

WEILIANG (LEON) LIU

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ACADEMIC EMPLOYMENT

The University of Chicago, Booth School of Business

August 2024 – Present

Principal Researcher

Supervisor: Amy R. Ward

EDUCATION

National University of Singapore

August 2020 – January 2025

Ph.D. in Industrial Systems Engineering & Management

Advisors: Loon Ching Tang and Zhisheng Ye

Shanghai Jiao Tong University

September 2016 – June 2020

B.E. in Industrial Engineering & Management

Upper-Level GPA: 90.69/100 (Ranked 2/52)

RESEARCH INTERESTS

Modern service operations, socially responsible operations, queuing control, data-driven decision making

PUBLICATIONS

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

Sun, X. & Liu, W.

Forthcoming at **Operations Research**

[2] 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

[3] 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

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

In preparation with Amy R. Ward and Xun Zhang for **Mathematics of Operations Research**

[2] Community Responder Crowdsourcing for Time-Critical Emergencies

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

Major revision at **Management Science**

Finalist, POMS-HK Best Student Paper Competition, 2025 (Winner TBD)

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

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

Major revision at **Production & Operations Management**

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

[4] Location-Allocation of Emergency Service Systems in Light Traffic: Application to Lift-Trap Rescue

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

SELECTED AWARDS

First Place, INFORMS Society on Location Analysis (SOLA) Best Student Paper Competition	2023
Chinese Government Award for Outstanding Students Abroad (6,000 USD)	2021
President's Graduate Fellowship, National University of Singapore	2020 – 2024
Hong Yi Scholarship (3,500 USD)	2019
Overseas Research Excellence Scholarship (1,000 USD)	2019

TEACHING EXPERIENCE

The University of Chicago Booth School of Business	
Bus 40110: Managing Service Operations (MBA)	Winter of 2025 (Scheduled)
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

TALKS

Data-Driven Matching for Impatient and Heterogeneous Demand and Supply	
BIRS Workshop: Dynamic Allocation and Matching, Banff, Canada	March 2025 (Scheduled)
The 15th POMS-HK International Conference, Hong Kong, China	January 2025 (Scheduled)
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 2024 Annual Meeting, Seattle, USA	October 2024
Expanding Service Capabilities Through an On-Demand Workforce	
INFORMS 2023 Annual Meeting, Phoenix, USA	October 2023
The 4th SRSE International Conference, Virtual	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, Virtual	November 2021

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	

COMPUTER SKILLS

C++, Python, Gurobi, MATLAB, LaTeX, Mathematica

PERSONAL

Languages	Cantonese (native), Mandarin (native), English (fluent)
Interests	Ultimate frisbee, traveling