# Qiyuan Chen

PhD Candidate, Industrial & Operations Engineering, University of Michigan, Ann Arbor cqiyuan@umich.edu — +1 (734) 210-8560 — Google Scholar — Home Page

#### RESEARCH INTERESTS

Methodologies: collaborative decision-making, knowledge Integration, blackbox optimization, experimental design, ... Applications: smart manufacturing, healthcare, financial markets, energy, ...

### **EDUCATION**

University of MichiganAnn Arbor, USAPhD Candidate in Industrial & Operations EngineeringJan. 2023 — PresentMaster of Science in Engineering in Industrial & Operations EngineeringSept. 2020 — April 2023Master of Arts in Applied EconomicsSept. 2021 — April 2023

University of Pittsburgh

Bachelor of Science in Industrial Engineering, minor in Economics

Pittsburgh, PA Sept. 2018 — April 2020

Sichuan University

Bachelor of Engineering in Industrial Engineering

Chengdu, China Sept. 2016 — June 2020

### PUBLICATIONS AND PREPRINTS

#### Journal papers under submission

[J8: Operations Research submission] Chen, Q., & Al Kontar, R. "Online Learning of Optimal Sequential Testing Policies," Under Review at Operations Research

#### Journal papers

[J7: Technometrics] Chen, Q., & Al Kontar, R. (2025). "The Traveling Bandit: A Framework for Bayesian Optimization with Movement Costs," *Technometrics*, 1–12.

[J6: Technometrics] Chen, Q., Jiang, L., Qin, H., & Al Kontar, R. (2024). "Multi-agent collaborative Bayesian optimization via constrained Gaussian Processes." *Technometrics*, 67(1), 32-45.

[J5: IJDS] Chen, Q., Al Kontar, R., Nouiehed, M., Yang, X. J., & Lester, C. (2024). "Rethinking cost-sensitive classification in deep learning via adversarial data augmentation." INFORMS Journal on Data Science, 4(1), 1-19.

[J4: JMIR] Tsai, C.-C., Kim, J. Y., Chen, Q., Rowell, B., Yang, X. J., Al Kontar, R., Whitaker, M., & Lester, C. (2025). "Effect of artificial intelligence helpfulness and uncertainty on cognitive interactions with pharmacists: Randomized controlled trial." Journal of Medical Internet Research, 27.

[J3: JMIR Human Factors] Kim, J. Y., Marshall, V. D., Rowell, B., **Chen, Q.**, Zheng, Y., Lee, J. D., Al Kontar, R., Lester, C., & Yang, X. J. (2025). "The effects of presenting AI uncertainty information on Pharmacists' trust in Automated Pill Recognition Technology: Exploratory mixed subjects study." *JMIR Human Factors*, 12.

[J2: JMIR Medical Informatics] Lester, C., Rowell, B., Zheng, Y., Co, Z., Marshall, V., Kim, J. Y., Chen, Q., Al Kontar, R., & Yang, X. J. (2025). "Effect of uncertainty-aware AI models on pharmacists' reaction time and decision-making in a web-based mock medication verification task: Randomized controlled trial." JMIR Medical Informatics, 13.

[J1: JMIR Formative Research] Zheng, Y., Rowell, B., **Chen, Q.**, Kim, J. Y., Al Kontar, R., Yang, X. J., & Lester, C. A. (2023). "Designing human-centered AI to prevent medication dispensing errors: Focus group study with Pharmacists." *JMIR Formative Research*, 7.

#### TEACHING EXPERIENCES

#### Instructor of Record

IOE 570: Experimental Design

Winter 2025

- Graduate-level course at the University of Michigan
- Topics include: linear models, hypothesis testing, model selection, ANOVA, block designs, (fractional) factorial design, incomplete and unreplicated designs, surrogate modeling, black-box optimization, and robust parameter design.
- Overall teaching evaluations: 4.4/5; response rate: 90% (63/70)

Qiyuan Chen December 7, 2025

### Graduate Student Instructor and Teaching Assistant

IOE 265: Probability and Statistics for Engineers

Fall 2022

- Undergraduate-level core course at the University of Michigan
- Graded homework and held office hours
- Teaching Evaluations: 4.4/5; response rate: 41% (53/129)

ENGR 0020: Probability and Statistics for Engineers

Fall 2019

- Undergraduate-level core course at the University of Pittsburgh.
- Graded homework and held office hours

### Vocational Teacher

Machine Learning in Python
Introduction to Investment Banking
Summer 2020

### FELLOWSHIP and AWARDS

IOE Bonder fellowship for dissertation research in applied OR at the University of Michigan	2023
Rackham conference travel grant at the University of Michigan	2023 - 2025
Outstanding graduates at Sichuan University	2020
Allias/Holzman teaching fellowship at the University of Pittsburgh	2019
Dean's honor list at the University of Pittsburgh	2018, 2019
Dean's list at Sichuan University	2016, 2017

### GRANT PROPOSAL

Contributed to proposal: NSF CDS&E: Collaborative Research: Digital Twin-Enabled Closed-Loop Discovery of Enhanced Interfacial Superconductivity. Budget: \$975,000; Period: 03/26–02/29; under submission.

# INDUSTRY EXPERIENCES

Investment banking intern, Guotai Junan Securities	Summer 2019
Management consulting intern, PwC Strategy&	Summer 2021

# **SERVICES**

IOE Graduate Student Coordinator	2024-2026
IOE Student Leadership Board	2024-2026
Michigan Student Symposium for Interdisciplinary Statistical Sciences (MSSISS) Student Organizing Committee	2024
Social Committee Chair for the INFORMS Student Chapter at the University of Michigan	2025
IOE Graduate Application Mentoring Program	2024

### JOURNAL RRFREE

Institute of Industrial and Systems Engineers (IISE) Transactions IEEE Transactions on Knowledge and Data Engineering (TKDE) The Engineering Economist