

Ali Daei Naby

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EDUCATION

- University of Toronto, Rotman School of Management, Canada** Sep. 2022 - July 2027 (exp.)
Ph.D. in Operations Management and Statistics
Advisors: Prof. Azarakhsh Malekian and Prof. Ming Hu
- Sharif University of Technology, Iran** Nov. 2020 - July 2022
M.Sc. in Applied Mathematics GPA: 18.52/20
Advisors: Prof. Kasra Alishahi and Prof. Mir-Omid Haji-Mirsadeghi
- Sharif University of Technology, Iran** Sep. 2015 - Feb. 2020
B.Sc. in Mathematics and Applications GPA: 17.87/20
Advisor: Prof. Kasra Alishahi

RESEARCH INTERESTS

I am broadly interested in revenue management and mechanism design, with a focus on the significance of limited additional information in markets from both the supply and demand sides. I investigate how limited price experimentation improves pricing performance, how coarse post-allocation signals about buyers' valuations affect selling mechanisms and revenue, and how buyers' costly value inspection influences buyer surplus.

PUBLICATIONS AND WORKING PAPERS

Optimal Mechanism Design with Post-Allocation Signal

with Saeed Alaei, Ali Makhdoumi, and Azarakhsh Malekian

Conference Version Submitted

Full Version (SSRN, Feb 2026): [Link]

A binary signal about values significantly increases revenue through the curvature of beliefs

Inspect or Guess? Mechanism Design with Unobservable Inspection

with Saeed Alaei and Azarakhsh Malekian

Reject and Resubmit at Operations Research

Extended Abstract in Proceedings of the 21st Conference on Web and Internet Economics (WINE 2025)

Full Version (SSRN, Oct. 2025): [Link]

Buyer value inspection prevents full surplus extraction and leads to randomization over a small menu of prices

Robust One-Shot Price Experiment

with Setareh Farajollahzadeh and Ming Hu

Major Revision at Management Science

Extended Abstract in Proceedings of the 26th ACM Conference on Economics and Computation (EC 2025)

Full Version (SSRN, Dec. 2025): [Link]

Winner, 2025 Oded Berman Student Paper Competition

One-shot price experimentation significantly improves pricing with limited data

Incentivizing Data Collaboration: A Mechanism Design Approach

with Saeed Alaei, Ali Makhdoumi, and Azarakhsh Malekian

Journal Version Submitted

Shorter Version Accepted for Poster at the NeurIPS 2025 Workshop on Algorithmic Collective Action (ACA)

Full Version (SSRN, Feb. 2026): [Link]

Revenue-maximizing platforms may mitigate free-riding in data collaboration

Digital Art Collection Design

with Ming Hu and Zhoupeng (Jack) Zhang

Work in Progress

Extreme rarity or uniform availability is optimal in art collections

AWARDS

- **Winner**, Oded Berman Student Paper Competition, Dec. 2025
Rotman School of Management.
- **Bronze Medal**, International Mathematical Olympiad (IMO), July 2015
Chiang Mai, Thailand.
- **Second Prize**, International Mathematics Competition for University Students (IMC), July 2019
Blagoevgrad, Bulgaria.
- **Gold Medal (1st Place)**, 43rd Iranian Mathematics Competition for University Students, Sep. 2019
Rafsanjan, Iran.
- **Gold Medal (1st Place)**, 20th National Mathematics Olympiad, June 2019
Tehran, Iran.
- **Gold Medal (1st Place)**, Al-Khwarizmi International Mathematical Olympiad, Oct. 2018
Urgench, Uzbekistan.
Won the special award with full marks among students of 56 universities from more than 20 countries.
- **Gold Medal (1st Place)**, 42nd Iranian Mathematics Competition for University Students, July 2018
Behshahr, Iran.
- **Gold Medal**, Iranian National Olympiad in Mathematics for High-school Students, Sep. 2014
Tehran, Iran.
- **Gold Medal**, Iranian National Olympiad in Mathematics for High-school Students, Sep. 2013
Tehran, Iran.

PROFESSIONAL ACTIVITIES AND SERVICES

- Program Committee (PC), ACM Conference on Economics and Computation (EC), 2026
- Reviewer, INFORMS Manufacturing and Service Operations Management (MSOM) Conference, 2026
- Session Co-Chair, INFORMS Annual Meeting, 2025
- Vice President of Operations, UTOrg Student Chapter at the University of Toronto, 2025-2026

TEACHING EXPERIENCE

Rotman School of Management, Teaching Assistant

Data Science for Managers (MBA Core), (≈ 30 students)	Spring 2026
Operations Management (undergraduate) (≈ 300 students)	Fall 2023 and Fall 2025
MMA Practicum (MMA Core) (≈ 10 students)	Spring 2024 and Spring 2025
Management Analytics (MMA Core) (≈ 30 students)	Fall 2023
Analytics for Marketing Strategy (MMA Core) (≈ 50 students)	Spring 2023

Sharif University of Technology, Teaching Assistant

Applied Stochastic Processes (graduate) (≈ 20 students)	Spring 2022
Introduction to Probability Theory (graduate) (≈ 10 students)	Spring 2022
Real Analysis (graduate) (≈ 20 students)	Fall 2021
Stochastic Analysis (graduate) (≈ 10 students)	Spring 2021

SELECTED TALKS

Inspect or Guess? Mechanism Design with Unobservable Inspection

- INFORMS Revenue Management and Pricing (RMP) Conference, New York, USA July 2025
- Marketplace Innovation Workshop (MIW) May 2025

Robust One-Shot Price Experiment

- Economics and Computation (EC) Conference, Palo Alto, USA July 2025
- University of Calgary Haskayne School of Business, Calgary, Canada Oct. 2024
- INFORMS Annual Meeting, Seattle, USA Oct. 2024
- Production and Operations Management Society (POMS) Conference April 2024

Digital Art Collection Design

- INFORMS Revenue Management and Pricing (RMP) Conference, New York, USA July 2025

SKILLS

- Programming: MATLAB, Python, R
- Tools: L^AT_EX