# Mingrui (Ray) Zhang

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**EDUCATION** 

#### University of Washington, Michael G. Foster School of Business

June 2024 (Expected)

Doctor of Philosophy in Business Administration, Operations Management

Minors: Information Systems, Economics

Research Methods Advisors: Yong Tan, Shi Chen

### Columbia University in the City of New York

Dec 2018

Master of Arts in Economics

GPA 3.80/4.00

## University of Illinois at Urbana-Champaign

May 2017

Bachelor of Science in Mathematics and Economics Major GPA: 3.92/4.00

Graduated with High Distinction in Mathematics and Distinction in Economics

RESEARCH

#### **Research Focus**

**INTERESTS** 

E-commerce, Consumer Behaviors, Crowdfunding, Fin-tech

#### Methodology

Game-theoretical Model, Econometrics, Economic Theories, Causal Inference, Large Language Models, Machine Learning

RESEARCH EXPERIENCE

#### **Research Papers**

- "Harnessing Tensor Completion with Geo-location: Impacts of Smart Vending Machines in Urban Landscapes" (with Wanning Chen, Yong Tan, Xusen Cheng)
   Working Paper
- "Investor Learning in Crowdfunded Supply Chain Finance Markets" (with Zhijin Zhou, Shengsheng Xiao, Yi-Chun (Chad) Ho, Yong Tan)

Under major revision at Production and Operations Management

- "Frenemies in the Retail Market: A Partnership Between a Physical Retailer and an E-tailer for Consumer Returns" (with Lin Hao, Shi Chen, Yong Tan)
  - Preparing for journal submission
- "When to Disclose Product Quality under Online Reviews?" (with He Huang, Yufeng Yang, Hongyan Xu, Tingting Nian)

Preparing for journal submission

 "Information Leakage Prior to SEC Form Filings—Evidence from TAQ Millisecond Data" (with Steven Wei Ho, Weiting Hong)

Working Paper

- "The Gamer-Developer Feedback Loop: Navigating Review Dynamics in Digital Marketplaces" (with Yingda Lu)
   Ongoing Project
- "Contract Design for Cloud Services with Privacy and Security Concerns" (with Hongyan Xu, Ying Wang, Shi Chen)
   Ongoing Project

CONFERENCES PRESENTATIONS • "Contract Design for Cloud Services with Privacy and Security Concerns" 33rd Annual POMS-Conference

May 2023

• "Uncovering Demand Information and Consumer behaviors — Evidence from Vending Ma-

chine Transactions"

2022 INFORMS Annual Meeting Indianapolis

October 2022

• "Frenemies in Retail Markets: Brick-and-Mortar Retailer's Partnership with Online Retail Platforms on Consumer Return"

2020 Conference on Information Systems and Technology Virtual November 2020

"Information Leakage Prior to SEC Form Filings—Evidence from TAQ Millisecond Data"
 American Finance Association 2020 Annual Meeting San Diego January 2020

AWARDS AND HONORS ISOM Outstanding Teaching Award, UW Foster Richard B. Peterson Ph.D. Fellowship, UW Foster Michael G. Foster Students First Scholar, UW Foster Edmund J James Scholar, UIUC Dean's List, UIUC 2022 2020 & 2021 2019 & 2022

FA 13/15/16 SP 16

2014-2017

## RESEARCH HIGHLIGHTS

- Investors in crowdfunded SCF adjust their views on guarantor reliability from loan repayments and act accordingly. This perception impacts investor reactions to factors like interest rate, affecting market efficiency and fundraising success.
- Retailer-e-tailer partnerships can reduce competition when return handling and offline shopping costs hit specific thresholds. This reduced competition might lower consumer surplus, disadvantaging consumers.
- With clearer online reviews, firms lean towards disclosing product quality due to changing consumer behavior. The firm's selling scheme choice hinges on factors like commission rates, with a bias towards quality disclosure.
- There's evident information leakage around SEC filings, with stocks that surge before filing releases also rising post-release, and vice versa for declines. These price shifts aren't due to momentum or past SEC technical issues, highlighting a new, previously unexplored 30-minute trend.

ACADEMIC SERVICE Session Co-Chair for 33rd Annual POMS-Conference Journal Reviewer for Production and Operations Management Conference Reviewer for ICIS, CIST, CSWIM

#### PHD

#### **Information Systems**

Coursework

Advanced Research Topics in Information Systems I
 Topics: (Latent) Instrumental Variables, Discrete Choice Models, Bayesian Learning, Hidden Markov Models

Advanced Research Topics in Information Systems III

Debabrata "Deb" Dey

## Topics: Digital Piracy, Economics of Information Systems

#### **Operations Management**

Stochastic Process

Foad Iravani

Topics: Renewal Theory, Discrete & Continuous time Markov chains, Stochastic Dominance

• Stochastic Models and Queuing

Kamran Moinzadeh

Topics: Deterministic Queues, Bounds and Approximations, Networks, Series & Cyclic Queues, Stochastic Simulation

• Advanced Topics in Inventory Management

Kamran Moinzadeh

Topics: Period Review Models/Lot Sizing/Just in Time Systems, Contracts and Channel Coordination, Multi-Echelon Inventory Systems

## **Economics & Econometrics & Statistics**

Microeconomics I	Quan Wen
Microeconomics II	Xu Tan and Jacques Lawarree
Microeconomics III	Jacques Lawarree
Econometrics I	Thomas Richardson
Econometrics II	Jing Tao
Econometrics III	Eric Zivot
Empirical Industrial Organization	Yuya Takahashi
Design and Analysis of Experiments	Tim Skalland

## **Computer Science**

Machine Learning Kevin Jamieson Interactive Learning Kevin Jamieson

## COURSES As Teaching Assistant

COCHDED	120 10000000000000000000000000000000000	
TAUGHT	TMMBA 516 Operations And Supply Chain Management (4.7/5)	AU 2021/22
	QMETH 510 Probability And Statistics (4.6/5)	AU 2021/22 & WI 2022/23
	SCM 512 Spreadsheet Modeling For Business Enterprise (4.8/5)	SU 2022
	SCM 501 Probability And Statistics (4.6/5)	SU 2022
	SCM 520 Forecasting, Inv. Management, And Supply Chain Analy	ytics (4.7/5) WI 2022/23
	EMBA 510 Statistics For Management	SP 2022
	BUS AN 512 Data Management And SQL	SU 2021
	IS 300 Intro to Information Systems	SP 2021
	QMETH 500 Statistical Data Analysis For Management	WI 2021
	OPMGT 565 Business Analytics-Tools For Big Data	AU 2020
	SCM 530 Managing And Mining Big Data	AU 2020
	QMETH 201 Introduction To Statistical Methods	WI 2020 & SP 2020

## PROFICIENCIES Skills

Python, R, SAS, SQL, LATEX, Stata, Mathematica, Maple, Microsoft Office

## Languages

English (fluent), Chinese (native)