

Lily Poursoltan

✉ Lily.Poursoltan@Rady.ucsd.edu |  [Google Scholar](#) |  [LinkedIn](#) |  lily-poursoltan.github.io

EDUCATION

University of California San Diego, Rady School of Management 2022 – 2027
Ph.D. in Quantitative Management (Innovation, Technology & Operations) (expected)

Dissertation: Essays on the Deployment, Evaluation, and Governance of Human-in-the-Loop AI in Knowledge Work

Dissertation Committee: Prof. Kevin Zhu (Chair), Prof. Karandeep Singh (Co-Advisor), Prof. Terrence August, and Prof. Hyoduk Shin

Queen's University, Smith School of Business 2020 – 2021
M.Sc. in Management Analytics (with distinction)

University of Toronto 2020 – 2021
Data Science Certificate

Iran University of Science and Technology 2016 – 2020
Ph.D. in Industrial Engineering (Operations Research focus)

Dissertation: Production-Inventory Models for Deteriorating Items with Stochastic Machine Breakdown under Uncertainty Considerations

Advisors: Prof. Seyed Mohammad Seyedhosseini & Prof. Armin Jabbarzadeh

RESEARCH INTERESTS

- Human-AI Collaboration and Delegation
- AI Agents and Human-Agent Systems
- Economics of Healthcare IT
- AI Evaluation and Governance

RESEARCH AFFILIATIONS

Jacobs Center for Health Innovation , UC San Diego Health (JCHI) Sep 2022 – Present
Research Data Scientist (Human-AI Systems and Digital Innovation)

Scotiabank Centre for Analytics & AI, Smith Business School Jul 2021 – Sep 2022
Research Data Scientist

MANUSCRIPTS UNDER REVIEW

L. Poursoltan, W. Chen, K. Singh, K. Zhu, “Human-in-the-Loop Generative AI for Knowledge Work: Interaction-Level Task–Technology Fit and Selective Deployment,” under review at *Information Systems Research*.

A. Noori et al., including **L. Poursoltan**, “A Global Log for Medical AI,” revise & resubmit at *Nature*. [ [paper](#)]

L. Poursoltan, A. Boussina, J. Cao, E. Kim, P. S. Bedmutha, H. Majmudar, M. Ramsis, A. Khalessi, K. Singh, “Generating Real-World Evidence from AI Deployed in Health Systems,” revise & resubmit at *Learning Health Systems*.

E. Kim, S. Chang, J. Feng, P. S. Bedmutha, **L. Poursoltan**, J. Cao, A. S. Wellsjo, E. Floyd, D. Luo, K. Zhu, A. Boussina, J. Holland, A. M. Sitapati, S. Hallaj, S. Nemati, R. A. Gabriel, A. A. Khalessi, C. A. Longhurst, K. Singh, M. Ramsis, “National Trends in the Use of Artificial Intelligence-Related CPT Codes in the United States,” under review at *JAMA*.

- L. Poursoltan**, E. Kim, J. Cao, A. Bhattacharya, A. Boussina, A. Chua, J. Pan, R. El-Kareh, C. VanDenBerg, C. Longhurst, K. Singh, “Automating Analysis of Health System Incident Reports with Large Language Models,” under review at *npj Digital Medicine (Nature Portfolio)*.

PUBLICATIONS

- L. Poursoltan**, J. Cao, W. Chen, E. Kim, T. K. Nakai, A. Boussina, A. Chua, J. Pan, M. Millen, M. Tai-Seale, C. A. Longhurst, K. Zhu, K. Singh, “Physician Edits to AI-Drafted Patient Messages and Their Impact on Clinical Workload,” forthcoming in *The New England Journal of Medicine AI (NEJM AI)*, 2026.
- L. Poursoltan**, J. Cao, B. Clay, B. Trimble, L. Adrid, J. Pan, A. Chua, J. Bell, C. A. Longhurst, K. Zhu, K. Singh, “Prospective Comparison of Econometric, Machine Learning, and Foundation Models for Forecasting Emergency Department Boarding Patients,” *npj Health Systems (Nature Portfolio)*, 2025. [[paper](#)]
- N. Ekbote, M. Akhondzadeh, R. Graham, J. Bell, D. Glasser, R. El-Kareh, A. Chua, A. Boussina, A. Tai-Seale, **L. Poursoltan**, K. Singh, P. Agnihotri, M. Tai-Seale, “Large Language Models for Summarizing Advance Care Planning Information from Goals of Care Notes in the EHR,” *Learning Health Systems*, 2026. [[paper](#)]
- L. Poursoltan**, S. M. Seyedhosseini, A. Jabbarzadeh, “Green Closed-Loop Supply Chain Network under the COVID-19 Pandemic,” *Sustainability*, 2021. [[paper](#)]
- L. Poursoltan**, S. M. Seyedhosseini, A. Jabbarzadeh, “An Extension to the Economic Production Quantity Problem with Deteriorating Products Considering Random Machine Breakdown and Stochastic Repair Time,” *International Journal of Engineering*, 2020. [[paper](#)]
- A. Golmohammadi, H. Rasay, Z. Sobhani, **L. Poursoltan**, “Modeling and Analyzing One Vendor–Multiple Retailer VMI Supply Chain Using Stackelberg Game Theory,” *Journal of Industrial Engineering and Management Systems*, 2016. [[paper](#)]

CONFERENCE PRESENTATIONS

- L. Poursoltan**, K. Singh, K. Zhu, “Designing Human-Agent Ecosystems: Interaction-Level Fit and Selective Delegation to Autonomous Agents,” *Wharton Business and Generative AI Conference*, San Francisco, CA, 2026.
- L. Poursoltan**, K. Singh, K. Zhu, “Where Do AI-Drafted Replies to Patient Messages Fall Short? A Taxonomy of Physician Edits and Their Workload Implications,” *Machine Learning for Healthcare (MLHC)*, Johns Hopkins University, Baltimore, MD, 2026.
- L. Poursoltan**, W. Chen, K. Singh, K. Zhu, “From Real-World Evidence to Deployment Policy: Targeted Offering of AI Assistance in EHR Messaging,” *Conference on Health Information Technology and Analytics (CHITA)*, Washington, DC, 2026. [**Best Student Paper Award**]
- L. Poursoltan**, J. Cao, W. Chen, E. Kim, T. K. Nakai, A. Boussina, A. Chua, J. Pan, M. Millen, M. Tai-Seale, C. A. Longhurst, K. Zhu, K. Singh, “Physician Edits to AI-Drafted Patient Messages and Their Impact on Clinical Workload,” *Symposium on Artificial Intelligence in Learning Health Systems (SAIL)*, 2026 (poster).
- L. Poursoltan**, J. Cao, B. Clay, B. Trimble, L. Adrid, J. Pan, A. Chua, J. Bell, C. A. Longhurst, K. Zhu, K. Singh, “Prospective Comparison of Econometric, Machine Learning, and Foundation Models for Forecasting Emergency Department Boarding Patients,” *Symposium on Artificial Intelligence in Learning Health Systems (SAIL)*, 2026 (poster).
- L. Poursoltan**, K. Zhu, K. Singh, “Bridging Econometrics, Machine Learning, and Foundation Models for Proactive Forecasting of Emergency Department Boarding,” *Production and Operations Management Society (POMS)*, 2026.
- L. Poursoltan**, W. Chen, K. Singh, K. Zhu, “Cognitive Load in Human-in-the-Loop AI Systems,” *Wharton Business and Generative AI Conference*, 2025 (poster).

- L. Poursoltan**, W. Chen, K. Singh, K. Zhu, “Measuring Cognitive Load in Human-in-the-Loop AI: Evidence from Clinical Messaging,” *Conference on Information Systems and Technology (CIST)*, 2025.
- L. Poursoltan**, K. Zhu, K. Singh, “Towards Effective Emergency Department Boarding Forecasting: A Real-World Study,” *INFORMS Annual Meeting*, 2025.
- L. Poursoltan**, W. Chen, K. Singh, K. Zhu, “Leveraging Large Language Models for Equitable Patient–Clinician Communication,” *Conference on Health Information Technology and Analytics (CHITA)*, 2025.

HONORS, GRANTS, AND AWARDS

- **Best Student Paper Award** – Conference on Health Information Technology and Analytics (CHITA) 2026
- **Graduate Research Fellow, UC San Diego Health (JCHI)** – AI in Healthcare [news] 2022 – Present
- **D.I. McLeod Dean’s List Scholarship** 2020 – 2021
- **Dean’s Award for Academic Excellence** – Iran University of Science and Technology 2020
- **Excellence in Teaching Award** – North Tehran University 2018

TEACHING EXPERIENCE

- **Instructor**
 - **MGT 71** Operating a Successful Business – UC San Diego *Summers 2025 and 2026*
Teaching evaluation: 4.82/5, with comments highlighting clarity and engagement.
 - **Probability & Statistics in Engineering; Operations Research; Supply Chain Analytics**
North Tehran University *Sep 2015 – Dec 2018*
Developed course materials and taught ~150 students per semester. Teaching evaluations: 4.91–4.95/5.
- **Teaching Assistant**
 - **MGT 451** AI & Disruptive Technology Strategy – EMBA/MBA, UC San Diego *Winter & Fall 2025*
 - **MGTA 456** Supply Chain Analytics – MSBA, UC San Diego *Spring 2024 & 2025*
 - **MGTA 453** Business Analytics – MSBA, UC San Diego *Fall 2024*
 - **MGT 413** Operations, Information Systems & Data Analysis – MBA, UC San Diego *Winter 2023*
 - **MMAI 831** AI in Marketing – Queen’s University, Smith School of Business *Winter 2022*

SERVICE

- **Ad-hoc Referee** – npj Health Systems (Nature Portfolio), International Conference on Information Systems (ICIS), Conference on Information Systems and Technology (CIST), Information Systems Frontiers
- **Judge** – 1st Annual Physician AI Hackathon, UC San Diego 2026
- **Women in Data Science (WiDS) Ambassador** – Stanford University 2020 – Present