

# Xiaole (Alyssa) Liu

xl2500@stern.nyu.edu · <https://liualyssa.github.io> · +1 (313) 818 8563  
KMC 8-152A, 44 W 4th St, New York, NY 10012  
Leonard N. Stern School of Business, New York University

## Education

2020 – Present	<b>New York University Stern School of Business</b> , New York, NY Ph.D. candidate in Operations Management Advisors: Mor Armony, Jing Dong, Rouba Ibrahim.
2020	<b>Columbia University</b> , New York, NY M.Sc. in Operations Research
2018	<b>University of Michigan-Dearborn</b> , MI M.S.E. in Industrial and System Engineering, with High Distinction
2016	<b>Xi'an Jiaotong University</b> , 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	<b>Measuring the Heterogeneous Effect of Emergency Department Boarding on Inpatient Length of Stay: Toward Efficient and Equitable Inpatient Bed Assignment</b> <a href="#">[Link]</a> · <i>Job Market Paper</i> Xiaole (Alyssa) Liu, Jing Dong, Yosef Berlyand, Martin S. Copenhaver. Major Revision, <i>Management Science</i> .
2024	<b>Telemedicine versus In-Person Outpatient Care: Equilibrium, Capacity, and Quality Differentiation</b> <a href="#">[Link]</a> Xiaole (Alyssa) Liu, Mor Armony. Major Revision, <i>Manufacturing &amp; Service Operations Management</i> . Accepted to the M&SOM Service Management SIG 2025.

2025	<b>Proactive Admission Control for Emergency Departments: Integrating Demand and Inpatient Admission Delay Predictions</b> Ruicheng Ao, Jing Dong, Xiaole (Alyssa) Liu. In Preparation for Submission to <i>Operations Research</i> , Available upon Request.
2025	<b>Fair and Efficient Outpatient Scheduling with Stratified No-Show Prediction</b> Xiaole (Alyssa) Liu, Jing Dong, Rouba Ibrahim. In Preparation for Submission, Available upon Request.
2019	<b>Private and Public Incentives for Hospitals to Improve the Quality and Reduce the Cost of Care</b> <a href="#">[Link]</a> Xiaole (Alyssa) Liu, Kevin Schulman, David Scheinker. <i>Health Management Policy and Innovation</i> , 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	<b>W. Edwards Deming Fellowship</b> , NYU Stern
2024	<b>Ph.D. Alumni Fellowship</b> , NYU Stern
2024	<b>Teaching Commendation</b> , NYU Stern Doctoral Program
2020	<b>Doctoral Fellowship</b> , NYU Stern ( <i>tuition and stipend for five years</i> )
2020	<b>Operations Research Graduate Fellowship</b> , Columbia University
2018	<b>Honor Scholar</b> , UM-Dearborn ( <i>recognize up to 1 student per program</i> )
2016	<b>Graduate Student Instructor Fellowship</b> , UM-Dearborn ( <i>tuition and stipend</i> )
2014	<b>Suzhou Industrial Park Scholarship</b> , XJTU
2013	<b>National Motivational Scholarship</b> , XJTU, Ministry of Education China

## Research Experience and Industry Collaboration

2023 – Present	<b>Massachusetts General Hospital</b> , Boston, MA PhD Student Researcher, Healthcare Systems Engineering.
2022	<b>Waitwhile</b> , San Francisco, CA Research Consultant, Queue Management Software for the Modern Enterprise.
2019	<b>Stanford University</b> , 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, 2025 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: M&SOM Main Conference (Service Operations Track), Manufacturing & Service Operations Management Journal
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**

DeRosa Family Associate Professor of Business  
Decision, Risk, and Operations Division  
Columbia Business School  
Email: jing.dong@gsb.columbia.edu

### **Rouba Ibrahim**

Professor  
Head (Operations and Technology)  
School of Management  
University College London (UCL)  
Email: rouba.ibrahim@ucl.ac.uk

### **Martin S. Copenhaver**

Operations Researcher, Judy Reitz Capacity Command Center  
Johns Hopkins Hospital  
Assistant Professor of Emergency Medicine  
Johns Hopkins University School of Medicine  
Email: copenhaver@jhmi.edu

### **Ana Cecilia Zenteno Langle**

Senior Director  
Data Science and Hospital Operations  
Massachusetts General Hospital  
Email: azentenolangle@mgb.org