

# PARSHAN PAKIMAN

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⌚ Jan, 2026

## APPOINTMENTS

<b>Assistant Professor of Operations Management</b>	Since Fall 2025
Department of Operations Management and Strategy University at Buffalo School of Management The State University of New York	
<b>Principle Researcher</b>	2023-2025
Tolan Center for Healthcare Booth School of Business The University of Chicago	

## EDUCATION

<b>College of Business Administration, University of Illinois Chicago</b>	2017 - 2023
Ph.D. Information and Decision Sciences	
Thesis title Self-guided Approximate Linear Programs: Randomized Multi-shot Approximation of Markov Decision Processes ( <a href="#">Link</a> )	
Committee Selva Nadarajah (Advisor and Chair); Dan Adelman, Beryl Chen, Itai Gurvich, Negar Soheili	
<b>College of Business Administration, University of Illinois Chicago</b>	2017 - 2023
M.Sc. Business Analytics	
<b>College of Science, University of Tehran</b>	2012 - 2016
B.Sc. Applied Mathematics	

## RESEARCH INTERESTS

- Studying impactful healthcare and retail operations problems by designing new algorithms based on data-driven optimization, reinforcement learning, and machine learning techniques.
- Developing algorithms to tackle large-scale Markov decision processes that are accessible to business users by requiring minimal human intervention during implementation.

## PUBLISHED PAPERS

- P. Pakiman, S. Nadarajah, N. Soheili, Q. Lin. *Self-Guided Approximate Linear Programs: Randomized Multi-Shot Approximation of Discounted Cost Markov Decision Processes*. Published in *Management Science* ([Link](#)).
- A. Chenreddy, P. Pakiman, S. Nadarajah, R. Chandrasekaran, R. Abens. *SMOILE: A Shopper Marketing Optimization and Inverse Learning Engine*. *Proceedings of the 25th ACM SIGKDD International Conference on Knowledge Discovery & Data Mining*, 2019 (Acceptance rate 6.4%, [Link](#)).

## UNDER REVIEW PAPERS

- D. Adelman, A. J. Mersereau, P. Pakiman. *Dynamic Optimization of Workforce Talent*. Under revision for the second round of review at *Operations Research* ([Link](#)).
- P. Pakiman, B. Chen, S. Nadarajah, S. Jasin. *Adaptive Risk Mitigation in Demand Learning*. Under the first round of review at *Manufacturing & Service Operations Management* ([Link](#)).
- P. Pakiman, S. Nadarajah. *Back to the Future: Revisiting a Pioneering Approximation of Average Cost Markov Decision Processes Using a Multi-Shot Perspective*. In preparation for submission to *INFORMS Journal on Computing* (Earlier version available at [Link](#)).

## INDUSTRY COLLABORATIONS

- Interned with the Advanced Solutions team at *Guidehouse*: Developed an approximate dynamic programming algorithm based on simulation to address a workflow scheduling problem. 2021
- Collaborated with *Foresight ROI*: Developed an inverse optimization method using Markov decision processes to model historical data trajectories and optimize future marketing campaigns. ([Link](#) to the research paper). 2017 - 2019

## TEACHING EXPERIENCES

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<b>Instructor</b>	Since Fall 2025
– Supply Chain Analytics (UB) – Production & Operations Management (UB)	
<b>Guest Instructor / Teaching Assistant</b>	Since Fall 2014
– Approximate Dynamic Programming (UChicago) – Supply Chain Management (UIC). – Introduction to Operations Management (UIC) – Business Analytics (UIC) – Business Data Mining (UIC) – Online Customer Analytics (UIC) – Text Analytics for Business (UIC) – Business Forecasting (UIC) – Optimization for Analytics (UIC) – Scientific Computing (UTehran) – Numerical Linear Algebra (UTehran)	

## INVITED TALKS AND PRESENTATIONS

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### Dynamic Optimization of Workforce Talent

– IMSI Workshop on Advances in Quantitative Medical Care, Chicago, IL	2026
– INFORMS Applied Probability Society (APS) Conference, Atlanta, GA	2025
– University at Buffalo, School of Management, Buffalo, NY	2024
– Stony Brook University, College of Business, Stony Brook, NY	2024
– University of Toronto, Rotman School of Management, Toronto, ON	2024
– INFORMS Annual Meeting, Seattle, WA	2024
– Purdue Operations Conference, West Lafayette, IN	2024
– MSOM Conference (Healthcare SIG), Minneapolis, MN	2024
– Chicago Booth Principal Researcher Workshop, Chicago, IL	2024

### Adaptive Risk Mitigation in Demand Learning

– POMS 35th Annual Conference, Atlanta, GA	2025
– INFORMS Annual Meeting, Phoenix, AZ	2023
– INFORMS Annual Meeting, Virtual	2020
– INFORMS Revenue Management and Pricing Student Live Paper Series, Virtual ( <a href="#">Link</a> )	2020

### Self-Guided Approximate Linear Programs: Randomized Multi-Shot Approximation of Discounted Cost Markov Decision Processes

– Tuck School of Business, Dartmouth College, Hanover, NH	2022
– International Conference on Continuous Optimization (ICCOPT), Bethlehem, PA	2022
– INFORMS Optimization Society (IOS) Conference, Greenville, SC	2022
– INFORMS Annual Meeting, Anaheim, CA	2021
– POMS 30th Annual Conference, Washington D.C.	2019
– INFORMS Annual Meeting, Phoenix, AZ	2018
– POMS 29th Annual Conference, Houston, TX	2018

### SMOILE: A Shopper Marketing Optimization and Inverse Learning Engine

– ACM SIGKDD, International Conference on Knowledge Discovery & Data Mining, Anchorage, AK ( <a href="#">Link</a> )	2019
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## HONORS AND AWARDS

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BGS membership (honor society):	College of Business Administration, University of Illinois Chicago, USA	2021
Merit-Based Graduate Admission:	College of Science, University of Tehran, Iran	2016
Technical qualification:	Soccer Simulation League, RoboCup Iran open, Iran ( <a href="#">Link</a> )	2016
Technical qualification:	Soccer Simulation League, Khwarizmi International Award, Iran ( <a href="#">Link</a> )	2010

## SERVICE

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### Reviewer

- Operations Research (OR) 2025
- Production and Operations Management (POM) 2024
- INFORMS Journal on Computing (IJOC) 2022
- Information Systems Research (ISR) 2022
- International Conference on Learning Representations (ICLR) 2021
- Annals of Operations Research (ANOR) 2019 - 2021
- Computers & Operations Research (COR) 2019 - 2021
- Electronic Commerce Research (ECR) 2018 - 2021
- Information Systems and Operational Research (INFOR) 2018

### Conference Organization

- Session chair, *Dynamic Pricing and Risk Management*, POMS 35th Annual Conference 2025
- Session co-chair, *New Topics in Dynamic Assignment*, INFORMS Annual Meeting 2024
- Session co-chair, *Recent Advances in Approximate Dynamic Programming*, INFORMS Annual Meeting 2024
- Session co-chair, *Risk Management in Reinforcement Learning*, INFORMS Annual Meeting 2023
- Session co-chair, *Learning and Sequential Decision Making*, INFORMS Annual Meeting 2022
- Session co-chair, *Large-scale Linear Programs and Applications*, INFORMS Optimization Society Conference 2022
- Session chair, *Recent Advances in Reinforcement Learning*, INFORMS Annual Meeting 2021
- Session co-chair, *Social Responsibility and Risk in Supply Chains*, INFORMS Annual Meeting 2021

### Membership

- Beta Gamma Sigma (BGS) Society 2021 - Present
- Production and Operations Management Society (POMS) 2018 - Present
- Institute for Operations Research and the Management Sciences (INFORMS) 2017 - Present
- INFORMS Chicago Chapter Ambassador 2022

## COMPUTATIONAL SKILLS

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- Programming languages: Python, R, C++, C, Java, Matlab, HTML, JavaScript  
Data analytics libraries: Scikit-learn, Gymnasium, Numba, NumPy, Matplotlib, SciPy, Pandas  
Optimization libraries: Gurobi, CVXPY, Nevergrad, Autograd, PyTorch, Pyomo, OR-Tools  
Operating systems: Linux, MacOS