Yating Zhang

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RESEARCH INTERESTS

At the intersection of data-driven retail operations, consumer choice modeling, and global optimization, with an emphasis on developing exact solution methods for assortment planning under consumer choice behavior

EDUCATION

Shanghai Jiao Tong University　　　　　　　　　　　　　　　　Shanghai, China
Ph.D. in Management Science, Antai College of Economics and Management　　　2020 - 2026
Advisors: Prof. Huan Zheng, Prof. Taotao He

University of Toronto　　　　　　　　　　　　　　　　　　　　Toronto, Canada
Visiting Ph.D. Student, Rotman School of Management　　　　　　　　　　　2023 - 2024
Host: Prof. Ningyuan Chen

Tongji University　　　　　　　　　　　　　　　　　　　　　　Shanghai, China
B.Sc. in Information Systems and Management, School of Economics and Management　　2016 - 2020

RESEARCH PAPERS

Assortment Optimization Under History-Dependent Utility [Link]

　with Taotao He and Huan Zheng

　Accepted to *Operations Research* subject to a voluntary code and data review

Strong Formulations for Logit-based Multi-Purchase Behavior and Applications

　with Taotao He and Zhongqi Wu

　Soon submitted to *Operations Research*

Joint Ranking and Assortment Optimization under Order-Dependent Choice Model

　with Taotao He and Huan Zheng

　Work in progress, to be submitted to *Management Science*

Network Revenue Management Under Regime Switching Demand

　with Ningyuan Chen and Huan Zheng

　Work in progress

Revisiting Random Utility Model Under a Multilinear Optimization Lens

　with Taotao He and Huan Zheng

　Work in progress

Data-Driven and People-Centric Operations: Research Opportunities in Retail Operations [Link]

　with Yuanzheng Ma and Huan Zheng

　Published at *Fundamental Research*, 2025

INDUSTRY PROJECTS

SmartCater: Intelligent Menu Planning (Sovel Co.)   2021-2022

Analyzed consumer choices using cafeteria transaction data, and investigated the multi-period menu planning problem considering consumer satiation behavior and operational constraints. Developed a randomized policy for industry implementation. Motivated a history-dependent choice model presented in a manuscript currently under review at *Operations Research*.

Decoding Demand: The Impact of Product Line Tiers (Jianzhijia Pharmacy)   2025

Analyze consumer choice using multi-store transaction and product line data. Estimate how product line tiers affect demand and provide insights for assortment and product line design. Motivate an order-dependent choice model in a joint optimization framework presented in a working paper.

TEACHING ASSISTANT

Modeling and Optimization (Undergraduate, AM360, SJTU)   Fall 2020, 2021, 2022

- Topic: data analytics, modeling, and optimization tools for business decision-making

- Designed assignments, the final project, and a lecture on column generation and delivered a lecture on Python programming and Gurobi implementation

Optimization Methods for Economics (Undergraduate, EC200, SJTU)   Spring 2021

- Topic: fundamental optimization models and tools motivated by economic applications

- Evaluated assignments and provided support for Julia coding tasks

HONORS & AWARDS

ISCOM Best Paper Award Competition, Third Place	2024
Outstanding Graduate Award, Tongji University	2020
National Scholarship, Tongji University	2019
Outstanding Student Leader Award, Tongji University	2019
First-Class Scholarship for Outstanding Students, Tongji University	2017, 2018

FUNDINGS

User Behavior and Algorithm Design in Online Transaction Platforms (Participant)

- Funded by the National Natural Science Foundation of China (No.72231003)

CONFERENCE PRESENTATIONS

Strong Formulations for Logit-based Multi-Purchase Behavior and Applications

- The 16th POMS-HK International Conference (scheduled)	Jan. 2026
- INFORMS Annual Meeting, Atlanta	Oct. 2025

Assortment Optimization Under History-Dependent Utility

- The POMS International Conference in China	Jul. 2025
- The 15th POMS-HK International Conference	Jan. 2025
- INFORMS Revenue Management and Pricing (RMP) Section Conference	Jul. 2024
- INFORMS Annual Meeting, Arizona	Oct. 2023
- The 15th International Annual Conference of the Chinese Scholars Association for Management Science and Engineering (CSAMSE)	Jul. 2023

SERVICE

Reviewer for Journal of Systems & Management

Coordinated one-to-one student-speaker meetings for Antai seminars   Spring 2023

REFERENCES

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