

WEILIANG (LEON) LIU

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ACADEMIC EMPLOYMENT

The Chinese University of Hong Kong

Assistant Professor, Systems Engineering and Engineering Management

November 2025 – Present

The University of Chicago

Principal Researcher, Booth School of Business

Mentor: Amy R. Ward

August 2024 – October 2025

EDUCATION

National University of Singapore

Ph.D. in Industrial Systems Engineering & Management

August 2020 – February 2025

Shanghai Jiao Tong University

B.E. in Industrial Engineering & Management

September 2016 – June 2020

SELECTED AWARDS

Finalist, INFORMS Service Science Best Cluster Paper (Winner TBA)	2026
National Semiconductor Golden Medal and Prize, National University of Singapore	2025
Finalist, POMS-HK Best Student Paper Competition	2025
Winner, INFORMS Society on Location Analysis (SOLA) Best Student Paper Competition	2023
Chinese Government Award for Outstanding Students Abroad	2021
President's Graduate Fellowship, National University of Singapore	2020 – 2024

RESEARCH INTERESTS

Modern service operations, operations research for social good, applied probability, data-driven decision making

PUBLICATIONS

[1] Location-Allocation of Emergency Service Systems in Light Traffic

Wang, X., Liu, W., Tang, L. & Ye, Z.

Accepted by **Operations Research**

[2] Data-Driven Matching for Impatient and Heterogeneous Demand and Supply

Liu, W., Ward, A., & Zhang, X.

Forthcoming at **Mathematics of Operations Research** (2026+)

[3] Robust Data-Driven Design of a Smart Cardiac Arrest Response System

Liu, W., Sun, Q., Tang, L. & Ye, Z.

Production & Operations Management (2026) Vol. 35, Issue 1

Winner, INFORMS Society on Location Analysis (SOLA) Best Student Paper Competition, 2023

[4] Expanding Service Capabilities Through an On-Demand Workforce

Sun, X. & Liu, W.

Operations Research (2025) Vol. 73, No. 1, pp. 363-384

[5] Energy-Aware and Delay-Sensitive Management of a Drone Delivery System

Liu, W. & Sun, X.

Manufacturing & Service Operations Management (2022) Vol. 24, No. 3, pp. 1294-1310

[6] Modeling and Optimization for Emergency Medical Services Network

Liu, R., Liu, W., Liu, Y., Pan, E. & Xie, X.

IEEE Transactions on Automation Science and Engineering (2022) Vol. 19, Issue 4, pp. 3520 - 3535

WORKING PAPERS

[7] Community Responder Crowdsourcing for Time-Critical Emergencies

Liu, W., Chan, T., Tang, L. & Ye, Z.

Major revision at **Operations Research**

Finalist, INFORMS Service Science Best Cluster Paper, 2026 (Winner TBA)

Finalist, POMS-HK Best Student Paper Competition, 2025

[8] Moving Lifelines: Fixed Sites or Mobile Fleets for Volunteer-Enabled Emergency Medical Device Delivery?

Lin, Z., Liu, W., Zhang, J., & Ong, EH M.

Under review

[9] AED-equipped Taxi Network Design for Cardiac Arrest Response

Yin, J., Ye, Z., & Liu, W.

RESEARCH VISITS

University of Toronto (Dept. of MIE)

August - December, 2023

Host Supervisor: Timothy C. Y. Chan

University of Florida (Dept. of ISE)

June - September, 2019

Host Supervisor: Xu Sun

ACADEMIC SERVICES

Communication officer and webmaster: INFORMS Applied Probability Society (APS)

Journal reviewer: Operations Research, Manufacturing and Service Operations Management, Production and Operations Research, Queueing Systems, Journal of Simulation

Conference reviewer or committee member: M&SOM (2025), ACM Conference on Economics and Computation (EC'26), NeurIPS Workshop on Machine Learning and Operations Research (NeurIPS ML X OR 2026)

Conference session chair: POMS-HK (2026)

Paper competition judge: INFORMS Public Sector Operations Research (PSOR) Best Paper Competition (2024, 2025)

INVITED TALKS

Data-Driven Matching for Impatient and Heterogeneous Demand and Supply

Stochastic Networks Conference Poster Session, Chicago, USA

June 2026

Data-Driven Techniques in Operations Research Workshop, Shenzhen, China

November 2025

BIRS Workshop: Dynamic Allocation and Matching, Banff, Canada

March 2025

The 15th POMS-HK International Conference, Hong Kong, China

January 2025

TTIC Summer Workshop on Data-Driven Decision Processes, Chicago, USA

August 2024

Reinforcement Learning for Stochastic Networks, Toulouse, France

June 2024

Community Responder Crowdsourcing for Time-Critical Medical Emergencies

INFORMS 2026 Service Science Best Cluster Paper Award Session, San Francisco, USA

November 2026

The 16th POMS-HK International Conference (Session Chair), Shenzhen, China

January 2026

INFORMS 2025 Annual Meeting, Atlanta, USA

October 2025

The 15th POMS-HK Best Student Paper Competition Session, Hong Kong, China

January 2025

INFORMS 2024 Annual Meeting, Seattle, USA

October 2024

Location-Allocation of Emergency Service Systems in Light Traffic

INFORMS 2026 Annual Meeting, San Francisco, USA

November 2026

The 16th POMS-HK International Conference, Shenzhen, China

January 2026

Expanding Service Capabilities Through an On-Demand Workforce

INFORMS 2023 Annual Meeting, Phoenix, USA

October 2023

The 4th SRSE International Conference

December 2022

Robust Data-Driven Design of a Smart Cardiac Arrest Response System

INFORMS 2023 SOLA Best Student Paper Competition Session, Phoenix, USA

October 2023

CSAMSE 2023 Annual Meeting (Session Chair), Shenzhen, China

July 2023

POMS 2023 Annual Meeting, Orlando, USA

May 2023

Energy-Aware and Delay-Sensitive Management of a Drone Delivery System

The 3rd SRSE International Conference

November 2021

TEACHING

The Chinese University of Hong Kong

SEEM3410: System Simulation and Modeling (Undergraduate core)

Fall of 2026

SEEM 3500: Quality Control and Management (Undergraduate elective)

Winter of 2026

The University of Chicago Booth School of Business

Bus 40110: Managing Service Operations (MBA, 80+ students in two sessions)

Winter of 2025

National University of Singapore

IE4213/EE4802: Learning from Data (Undergraduate, 60+ students)

Springs of 2021, 2022, 2023

IE5005: Data Analytics for Industrial Engineers (Master, 230+ students)

Falls of 2021, 2022

PERSONAL

Languages

Cantonese (native), Mandarin (native), English (fluent)

Hobbies

Ultimate frisbee, Tennis, traveling