

WEILIANG (LEON) LIU

Industrial Systems Engineering and Management, National University of Singapore, Singapore (SG)

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Last Updated: May, 2023

EDUCATION

National University of Singapore

2020 – 2024 (Expected)

Ph.D., Industrial Systems Engineering & Management

Advisors: Loon Ching Tang and Zhisheng Ye

Shanghai Jiao Tong University

2016 – 2020

B.E., Industrial Engineering

RESEARCH INTERESTS

Stochastic optimal control, diffusion approximation, (distributionally) robust optimization

Dynamic service system operations, healthcare operations, smart city operations

COMPLETED PAPERS

[1] *Robust Data-Driven Design of a Smart Cardiac Arrest System*

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

Under Review (2023)

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

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

Reject and resubmit at **Management Science** (2023)

[3] *Expanding Service Capabilities Through an On-Demand Workforce*

Sun, X. & Liu, W.

Major revision at **Operations Research** (2022)

[4] *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

[5] *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 (2021) Vol. 19, Issue 4, pp. 3520 - 3535

WORK IN PROGRESS

[6] *Optimal Alert of Community Responders*

In Preparation, 2023.

OTHER RESEARCH EXPERIENCE

University of Toronto

August - December, 2023 (Expected)

Visiting Graduate Student, Mechanical & Industrial Engineering

Supervisor: Timothy C. Y. Chan

University of Florida

June - September, 2019

Research Intern, Industrial & Systems Engineering

Supervisor: Xu Sun

TEACHING EXPERIENCE

Learning from Data (IE4213/EE4802), National University of Singapore

Teaching Assistant

2020, 2021, 2022

Data Analytics for Industrial Engineers (IE5005), National University of Singapore

Teaching Assistant

2021, 2022

SELECTED AWARDS

Chinese Government Award for Outstanding Students Abroad

2021

President's Graduate Fellowship

2020 - Present

Hong Yi Scholarship

2019

Overseas Research Excellence Scholarship

2019

COMPUTER SKILLS

Programming Language

C++, Python

Software

Gurobi, MATLAB, LaTeX

PERSONAL

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

Interests Ultimate frisbee, traveling

REFERENCES

Zhisheng Ye

Associate professor

National University of Singapore

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Xu Sun

Assistant professor

University of Florida

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Loon Ching Tang

Professor

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