Xinyi Zhou

Contact Information

Email: xinyi.zhou@connect.ust.hk Tel: +852-96765701
Personal Website: https://xin-yi-zhou.github.io/ +86-13926599185

Education

The Hong Kong University of Science and Technology *Sept 2023-Jun 2026 (Expected)*
Ph.D. Candidate in Operations Management, HKUST Business School *Hong Kong*

The Hong Kong University of Science and Technology *Aug 2021-Aug 2023*
M.Phil. in Operations Management, HKUST Business School *Hong Kong*
High pass in 2/2 subjects in the Ph.D. Qualifying Exam
Master's Thesis: Quality and Welfare Implications of Product Traceability in Supply Chain

Renmin University of China (985, 211) *Sept 2017-Jun 2021*
B.Sc. in Physics, School of Science *Beijing*
GPA: 3.56/4.00 (87.3/100)
Science Experimental Program (an elite program for students with national competition awards in *mathematics, physics, and computer science*)
Undergraduate Thesis: From Topological Bands of Fermions to Quantum Magnetism: Variational Monte Carlo Phase Diagram of the $S = 1$ Spin Chain

Journal Publication

1."Navigating Traceability: How Pricing and Responsibility Sharing Impact Quality and Welfare", with Lijian Lu and Ruxian Wang (Forthcoming in *Production and Operations Management*, https://ssrn.com/abstract=4101172)
Abstract: Developed a multi-agent game-theoretic model showing that under multinomial logit (MNL) market share allocation, the impact of traceability on product quality and supply chain welfare depends on pricing power and responsibility allocation. Identified the conditions under which traceability improves quality and benefits buyers or suppliers.
Conference Presentations:
- Honorable Mention in the Best Student Paper Competition, POMS-HK, 2023
- POMS-China, 2022
- INFORMS Annual Meeting, 2021

Working Paper

1."Oligopolistic Competition in Online Marketplaces: The Roles of Business Models", with Lijian Lu and Guillermo Gallego (https://ssrn.com/abstract=4422808)
Abstract: Developed a supply function competition framework to analyze selling formats in a two-sided marketplace. Showed that a contribution-based model is the unique equilibrium and the only format that achieves the first-best coordinated outcome. Proposed a variant that provides a stable, economical, coordinated, and individually aligned outcome for all firms.
Conference Presentations:
- POMS-HK, 2025
- CSAMSE, Xiamen, 2024
- CSAMSE, Shenzhen, 2023
- MSOM Conference, Montreal, 2023
- POMS-HK, 2023

Work in Progress

1."Tax Relief or Public Belief: CSR-Induced Consumer Segmentation with Tax Incentives", with Lijian Lu and Ruxian Wang (Manuscript in Preparation)
Abstract: Developed a product-line model to analyze the interaction of CSR, quality differentiation, and tax policy under heterogeneous consumer expertise. Identified conditions under which firms strategically increase CSR, raise prices, shift toward premium-focused strategies, and improve profits. Showed that CSR tax deductions can benefit firms, consumers, and governments, depending on decision power.
Conference Presentations:
- INFORMS Annual Meeting, Atlanta, 2025
- MSOM Conference, London, 2025 (poster)
- POMS-HK, 2025
- INFORMS Annual Meeting, Seattle, 2024
- CSAMSE, Xiamen, 2024

2."Improving Product Quality in Presence of Spillover Effects: Adopting Traceability or Inspection", with Lijian Lu and Ruxian Wang (Manuscript in Preparation)
Abstract: Developed a Stackelberg game-theoretic model to study traceability and quality inspection in a supply chain with competing suppliers and spillover effects. Showed that traceability can either improve or reduce equilibrium quality depending on inspection intensity, spillover, and quality costs. Identified pricing and cost conditions under which traceability yields win-win outcomes for supply chain members.

3."Penalty Allocation under Traceability Adoption", with Lijian Lu and Ruxian Wang (Work in Progress)

Teaching Experiences

1.Instructor

- ISOM 2700 Operations Management, 3 credits
  UG Course, Class size: 37
  Teaching evaluation: 4.0/5.0 *25 Summer*

2.Teaching Assistant

- ISOM 5800 Business Modeling, 1 credit
  Instructor: Prof. Hongtao Zhang
  MBA Course, Class size: 48, 49, 52, & 20 *22 Spring, 22 Fall, 23 Spring & 23 Fall*

Professional Experiences

1.Ad Hoc Reviewer:

- *Manufacturing & Service Operations Management*

2.Internships:

- Research Assistant, Financial Engineering Group, China Securities Co., Ltd.
  Modeler & research report author *Sept 2020-Dec 2020*
- Quantitative Research Intern, Makers Venture Capital *Jan 2020-Mar 2020*

Selected Awards and Honors

Research Postgraduate Top-Up Award *Sept 2023-Aug 2026*
HKUST RedBird PhD Scholarship *May 2023*
Honorable Mention in the Best Student Paper Competition, POMS-HK *Jan 2023*
HKUST Postgraduate Studentship *Sept 2021-Aug 2026*
Outstanding Graduates of Renmin University of China *Jun 2021*
Excellent Graduate Thesis of Renmin University of China ($\leq$5%) *Jun 2021*
First Class Scholarship for Study Progress *Dec 2020*
First Prize of National University Student Computer Skills Application Competition (in C++ Group, 5%) *Jul 2020*
Outstanding Community Backbone Second-class Scholarship (0.2%) *Dec 2019*
China High School Physics Olympiad (CPhO), Provincial, Third Prize *Oct 2016*
China High School Mathematical Olympiad (CMO), Provincial, Third Prize *Sept 2016*
China High School Biology Olympiad (CHSBO), Provincial, Second Prize *May 2016*

Computer Skills

MATLAB (proficient), Mathematica (proficient), C++, Python, R, Fortran, LaTeX, LabVIEW, Origin, Photoshop, Linux

English Proficiency

GRE 333/340 (Quantitative 170/170, Verbal 163/170, Analytical Writing 4.5/6.0),
IELTS 7.0/9.0 (Listening 7.5/9.0, Reading 8.0/9.0, Writing 6.0/9.0, Speaking 6.0/9.0)

References

Prof. Lijian Lu (Supervisor)
Assistant Professor of Operations Management
School of Business and Management
The Hong Kong University of Science and Technology
Clear Water Bay, Kowloon, Hong Kong
lijianlu@ust.hk
(+852)3469-2866

Prof. Ruxian Wang (Co-author)
Professor of Operations Management
Carey Business School
Johns Hopkins University
Baltimore, MD 21200, USA
ruxian.wang@jhu.edu
(+1)202-650-6020

Last updated on April 6, 2026