

Xiaole (Alyssa) Liu

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Leonard N. Stern School of Business, New York University

Education

- 2020 – Present **New York University Stern School of Business**, New York, NY
Ph.D. candidate in Operations Management
Advisors: Mor Armony, Jing Dong, Rouba Ibrahim.
- 2020 **Columbia University**, New York, NY
M.Sc. in Operations Research
- 2018 **University of Michigan-Dearborn**, MI
M.S.E. in Industrial and System Engineering, with High Distinction
- 2016 **Xi'an Jiaotong University**, Xi'an, Shaanxi, China
B.Mgt. in Management Science and Engineering
(Division: Electronic and Information Engineering)
The Special Class for the Gifted Young of China (XJTU)

Research Interests

Healthcare operations; data-driven decision making and policy learning; causal inference and machine learning in operations; stochastic modeling; efficiency and fairness in technology adoption; empirical and applied research in collaboration with healthcare providers.

Papers

- 2025 **Measuring the Heterogeneous Effect of Emergency Department Boarding on Inpatient Length of Stay: Toward Efficient and Equitable Inpatient Bed Assignment** [\[Link\]](#) · *Job Market Paper*
Xiaole (Alyssa) Liu, Jing Dong, Yosef Berlyand, Martin S. Copenhaver.
Major Revision, *Management Science*.
- 2024 **Telemedicine versus In-Person Outpatient Care: Equilibrium, Capacity, and Quality Differentiation** [\[Link\]](#)
Xiaole (Alyssa) Liu, Mor Armony.
Major Revision, *Manufacturing & Service Operations Management*.
Accepted to the M&SOM Service Management SIG 2025.

- 2025 **Proactive Admission Control for Emergency Departments: Integrating Demand and Inpatient Admission Delay Predictions**
Ruicheng Ao, Jing Dong, Xiaole (Alyssa) Liu.
In Preparation for Submission to *Operations Research*, Available upon Request.
- 2025 **Fair and Efficient Outpatient Scheduling with Stratified No-Show Prediction**
Xiaole (Alyssa) Liu, Jing Dong, Rouba Ibrahim.
In Preparation for Submission, Available upon Request.
- 2019 **Private and Public Incentives for Hospitals to Improve the Quality and Reduce the Cost of Care** [\[Link\]](#)
Xiaole (Alyssa) Liu, Kevin Schulman, David Scheinker.
Health Management Policy and Innovation, Volume 4, Issue 3.

Research In Progress

From Overflow to Oversight: The Strategic Role of Hallway Beds in Hospital Patient Flow
Xiaole (Alyssa) Liu, Jing Dong, Martin S. Copenhaver.

Awards and Honors

- 2024 **W. Edwards Deming Fellowship**, NYU Stern
- 2024 **Ph.D. Alumni Fellowship**, NYU Stern
- 2024 **Teaching Commendation**, NYU Stern Doctoral Program
- 2020 **Doctoral Fellowship**, NYU Stern (*tuition and stipend for five years*)
- 2020 **Operations Research Graduate Fellowship**, Columbia University
- 2018 **Honor Scholar**, UM-Dearborn (*recognize up to 1 student per program*)
- 2016 **Graduate Student Instructor Fellowship**, UM-Dearborn (*tuition and stipend*)
- 2014 **Suzhou Industrial Park Scholarship**, XJTU
- 2013 **National Motivational Scholarship**, XJTU, Ministry of Education China

Research Experience and Industry Collaboration

- 2023 – Present **Massachusetts General Hospital**, Boston, MA
PhD Student Researcher, Healthcare Systems Engineering.
- 2022 **Waitwhile**, San Francisco, CA
Research Consultant, Queue Management Software for the Modern Enterprise.
- 2019 **Stanford University**, Stanford, CA
Research Assistant, Systems Utilization Research For (SURF) Stanford Medicine.

Teaching Experience

Instructor

2024 OPMG-UB.1: Operations Management
NYU Stern undergraduate core
Teaching evaluation: 4.8/5.0 with *Teaching Commendation*.

Teaching Assistant

2023, 25, 26 COR1-GB.2114: Operations (NYU Stern M.Sc.)
2022 SHBI-GB.7301: Stochastic Modeling & Simulation (NYU Stern M.Sc.)
2022 OPMG-UB.1: Operations Management (NYU Stern undergraduate core)
2020 IEOR E4729: Model-Based Trading: Theory and Practice (Columbia M.Sc.)
2019 IEOR E4150: Introduction to Probability and Statistics (Columbia M.Sc.)
2016 – 2018 IMSE 561: Total Quality Management and Six Sigma (UM-Dearborn M.S.E.)
2017 IMSE 4585: Simulation in Systems Design (UM-Dearborn undergraduate)
2016 IMSE 511: Design and Analysis of Experiment (UM-Dearborn M.S.E.)

Industry Work Experience

2018 **Stellantis (Fiat Chrysler Automobile)**, Auburn Hills, MI
Full-time Simulation Engineer, 2018 Driven Winner Award.

2015 **JD.com, Inc.**, Xi'an, Shaanxi, China
Summer Intern, Inventory Management.

Selected Presentations

Measuring the Heterogeneous Effect of Emergency Department Boarding on Inpatient Length of Stay: Toward Efficient and Equitable Inpatient Bed Assignment

2025 INFORMS Annual Meeting, Atlanta, GA
2024 INFORMS Annual Meeting, Seattle, WA
2024 M&SOM Conference, Minneapolis, MN

Telemedicine versus In-Person Outpatient Care: Equilibrium, Capacity, and Quality Differentiation

2025 M&SOM Service Management SIG, London, UK
2023 INFORMS Annual Meeting, Phoenix, AZ
2023 M&SOM Conference, Montreal, Canada
2023 POMS Conference, Orlando, FL
2022 INFORMS Annual Meeting, Indianapolis, IN
2021 INFORMS Annual Meeting, virtual

Professional Services

2025	Ad-hoc Reviewer: Manufacturing & Service Operations Management, Omega
2024	Co-organizer: NYC Operations Day Joint PhD Colloquium
2022	Organizer: MOILS Seminar Series, NYU Stern

References

Mor Armony

Vice Dean for Faculty and Research
Harvey Golub Professor of Business Leadership
Professor of Technology, Operations & Statistics
Leonard N. Stern School of Business
New York University
Email: marmony@stern.nyu.edu

Jing Dong

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University College London (UCL)
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Martin S. Copenhaver

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Johns Hopkins Hospital
Assistant Professor of Emergency Medicine
Johns Hopkins University School of Medicine
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Data Science and Hospital Operations
Massachusetts General Hospital
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