

# 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.  
Under Review, *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 for full program*)
- 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, 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 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	Referee: M&SOM Main Conference (Service Operations Track)
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: ma67@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**

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

### **Ana Cecilia Zenteno Langle**

Director of Data and Analytics  
Healthcare Systems Engineering and Perioperative Services  
Massachusetts General Hospital  
Email: azentenolangle@mgb.org