

Lan Wu

Email:  Phone: +65 80390542

Research Interests

My research studies operational bottlenecks in revenue-generating decision systems. I develop learning, optimization, and modeling frameworks for settings where classical pricing, revenue management, and choice models break down because firms face menu-dependent choice, customer lifecycle effects, finite memory, perception-based competition, or context-dependent outside options. My work combines theoretical guarantees with empirical and industry-grounded validation in airlines, retail, mobility platforms, and online marketplaces.

Education

- Ph.D. in Analytics and Operations, National University of Singapore, 2021–2026
 - *Supervisor: Prof. Chung-piaw Teo, Prof. Xiaobo Li*
- Visiting Student, Columbia University, September–December 2024
 - *Host Professor: Prof. Will Ma*
- B.Eng. in Electronics Information, The Chinese University of Hong Kong (Shenzhen), 2017–2021

Research

- Published Journal articles

- Unmanned Aerial Vehicle (UAV)-Assisted Path Planning for Unmanned Ground Vehicles (UGVs) via Disciplined Convex-Concave Programming, with Guanchong Niu, Yunfan Gao, Man-On Pun. [\[PDF\]](#) (Published in IEEE Transactions on Vehicular Technology, 2022.)

- Working papers

- Adaptive Learning to Prevent Spiral-Down in Branded-Fare Revenue Management, with Changchun Liu, Chung-piaw Teo, Xun Zhang. [\[PDF\]](#) (R&R at the *Journal of Operations Research*.)
- Pricing Under Static Tariffs: A Lifecycle Approach to Platform Revenue Management, with Junhong Chu, Xiaobo Li, Yinuo Lin, Chung-piaw Teo. [\[PDF\]](#) (Submitted to MSOM)
- Subset Selection via Perspective Reformulation, with Changchun Liu, Wei Qi, Chung-Piaw Teo. [\[PDF\]](#) (Submitted to OR)
- Multi-Product Pricing in Competition: A Convex Reformulation of the Price Image Effect, with Changchun Liu, Chung-Piaw Teo. (Plan to submit to MSOM in June 2026)
- Optimal Promotional Cycles under Finite Customer Memory, with Weiguang Liu, Will Ma, Chung-Piaw Teo. (Plan to submit to OR in June 2026)

- Ongoing Projects

- Agoda Figure Ranking Project, with Yifan Feng, Chung-Piaw Teo.

Experiences

- Assistant Researcher, Shenzhen Research Institute of Big Data, CUHK(SZ), September 2026
- Guest Lecturer, Engineering Systems and Design, SUTD, May–August 2025
- Research Intern, SLA-NUS Digital Aviation Corporate Laboratory, May–August 2024
- Pricing Intern, Neuron Mobility, May–August, 2023

Teaching and Activities

- Adjunct Lecturer

- Singapore University of Technology and Design
 - Undergraduate Course 10.022 Modeling Uncertainty (Outstanding Teaching Award), Summer 2024
- National University of Singapore
 - Undergraduate Course DAO1704 Decision Analytics using Spreadsheets, September 2022

- Teaching Assistant

- National University of Singapore
 - Master Course IE5604 Practical Deep Learning Methods for Decision Making, 2025
 - PhD Course BDC6302 Discrete Optimization and Algorithms, 2024
 - EMBA Course BME5040 Business Analytics and Decision Making, NUS EMBA Course, 2022, 2025, 2026
 - Undergraduate Course DBA4813 AI Strategies in Business, 2024
 - Master Course LI5202 Supply Chain Management Strategies and Case Studies, 2023
- The Chinese University of Hong Kong, Shenzhen
 - Undergraduate Student Teaching Fellows for Physics Laboratory and C++, 2019–2021

- Conferences

- Operations Research China Society Workshop, Shenzhen, 2026
- Informs Annual Meeting, Phoenix/Seattle/Atlanta, 2023–2025
- MSOM Conference, Minnesota/London, 2023–2024
- POMS HK, Hong Kong/Shenzhen, 2025–2026
- Analytics for X Workshop, NUS, 2025
- Informs International Conference, Singapore, 2025
- POMS, Atlanta, 2025

Scholarships and Prizes

- Operations Research China Society Best Student Poster Award, 2026; Operational Research Society of Singapore (ORSS) Best Student Paper Contest —Finalist (Top 2), 2025; Outstanding Teaching Award, Singapore University of Technology and Design, 2025; First Prize in Neuron Global Hackathon, 2022; NUS Research Scholarship, 2021–2026; Outstanding Graduate Award of Muse College, CUHKSZ, 2021; Dean List, CUHKSZ, 2017–2021; Undergraduate Student Research Scholarship, 2018–2021; Excellent Student Award, CUHKSZ, 2019; The Consortium for Mathematics and Its Application: Meritorious Winner, 2019; Bowen Scholarship, CUHKSZ, 2017–2021; Exchange Scholarship for CMU Summer Research Program, CUHKSZ, 2020; Whole-person Development Scholarship, Muse College, CUHKSZ, 2020.

Professional Services

- **Student co-chair** for NUS Analytics for X workshop 2024.
- **Session chair** in INFORMS Annual Meeting (Revenue Management) 2025
- **Livestream Program Host and Coordinator, China “运筹OR帷幄”| 2025–Present.** Hosted and coordinated academic livestreams featuring leading scholars, including Prof. Ningyuan Chen, Prof. Pin Gao, and Prof. Guodong Lv. Broadcast simultaneously on Bilibili, WeChat Official Accounts, and other online platforms, reaching audiences of over 1,000 viewers. Contributed to academic outreach and knowledge exchange within one of China’s largest operations research communities.

References

Professor Chung-Piaw Teo

Department of Analytics & Operations, Business School, National University of Singapore

Email: bizteocp@nus.edu.sg

Associate Professor Xiaobo Li

Department of Industrial Systems Engineering and Management, Engineering School, National University of Singapore

Email: iselix@nus.edu.sg

Professor Junhong Chu

Marketing Department, Business School, Hong Kong University

Email: junhong.chu@gmail.com

Associate Professor Will Ma

Decision, Risk, and Operations, Graduate School of Business, Columbia University

Email: willma353@gmail.com