

# SHUO SUN

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## EDUCATION

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### University of California, Berkeley

08/2021 – Current

Ph.D. Candidate in Industrial Engineering and Operations Research (Minor: Theoretical Statistics & Algorithm Design).

Advisors: Zuo-Jun Max Shen & Rajan Udawani

### Tsinghua University

08/2016 – 07/2021

B.Eng. in Industrial Engineering.

### University of Wisconsin-Madison

08/2019 – 12/2019

Exchange Student

## INDUSTRY EXPERIENCE

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### Amazon, Seattle, WA

05/2024 – 08/2024

Applied Scientist Intern at Fashion, Fitness & Creators

## PREPRINTS/WORKING PAPERS

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1. A Unified Algorithmic Framework for Dynamic Assortment Optimization under MNL Choice [link]  
Shuo Sun, Rajan Udawani, Zuo-Jun Max Shen  
Major revision in **Operations Research**  
2025 ACM Conference on Economics and Computation [link]  
Finalist for the 2024 INFORMS RMP Jeff McGill Student Paper Award
2. JD.com Improves Fulfillment Efficiency with Data-driven Integrated Assortment Planning and Inventory Allocation  
Zuo-Jun Max Shen, Shuo Sun, Yongzhi Qi, Hao Hu, Ningxuan Kang, Jianshen Zhang, Xin Wang, Xiaoming Lin  
Accepted by **INFORMS Journal on Applied Analytics**  
Winner of the 2024 INFORMS Daniel H. Wagner Prize [link]
3. A Markovian Approach for Cross-Category Complementarity in Choice Modeling  
Shuo Sun, Rajan Udawani, Omar El Housni  
Manuscript in Preparation

## PUBLICATIONS

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1. Online MDP with Prototypes Information: A Robust Adaptive Approach [link]  
Shuo Sun, Meng Qi, Zuo-Jun Max Shen  
**Proceedings of the AAAI Conference on Artificial Intelligence, 39(19), 20717-20724.**
2. A Unified Algorithmic Framework for Dynamic Assortment Optimization under MNL Choice  
Shuo Sun, Rajan Udawani, Zuo-Jun Max Shen  
Extended abstract in **Proceedings of the 26th ACM Conference on Economics and Computation (EC '25), 789. <https://doi.org/10.1145/3736252.3742628>**

## HONORS & AWARDS

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- Winner, 2024 INFORMS Daniel H. Wagner Prize

10/2024

- Finalist, 2024 INFORMS Jeff McGill Student Paper Award 10/2024
- IEOR Ph.D. First-year Fellowship 2021–2022
- Outstanding Graduate, Tsinghua University 06/2021
- Finalist, INFORMS Undergraduate OR Prize 10/2020
- China National Scholarship (Top 1%) 11/2019

## TEACHING EXPERIENCE

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- Graduate Student Instructor, Supply Chain & Logistics Management 2024 Spring
- Graduate Student Instructor, Optimization Analytics 2022 Fall, 2023 Fall
- Graduate Student Instructor, Economics of Supply Chains 2023 Spring, 2025 Spring

## OTHER EXPERIENCE

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- Member, Berkeley IEOR Grad Student Services Leadership Group Since 2024
- Panelist, Berkeley IEOR PhD Visiting Day 2023, 2024
- Panelist, Berkeley IEOR PhD Orientation Day 2022