# Sajad Modaresi

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## Education

**Fuqua School of Business, Duke University**  Durham, NC
Ph.D. in Operations Management  2018
Thesis: Data-Driven Learning Models with Applications to Retail Operations
Advisor: Fernando Bernstein

**University of Pittsburgh**  Pittsburgh, PA
M.Sc. in Industrial Engineering  2012

**Sharif University of Technology**  Tehran, Iran
B.Sc. in Industrial Engineering  2010

## Professional Experience

**Kenan-Flagler Business School, University of North Carolina at Chapel Hill**  Chapel Hill, NC
Assistant Professor of Operations  2018 − Present

**Fuqua School of Business, Duke University**  Durham, NC
Graduate Research and Teaching Assistant  2013 − 2018

**Department of Industrial Engineering, University of Pittsburgh**  Pittsburgh, PA
Graduate Research and Teaching Assistant  2010 − 2013

## Research Interests

Retail Operations, Online Personalization, Data-Driven Approaches to Decision-Making under Uncertainty, Machine (Reinforcement) Learning, Consumer Choice Models.

## Publications

1. "A Dynamic Clustering Approach to Data-Driven Assortment Personalization", with F. Bernstein and D. Sauré. 2019. *Management Science*, 65(5), pp. 2095-2115.
   - **First Prize, 2018 MSOM Student Paper Competition**.

2. "Learning in Combinatorial Optimization: What and How to Explore". with D. Sauré and J. P. Vielma. 2020. *Operations Research*, 68(5), pp. 1585–1604
   - **Second Prize, 2013 INFORMS JFIG Paper Competition**.

3. "Impact of Inventory Levels and Product Variety on Consumers' Perceptions of Brands", with S. Golara and K. Rajavi. *Production and Operations Management.* Forthcoming.

## Working Papers

4. "Diamonds in the Rough: Leveraging Click Data to Spotlight Underrated Products", with S.M. Emadi and V. Deshpande. *Under Review.*
   - **Finalist, 2021 MSOM Data-Driven Challenge**.

5. "Exploration Optimization for Dynamic Assortment Personalization under Linear Preferences", with F. Bernstein and D. Sauré. *Under Review.*

6. "Price Optimization under the Mixture of Boundary Logit Model", with M.A. Farzaneh and A. Venkataraman. *Under Review.*

## Work in Progress

7. "Bundle Price Optimization with Learning", with T. Abdallah.

8. "Deep Reinforcement Learning in Service Systems", with S.M. Emadi.

## Patents

- "Quick Learning Recommendation Method, Non-transitory Computer Readable Medium and System for Baskets of Goods". *US Patent* 11,151,631, 2021.

## Teaching Experience

Kenan-Flagler Business School, University of North Carolina at Chapel Hill

- BUSI 410: Business Analytics, Undergraduate Program (Core), Fall 2018 – Present.
- MBA 708A: Retail Operations, MBA Elective, Fall 2019 – Present.

The Fuqua School of Business, Duke University

Decision 502: Business Mathematics Review, Daytime MBA and Master of Management Studies (MMS) Programs, Summer 2016.

## Honors and Awards

- Nominated for Weatherspoon Award for Excellence in Undergraduate Teaching, Kenan-Flagler Business School, 2023.
- MBA Teaching All-Star Award, Kenan-Flagler Business School, 2021.
- Finalist at the 2021 MSOM Data-Driven Research Challenge.
- First Prize at the 2018 MSOM Student Paper Competition.
- Second Prize at the 2013 INFORMS JFIG Paper Competition.

- Invited Panelist at the POMS Doctoral Consortium, 2019.

- INFORMS Doctoral Student Colloquium Selected Attendee, 2016.

- The Fuqua School of Business Graduate Fellowship, 2013.

- University of Pittsburgh Graduate Fellowship, 2010.

- University Honor of Exceptionally Outstanding Undergraduate Student. Department of Industrial Engineering, Sharif University of Technology, 2010.

- University Honor of Studying for the Master's degree without taking the National Entrance Exam, Department of Industrial Engineering, Sharif University of Technology, 2010.

- Ranked $3^{rd}$ in the Class of 2006 for the undergraduate cumulative GPA among all peers, Department of Industrial Engineering, Sharif University of Technology, 2010.

- Ranked among Top 0.1% in Iran's National University Entrance Exam (over 400,000 participants), 2006.

## Academic Service and Affiliations

- Reviewer Service

  - Referee for: *Management Science, Operations Research, Manufacturing and Service Operations Management, Production and Operations Management, Service Science*.
  - Judge for MSOM Supply Chain SIG conference, 2020, 2022.
  - Judge for JFIG Paper Competition, 2019.
  - Judge for DSI Buffa Dissertation Award, 2019.
  - Judge for Research Grants Council (RGC) of Hong Kong, 2018 and 2019.

- University Service

  - Co-Organizer, Operations Area Seminar Series, 2019 − 2023.
  - Member, Faculty Need Trends Discovery Working Group, 2020.

- Conference Organizing

  - Session Chair, INFORMS Annual Meeting, 2019.
  - Session Chair, POMS Annual Conference, 2019, 2020, 2021.

- Member of: The Institute for Operations Research and the Management Sciences (INFORMS), Manufacturing and Service Operations Management (M&SOM) Society, Production and Operations Management Society (POMS).

## Invited Talks

- Kellogg School of Management, Northwestern University, April 2024.

- Statistics & Operations Research Department, University of North Carolina at Chapel Hill, March 2024.

- Carey Business School, Johns Hopkins University, May 2023.

- "Diamonds in the Rough: Leveraging Click Data to Spotlight Underrated Products", Oracle Corporation, February 2022.

- "The Job Market Experience: Candid Conversations", Invited Panelist at the POMS Doctoral Consortium, May 2019.

- McCombs School of Business, University of Texas at Austin, 2018.

- Kelley School of Business, Indiana University, 2018.

- Imperial College Business School, 2018.

- McGill University, Desautels Faculty of Management, 2018.

- University of California, Riverside, School of Business Administration, 2018.

- Lindner College of Business, University of Cincinnati, 2018.

- University of Illinois at Chicago, College of Business Administration, 2018.

- University of Nebraska-Lincoln, College of Business, 2018.

- Kenan-Flagler Business School, University of North Carolina at Chapel Hill, 2017.

- Fox School of Business, Temple University, 2017.

- Lundquist College of Business, University of Oregon, 2017.

## Invited or Refereed Conference Presentations

- INFORMS Annual Meeting, Indianapolis, IN, 2022.

- POMS Annual Conference, 2022.

- INFORMS Annual Meeting, 2021.

- MSOM Annual Conference, 2021.

- POMS Annual Conference, 2021.

- INFORMS Annual Meeting, Seattle, WA, 2019.

- POMS Annual Conference, Washington, DC, 2019.

- INFORMS Annual Meeting, Phoenix, AZ, 2018.

- MSOM Student Paper Competition, INFORMS Annual Meeting, Phoenix, AZ, 2018.

- INFORMS Annual Meeting, Houston, TX, 2017.

- MSOM Annual Conference, Chapel Hill, NC, 2017.

- POMS Annual Conference, Seattle, WA, 2017.

- INFORMS Annual Meeting, Nashville, TN, 2016.

- Amazon's Supply Chain Optimization Summit, Seattle, WA, 2016 (Poster presentation).

- INFORMS Revenue Management and Pricing Section Conference, NY, 2016.

- POMS Annual Conference, Orlando, FL, 2016.

- INFORMS Annual Meeting, Philadelphia, PA, 2015.

- INFORMS Annual Meeting, San Francisco, CA, 2014.

- INFORMS Annual Meeting, Phoenix, AZ, 2012.

- MSOM Annual Conference, New York, NY, 2012 (Poster presentation).