

XUFEI LIU

The Wharton School, University of Pennsylvania
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EDUCATION

University of Pennsylvania, The Wharton School, Philadelphia, PA 2022 – 2027 (expected)
Ph.D. Candidate in Operations Management, expected graduation May 2027
Advisors: Gad Allon and Ken Moon
Dissertation committee: Gad Allon, Ken Moon, Hummy Song, Christian Terwiesch

Georgia Institute of Technology, Atlanta, GA 2019 – 2022
B.S. in Industrial and Systems Engineering, May 2022
Honors Program; GPA 4.0/4.0

JOB MARKET PAPER

Micro-Level Human-LLM Collaboration and Cognitive Load in Writing Tasks
with Hummy Song and Christian Terwiesch
Working paper — supported by the Mack Institute for Innovation Management

WORKING PAPERS

When to Intervene: Decision-Aware Learning from Wearable Sensor Streams in Military Aviation
with Gad Allon and Ken Moon
Working paper — supported by the Mack Institute for Innovation Management

Learning How to Learn: Adaptive Review Policies for Long-Term Memory and Engagement
with Gad Allon and Ken Moon
Working paper — supported by the Mack Institute for Innovation Management and the Fishman-Davidson Center

PUBLICATIONS (PRIOR TO PH.D.)

- Harrington, J., Hua, X., **Liu, X.**, Nash, A., Rios, R., and Wong, T. W. H. (2023). “Probabilistic chip-collecting games with modulo winning conditions.” *Discrete Applied Mathematics*, 324, 93–98.
- Glassband, J., Koch, G., Lebiere, S., **Liu, X.**, and Sabini, E. (2021). “On the Assignment Graphs of Oriented Graphs.” arXiv:2111.04882.
- Four sequences published in the On-Line Encyclopedia of Integer Sequences (A346189, A346198, A346199, A346204), with Fiorini, E., Glassband, J., Koch, G., Lebiere, S., Sabini, E., Shank, N. B., and Woldar, A. (2021).

HONORS & AWARDS

George James Award, The Wharton School 2024, 2025
Mack Institute Research Fellowship 2023

TEACHING

University of Pennsylvania, The Wharton School 2024 – present
Instructor, Wharton Doctoral Math Camp Summers 2024, 2025
Sole instructor of the mathematics preparation course for incoming Wharton Ph.D. students (10 sessions per summer). Designed, created, and delivered the full syllabus covering real analysis, optimization, and probability; taught 40+ Ph.D. students across two years with uniformly positive evaluations.

MBA Program Teaching Assistant, Scaling Operations (OIDD 6360)

Fall 2025

MBA elective taught by Gad Allon. Supported case discussions, held office hours, answered student questions, and graded assignments and exams.

CONFERENCE PRESENTATIONS

INFORMS Annual Meeting	2023, 2024, 2025
INFORMS MSOM Conference	2024, 2025
POMS Annual Conference	2025
Purdue Supply Chain and Operations Management Conference	2025
MIT Rising Scholars Conference	2023

SERVICE & LEADERSHIP

Organizer, Wharton–INSEAD Doctoral Consortium Fall 2024

- Served on a committee of six organizing the consortium; managed the paper review process and hosted two parallel tracks with 35 presenters, two panels, and two keynotes.

President and OIDD Representative, Wharton Doctoral Council 2022 – 2024

- Led the council representing the Wharton Ph.D. community; organized 31 events and managed a \$32,000 budget; worked with administration to create the Wharton GAPSA Fellowship.

Wharton Doctoral Representative, GAPSA and Penn Research Council 2022 – 2023

- Represented Wharton Ph.D. students in Penn’s Graduate and Professional Student Assembly; allocated travel grant funding and served on the university Research Council.

SKILLS

Programming: Python (NumPy, pandas, scikit-learn, PyTorch, TensorFlow), R, LaTeX, Git, Qualtrics (including custom JavaScript instrumentation)

Methods: Experimental design (lab and field), structural estimation, reinforcement learning and Markov decision processes, semi-supervised and decision-focused learning, optimization, causal inference (instrumental variables, difference-in-differences, regression discontinuity)

REFERENCES

Gad Allon (Advisor)

Jeffrey A. Keswin Professor
Professor of Operations, Information and Decisions
The Wharton School, University of Pennsylvania
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Ken Moon (Advisor)

Associate Professor of Operations, Technology and Information Management
Cornell SC Johnson College of Business
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Hummy Song

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Christian Terwiesch

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