

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	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] · <i>Job Market Paper</i> Xiaole (Alyssa) Liu, Jing Dong, Yosef Berlyand, Martin S. Copenhaver. Major Revision, <i>Management Science</i> .
2024	Telemedicine versus In-Person Outpatient Care: Equilibrium, Capacity, and Quality Differentiation [Link] Xiaole (Alyssa) Liu, Mor Armony. Major Revision, <i>Manufacturing & Service Operations Management</i> . 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 <i>Operations Research</i> , 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. <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	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 (<i>tuition and stipend for five years</i>)
2020	Operations Research Graduate Fellowship , Columbia University
2018	Honor Scholar , UM-Dearborn (<i>recognize up to 1 student per program</i>)
2016	Graduate Student Instructor Fellowship , UM-Dearborn (<i>tuition and stipend</i>)
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

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