply Chain Optimization Technologies (SCOT) Team, New York City, NY
Research Scientist II Intern
May 2021 – Aug 2021

- I built statistical models and conducted data analysis to analyze the impacts
  of delivery speed on demand. I provided counterfactual predictions that helped
  the inventory planning and control team select the most desired products for
  the faster delivery program.
- I coauthored a technical report, and the report was accepted to the causal inference workshop in Amazon's internal annual machine learning conference.

### Research Scientist I Intern

May 2020 – Aug 2020

Spring 2016

- I worked as part of the demand forecasting team to provide reliable demand predictions to guide downstream decision-making amid the challenges of oscillating demand and unstable supply during COVID-19.
- I developed a demand forecasting methodology with fine granularity in time and space. My prototyped model was continued by the team for production in the whole US marketplace after my internship.

## Alibaba Group

Data Science Decision Support Team of Alibaba Cloud, Sunnyvale, CA Student Research Intern  $\hbox{May 2019-Aug 2019}$ 

 $\circ$  I studied and proposed time series forecasting methods for cloud computing demand.

SELECTED			
Honors &			
Awards			

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
Outstanding Graduate Award (provincial)	2017
National Scholarship in China (top 2% of the department)	2015 & 2016
First Prize, National College Student Mathematics Contest	2014
First Prize, China Mathematical Olympiad (provincial)	2012
Silver Medal, China Girls Mathematical Olympiad	2011 & 2012

## Other University of California, Los Angeles

Experience Department of Statistics

Research Assistant June 2016 – Sept 2016

Mentors: Prof. Ying Nian Wu and Dr. Jianwen Xie

• I studied statistics and machine learning tools for signal modeling and image synthesis, under the support of a UCLA-CSST scholarship and a USTC scholarship for study abroad.

## Talks

Intertemporal Pricing via Nonparametric Estimation: Integrating Reference Effects and Consumer Heterogeneity

INFORMS Annual Meeting, Anaheim, CA	Oct 2021
INFORMS Revenue Management & Pricing Conference	June 2021
MSOM Data-Driven Challenge Finalist Presentation	Nov 2020
INFORMS Annual Meeting, Online	Oct 2020
INFORMS Annual Meeting, Seattle, WA	Nov 2019

A Nonparametric Maximum Likelihood Approach to Mixture of Regression

IISA Student Paper Award Presentation

July 2020

Amazon SCOT Visiting BAIR Workshop, Berkeley, CA

Jan 2020

Learning While Repositioning in On-Demand Vehicle Sharing Systems

YinzOR Student Conference, Pittsburgh, PA Aug 2022 INFORMS Revenue Management & Pricing Conference June 2022

# SERVICES & ACTIVITIES

Session Chair of "Learning and Optimization in Pricing" at INFORMS 2022

Departmental Service

o Volunteer, IEOR new student orientation 2019, 2021 & 2022

• Panelist, IEOR information session for prospective students 2021

 $\circ$  Signatory committee member, IEOR graduate student organization 2020 Reviewer for *Annals of Statistics* 

## TECHNICAL SKILLS

Python, R, SQL, LATEX, HTML, Gurobi, AMPL, experience with large-scale real-data processing and analyzing

## References

Zuo-Jun Max Shen

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Adityanand Guntuboyina Department of Statistics University of California, Berkeley aditya@stat.berkeley.edu

Junyu Cao

Department of Information, Risk, and Operations Management McCombs School of Business University of Texas at Austin junyu.cao@mccombs.utexas.edu

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