

# Yating Zhang

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## RESEARCH INTERESTS

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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

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**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

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**Assortment Optimization Under History-Dependent Utility** [Link]

with Taotao He and Huan Zheng

*Operations Research* (Minor revision)

**Strong Formulations for Logit-based Multi-Purchase Behavior**

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

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**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

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**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

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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

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

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

## CONFERENCE PRESENTATIONS

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**Strong Formulations for Logit-based Multi-Purchase Behavior**

- INFORMS Annual Meeting, Atlanta (scheduled) 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

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Reviewer for Journal of Systems & Management

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

Spring 2023

## REFERENCES

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### **Huan Zheng**

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### **Ningyuan Chen**

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