MENGXIN WANG

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Education

University of California, Berkeley — Berkeley, CA
Ph.D in Industrial Engineering and Operations Research — *May 2023 (Expected)*
Minor in Statistics and Machine Learning
Advisor: Dr. Zuo-Jun (Max) Shen

University of California, Berkeley — Berkeley, CA
M.S in Industrial Engineering and Operations Research — *May 2018*

Tsinghua University — Beijing, China
B.Eng in Industrial Engineering (*Summa Cum Laude*; Rank: 1/71) — *June 2017*

Honors and Awards

IEOR Faculty Fellowship — 2022

The IEOR Faculty Fellowship is the highest graduate student award in the department given each year to recognize one student for their overall academic excellence and leadership.

Teaching Effectiveness Award — 2022

This award recognizes the teaching ideas of up to 14 Outstanding Graduate Student Instructors (GSIs) each year across UC Berkeley.

Outstanding Graduate Student Instructor Award — 2021

This award honors UC Berkeley GSIs each year for their outstanding work in teaching on the Berkeley campus.

Graduate Remote Instruction Innovation Fellowship — 2021

A fellowship of $2,000 intended for students at UC Berkeley to develop high-quality approaches for remote instruction of spring and summer 2021 courses.

IEOR Department Award — 2017-2020
Graduate Division Block Grant Award — 2017
Beijing Outstanding Graduate — 2017
University Outstanding Graduate — 2017
Boeing Fellowship — 2016
Science and Technology Innovation Fellowship — 2016
Academic Excellence Fellowship — 2015-2016
Tsinghua-Changhong Fellowship — 2014

Research Interests

Algorithm design and data analytics for digital business, with applications in the online marketplace, digital supply chain, and intelligent logistics systems; Machine learning methods and their applications in operations research.

Publications

Journal Papers

1. "Joint Product Design and Dynamic Assortment Optimization: Integrating Strategic and Tactical Revenue Management." 2022. Major Revision at *Management Science*.
   Finalist, Jeff McGill Student Paper Award, 2022
   (with Paat Rusmevichientong, Heng Zhang, Zuo-Jun Max Shen)
2. "Content Promotion for Online Content Platforms with Diffusion Effect." 2021. Major Revision at *Manufacturing & Service Operations Management*.
   Best Student Paper of Social Media Analytics, 2022 (Primary Awardee: Yunduan Lin)
   (with Yunduan Lin, Heng Zhang, Renyu Zhang, and Zuo-Jun Max Shen)
3. "Urban Courier: Operational Innovation and Data-driven Coverage-and-Pricing." 2020. Submitted to *Manufacturing & Service Operations Management*.
   (with Meng Qi, Junyu Cao, and Zuo-Jun Max Shen)
4. "Modeling and Analysis of the Waiting Time of Rapid Response Process in Acute Care." 2018. *IEEE Robotics and Automation Letters*.
   (with Nan Chen, Xiaolei Xie, Li Zheng, and Colleen H. Swartz)

Workshop

1. "Smart Feasibility Pump: Reinforcement Learning for (Mixed) Integer Programming." 2021. ICML 2021 RL for Real Life Workshop.
   Selected for Spotlight Talk
   (with Meng Qi and Zuo-Jun Max Shen)

Book Chapter

1. "Online Retailing Inventory Management." 2021. Invited book chapter for *Research Handbook on Inventory Management*.
   (with Zuo-Jun Max Shen)

Work-in-Progress

1. "From Customer Data to Product Design: A Statistical Learning Framework." 2022. Target Journal: *Management Science*.
   (with Meng Qi and Zuo-Jun Max Shen)

Professional Experience

Uber *June 2020 - August 2020*
Data Science Intern @ Eats Pricing Team

- Worked on demand modeling and delivery fee optimization based on large-scale pricing data
- Proposed and implemented a delivery fee optimization framework to allocate a budget of $20m for boosting business. This framework was launched in the U.S. market in 2020 Q3 onwards.
- Developed an automated pipeline integrating data analysis, modeling, and optimization

Teaching Experiences

Co-instructor
IEOR 253/CEE 258: Supply Chain and Logistics Management (Spring 2021)
Teaching evaluation: 4.75/5.00 (IEOR 253, Department average: 4.22), 5.00/5.00 (CEE 258)

– PhD/MS core course covering fundamental and selected state-of-the-art topics on supply chain and logistics management

Graduate Student Instructor
IEOR 242: Applications in Data Analytics (Spring 2019, Fall 2019, Fall 2020)

– MEng core class (with 120+ students) covering theory and practical techniques of data analytics
– Held weekly discussion sessions and office hours
– Mentored more than 40 student projects on data analytics applications

Reader
IEOR 172: Probability and Risk Analysis for Engineers (Fall 2018)

– Supported 70+ undergraduate students with fundamental topics of probability theory; graded homework and held weekly office hours

Contributed and Invited Talks

Urban Courier: Operational Innovation And Data-driven Coverage-and-pricing

– *INFORMS Annual Meeting*, Seattle, WA, 2019
– *INFORMS Annual Meeting* (virtual), 2020
– *International Symposium on Transportation Data and Modelling (ISTDM)*, 2021

Smart Feasibility Pump: Reinforcement Learning for (Mixed) Integer Programming

– *ICML 2021 RL for Real Life Workshop Spotlight Talk* (virtual), 2021

Joint Product Design and Dynamic Assortment Optimization: Integrating Strategic and Tactical Revenue Management

– *POMS Annual Conference* (virtual), 2022
– *INFORMS Revenue Management and Pricing (RMP) Section Conference* (virtual), 2022

Academic Service

Reviewer

– Management Science
– NeurIPS 2022 Workshop on RL for Real Life
– NeurIPS 2022 Workshop on Progress and Challenges in Building Trustworthy Embodied AI

Session Chair

– "Innovation and algorithm advances in online marketplace", INFORMS, 2022

Computing

Python, R, SQL, Matlab, Gurobi, Tensorflow, PyTorch