

YUEYANG LIU

McNair Hall, 6100 Main Street, Houston, TX 77005

yueyl@stanford.edu ◊ [Personal Website](#)

EMPLOYMENT

Jones Graduate School of Business, Rice University

Assistant Professor of Operations Management

July. 2024 - present

EDUCATION

Stanford University

Ph.D. in Management Science and Engineering

Sept. 2018 - present

Advisors: [Benjamin Van Roy](#) and [Kuang Xu](#)

M.S. in Computational and Mathematical Engineering

Jan. 2016 - Jun. 2018

Massachusetts Institute of Technology

Sept. 2009 - Jun. 2012

B.A. in Mathematics

Minor in Economics, minor in Management Sciences

RESEARCH INTERESTS

Sequential decision making, continual learning, machine learning, probability, operations management

PREPRINTS AND PUBLICATIONS

ALGORITHMS AND THEORY

1. Non-Stationary Bandit Learning via Predictive Sampling, 2023. [\[PDF\]](#)

Yueyang Liu, Xu Kuang, Benjamin Van Roy

A preliminary version published at the *International Conference on Artificial Intelligence and Statistics (AISTATS), 2023*

Major revision at *Management Science*

2. A Definition of Non-Stationary Bandits, 2023. [\[PDF\]](#)

Yueyang Liu, Xu Kuang, Benjamin Van Roy

To be submitted to *Management Science*

3. Gaussian Imagination in Bandit Learning, 2022. [\[PDF\]](#)

Yueyang Liu, Adithya Devraj, Benjamin Van Roy, and Kuang Xu

To be submitted to *Annals of Operations Research*

EMPIRICAL AND APPLIED WORK

4. Non-Stationary Contextual Bandit Learning via Neural Predictive Ensemble Sampling, 2023. [\[PDF\]](#)

Zheqing Zhu, **Yueyang Liu**, Xu Kuang, Benjamin Van Roy

MONOGRAPH

5. Continual Learning as Computationally Constrained Reinforcement Learning, 2023. [\[PDF\]](#)
Saurabh Kumar, Henrik Marklund, Ashish Rao, Yifan Zhu, Hong Jun Jeon, **Yueyang Liu**, Benjamin Van Roy
Under revision at *Foundations and Trends[®] in Machine Learning*

PROFESSIONAL EXPERIENCE

Oracle Corporation Sept. 2012 - Sept. 2016
Business Intelligence Redwood City, CA
Software Engineer

SELECTED CONFERENCE AND SEMINAR PRESENTATIONS

A Definition of Non-Stationary Bandits

- INFORMS Annual Meeting 2023, Phoenix, AZ
- Stanford Data Science Conference 2023, Stanford, CA
- SIAM Conference on Optimization 2023, Seattle, WA
- Workshop: Experimentation and Causal Inference in the Tech Sector 2023, Stanford, CA

Non-Stationary Bandit Learning via Predictive Sampling

- Stanford University MS&E Rising Stars Workshop 2023, Stanford, CA
- International Conference on Artificial Intelligence and Statistics (AISTATS) 2023, Valencia, Spain
- Stanford University MS&E 338 Reinforcement Learning Spring 2023 Guest Lecture, Stanford, CA
- INFORMS Annual Meeting 2022, Indianapolis, IN
- Stanford University Operations Research Student Seminar 2022, Stanford, CA

TEACHING EXPERIENCE

Teaching Assistant, Stanford University

MS&E 338, Aligning Superintelligence	Spring 2024
MS&E 338, Reinforcement Learning: Frontiers	Spring 2022
EE 277, Reinforcement Learning: Behaviors and Applications	Fall 2021
MS&E 226, Fundamentals of Data Science: Prediction, Inference, Causality	Fall 2020, Winter 2023
EE 364A, Convex Optimization I	Summer 2020, 2023
MS&E 232, Introduction to Game Theory and Market Design	Winter 2019, 2020, Spring 2023
MS&E 120, Probabilistic Analysis	Fall 2019

Guest Lecturer, Stanford University

MS&E 338, Reinforcement Learning: Frontiers	Spring 2022, 2023
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Tutor

Stanford University, Office of Accessible Education	2017-18
Massachusetts Institute of Technology, Disability and Access Services	2011-12

SERVICE AND OUTREACH

Conference Review

- ICML 2022/2023, NeurIPS 2022/2023, and AISTATS 2023

Seminar Organization

- Stanford MS&E/OIT Operations Research Joint Student Seminar, 2022-23

Graduate Admission Committee

- Stanford MS&E Master's Program Admission Committee, 2021-23

Outreach

- Secretary, Stanford Graduate Society of Women Engineers (GradSWE), 2022-23
- Professional Development Chair, Stanford GradSWE, 2021-22
- Mentor, Stanford Women in Math Mentoring (SWIMM), 2022-23
- Secretary & Webmaster, MIT Undergraduate Society for Women in Mathematics (USWIM), 2010-12

SELECTED HONORS AND AWARDS

Stanford MS&E Rising Stars	2023
Stanford MS&E Fellowship	2022
Dantzig-Lieberman Operations Research Fellowship	2020, 2021
Reid Weaver Dennis Fellowship in the School of Engineering	2018