Hansheng Jiang

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CONTACT

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https://hanshengjiang.github.io

EDUCATION

University of California, Berkeley
Ph.D. in Industrial Engineering & Operations Research — Aug 2017 – Present
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 — Aug 2013 – May 2017

RESEARCH INTERESTS

Interface of statistics and operations management, decision-making methodologies, data-driven analytics, and real-world problems in online retailing, revenue management, supply chain management, sharing economy, etc.

PAPERS

1. Intertemporal Pricing via Nonparametric Estimation: Integrating Reference Effects and Consumer Heterogeneity.
   Hansheng Jiang, Junyu Cao, Zuo-Jun Max Shen.
   Accepted by *Manufacturing & Service Operations Management.*
   - ✧ **Finalist**, MSOM Data-Driven Research Challenge 2020 (top 4 of all submissions)
2. A Nonparametric Maximum Likelihood Approach to Mixture of Regression.
   Hansheng Jiang, Adityanand Guntuboyina.
   R&R at *Journal of the American Statistical Association.*
   - ✧ **Winner**, IISA Best Student Paper Competition 2020
3. Learning While Repositioning in On-demand Vehicle Sharing Systems.
   With Shunan Jiang, Zuo-Jun Max Shen. *Working paper.*
4. Multi-product Dynamic Pricing with Reference Effect under Logit Demand.
   With Mengzi Guo, Zuo-Jun Max Shen. *Working paper.*

TEACHING

Operations Management (Berkeley Haas UGBA 141) — Spring 2022
Graduate Student Instructor

Introduction to Stochastic Processes (Berkeley IEOR 173) — Spring 2020
Graduate Student Instructor

Mathematical Programming (Berkeley IEOR 262A) — Fall 2019
Graduate Student Instructor

Marketing (Bekeley Haas UGBA 106) — Fall 2020
Grader

Applied Stochastic Processes (Berkeley IEOR 263A) — Fall 2018
Grader

Mathematical Analysis (USTC Mathematics) Spring 2016
Undergraduate Student Instructor

Industry Experience

Amazon
Supply Chain Optimization Technologies, 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 prediction that supported the inventory planning and control team in selecting the most desired products into the faster delivery program.
- I coauthored a technical report, and the report was accepted for poster presentation at the causal inference workshop of Amazon's annual machine learning conference.

Research Scientist I Intern May 2020 – Aug 2020

- I worked as part of the demand forecasting team to provide reliable demand prediction to guide downstream decision-making amid the challenges of oscillating demand and unstable supply during COVID-19.
- I developed a demand forecasting methodology with features of 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, Sunnyvale, CA
Student Research Intern May 2019 – Aug 2019

- I worked in the decision support team of Alibaba Cloud, a cloud computing company and a subsidiary of Alibaba Group. I studied and proposed time series forecasting methods for cloud computing demand.

Other Experience

University of California, Los Angeles
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. I was fully supported by a UCLA-CSST scholarship and a USTC scholarship for study abroad.

Presentations

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 Competition Presentation Virtual	July 2020

Amazon SCOT Visiting BAIR Workshop, Berkeley, CA — Jan 2020

Learning While Repositioning in On-demand Vehicle Sharing Systems
- CMU YinzOR Workshop Flash Talk — Aug 2022
- INFORMS Revenue Management & Pricing Conference — June 2022

Honors & Awards

- Graduate Division Conference Travel Grant, UC Berkeley — 2021
- Finalist, MSOM Data-Driven Research Challenge — 2020
- Winner, IISA Student Paper Competition — 2020
- Berkeley Fellowship — 2017 – 2022
- Outstanding Graduate Award, Anhui Province — 2017
- UCLA-CSST Fellowship — 2016
- Hua Luogeng Mathematics Scholarship — 2015
- National Scholarship (top 2% of the department) — 2015 & 2016
- Gold Medal, International Genetically Engineered Machine (iGEM) — 2015
- First Prize, National College Student Mathematics Contest — 2014
- First Prize, China Mathematical Olympiad, Hubei Province — 2012
- Silver Medal, China Girls' Mathematical Olympiad — 2011 & 2012

Services & Activities

Reviewer for *Annals of Statistics*

Session chair, INFORMS Annual Meeting 2022

- General session: Learning and Optimization in Pricing

Departmental service

- Signatory committee member, IEOR graduate student organization — 2020
- Panelist, IEOR information session for prospective students — 2021
- Volunteer, IEOR new student orientation — 2019, 2021 & 2022

Mentorship

Co-mentor (with Zuo-Jun Max Shen) for Vishrut Rana (B.S. '22 IEOR) exploring the literature on car-sharing services and revenue management — 2020 – 2021

Computer Skills

Python, R, MATLAB, AMPL, Gurobi, SQL

Rich experience dealing with real data from industry

Personal Information

Languages: English (fluent), Chinese (native)

Extracurricular activities: cat-sitting, cooking, hiking, tennis, traveling

Pronouns: she/her/hers