Mohammad Reza Aminian

Curriculum Vitae

The University of Chicago, Booth School of Business
5807 S Woodlawn Ave, Chicago, IL 60637
Mr.aminian1999@gmail.com
Personal Website
Google Scholar

Education

2021 - Present **PhD in Business**, *The University of Chicago, Booth School of Business, Chicago, IL, USA*
Major: Management Sciences/Operations Management
Minor: Economics
Advisor: Prof. Rad Niazadeh
Expected Graduation Date: June 2027

2025 **MBA in Business**, *The University of Chicago, Booth School of Business, Chicago, IL, USA*

2018 - 2021 **BS in Computer Science**, *Sharif University of Technology, Tehran, Iran.*

2016 - 2021 **BS in Electrical Engineering**, *Sharif University of Technology, Tehran, Iran.*

Research Interests and Methods

Interests **Socially Responsible & Behaviorally Aware Operations** • **Platform & Nonprofit Operations** • **Algorithmic Hiring & Fairness** • **Dynamic Resource Allocation** • **AI, EdTech & the Future of Education**

Methods **Online Algorithms** • **Optimization** • **Stochastic Modeling & Queueing** • **Online Learning** • **Game Theory** • **Mechanism/Information Design**

Research

Fundraising for Education: Optimizing Crowdfunding Platforms (Job Market Paper)
Design dynamic assortment policies for crowdfunding platforms to prevent "project starvation" and maximize the value of fully funded campaigns.
with Rad Niazadeh (Chicago Booth)

Optimal Bayesian Online Allocation of Reusable Resources
Generalize classical online resource allocation theory to the reusable setting by developing a time-invariant admission policy that guarantees ex-post feasibility and matches the information-theoretic tight bounds of non-reusable models. SSRN: 6384158
with Rad Niazadeh (Chicago Booth), Pranav Nuti (Chicago Booth)

Stationary Online Contention Resolution Schemes
Create the S-OCRS framework to unify the design of online selection algorithms, achieving optimal selectability and resolving open problems across various feasibility environments, like matchings and matroids. SSRN: 6384199
with Rad Niazadeh (Chicago Booth), Pranav Nuti (Chicago Booth)
Major Revision at Operations Research, Accepted at EC 2026
• Finalist, Michael H. Rothkopf Junior Researcher Paper Prize, *INFORMS Auctions and Market Design (AMD) Section (Entrant: Pranav Nuti)*

Online Job Selection: Reward Rate vs. Remaining Value (formerly Real-Time Personalized Order Holding)
Introduce an online resource allocation framework and index-based policies with theoretical guarantees to optimize the trade-off between keeping an ongoing job to harvest its remaining value vs. preempting it to serve a new request in limited capacity systems. SSRN: 4644495
with Will Ma (Columbia GSB), Linwei Xin (Cornell)
Accepted at Management Science
• Featured in Chicago Booth Review

Markovian Search with Ex-Ante Constraints: Theory and Applications to Socially Aware Algorithmic Hiring
Design socially-responsible sequential search framework for algorithmic hiring and resource allocation. Developed dual-adjusted index policies and primal-dual algorithms to satisfy ex-ante constraints efficiently. SSRN: 4347447
with Vahideh Manshadi (Yale SOM), Rad Niazadeh (Chicago Booth)
Accepted at Management Science, EAAMO 2024
- Featured in Chicago Booth Review
- Third Place, IBM Service Science Best Student Paper Award, *INFORMS 2023*

Teaching

Operations Management (Executive MBA), TA, Chicago Booth, Winter 2024

Managerial Decision Modelling (Undergrad, MiM, MBA), TA, Chicago Booth, Spring: 2023, 2024, Fall: 2024, 2025

Linear Programming (PhD), TA, Chicago Booth, Fall: 2022, 2023

Math Olympiad Teacher and Tutor

Work

2019 - 2021 **Research Assistant at the *Sharif University of Technology, Tehran, Iran.***
Graph Auto-Encoder with capability of reconstructing any weighted adjacency matrix
Supervisor: Prof. Saber Saleh Kaleybar

2017 **Research Assistant at *Ambient Intelligence Research Lab (AIR Lab), Sharif University of Technology, Tehran, Iran.***
Signal Processing on the EEG data
Supervisor: Prof. Hamid K. Aghajan

Selected Honors and Awards (since 2012)

2026 **Finalist, Michael H. Rothkopf Junior Researcher Paper Prize**, *INFORMS Auctions and Market Design (AMD) Section (Entrant: Pranav Nuti)*

2023 **Third Place, IBM Service Science Best Student Paper Award**, *INFORMS*

2021 - 2023 **K.D.M. Fellowship Award**, *The University of Chicago, Booth School of Business*

2021 - 2027 **Booth Doctoral Fellowship Award**, *The University of Chicago, Booth School of Business*

2021 **Honorary admission for Master of Business Administration**, *Sharif University of Technology, Tehran, Iran*

2019 **Top Second Prize Winner at International Mathematics Competition for university students**, *Bulgaria*

2016 **Honorary admission for Bachelor of Electrical Engineering**, *Sharif University of Technology, Tehran, Iran*

2016 **Silver medalist at 57th International Mathematical Olympiad (IMO)**, *Hong Kong*

2015 **Gold medalist at 33rd National Mathematical Olympiad**, *Iran*

2014 **Silver medalist at International Mathematics Competition (KIMC)**, *South Korea*

2014 **Second Runner up on both Team Prize and Group Prize at International Mathematics Competition (KIMC)**, *South Korea*

2014 **Silver medalist at 32nd National Mathematical Olympiad**, *Iran*

2014 **Gold medalist at 15th National Mathematics Competition**, *Iran*

2013 **Gold medalist at 14th National Mathematics Competition**, *Iran*

2013 **Gold medalist at 3rd Mathematical Olympiad of Iranian Teenagers**, *Iran*

2012 **Merit medalist at International Mathematics Competition (TAIMC)**, *Taiwan*

2012 **Gold medalist at 13th National Mathematics Competition**, *Iran*

Presentations

Fundraising for Education: Optimizing Crowdfunding Platforms

INFORMS 2026, San Francisco, CA, USA
RMP 2026, Ann Arbor, MI, USA
MSOM 2026, Boston, MA, USA

Responsible Decision Making in Operations: Algorithms for Social Impact

Chicago OPS Day 2026, Poster, Chicago, IL, USA
Rising Stars Workshop 2026, Poster, Ann Arbor, MI, USA

Stationary Online Contention Resolution Schemes:

INFORMS 2025, Atlanta, GA, USA
Purdue Operations Conference 2025, West Lafayette, IN, USA
RMP 2025, New York, NY, USA
EC 2025, Poster, Stanford, CA, USA
INFORMS 2024, Seattle, WA, USA

Online Job Selection: Reward Rate vs. Remaining Value (formerly Real-Time Personalized Order Holding):

RMP 2024, Los Angeles, CA, USA
Chicago OPS Day 2024, Poster, Chicago, IL, USA
INFORMS 2023, Phoenix, AZ, USA
ChicagoBooth Operations Day 2023, Chicago, IL, USA
MOPTA 2023, Bethlehem, PA, USA
MIW 2023, Virtual

Markovian Search with Socially Aware Constraints:

APS 2025, Atlanta, GA, USA
Purdue Operations Conference 2024, West Lafayette, IN, USA
EC 2024, Poster, New Haven, CT, USA
MSOM 2024, Minneapolis, MN, USA
FORC 2024, Cambridge, MA, USA
Chicago OPS Day 2024, Poster, Chicago, IL, USA
Midwest Workshop on Game Theory 2024, Poster, Chicago, IL, USA
Columbia Workshop on Fairness 2023, Poster, NYC, NY, USA
INFORMS 2023, Phoenix, AZ, USA
EC 2023, Poster, Virtual
MIW 2023, Virtual

NYC OPS Day 2023, Poster, NYC, NY, USA
INFORMS 2022, Indianapolis, IN, USA

Service

Journal Reviewing: **Management Science, Operations Research, M&SOM**

Conference Reviewing: **MSOM, International Symposium on Algorithms and Computation (ISAAC)**

Languages

Human: **Persian**: Native, **English**: Advanced, **Arabic**: Intermediate, **Turkish**: Intermediate, **Japanese**: Elementary

Computer: Python, Matlab, R, Java, C++, C, LaTeX

Extracurricular Activities

Anime, Swimming, Cycling, Archery, (Table) Tennis, Badminton, Hiking, Nature-tourism

References

Professor Rad Niazadeh
Associate Professor of Operations Management (PhD Advisor)
The University of Chicago Booth School of Business
rad.niazadeh@chicagobooth.edu

Professor Vahideh Manshadi
Michael H. Jordan Professor of Operations
Yale School of Management, Yale University
vahideh.manshadi@yale.edu

Professor Linwei Xin
Associate Professor
School of Operations Research and Information Engineering, Cornell University
lx267@cornell.edu

Professor Will Ma
Roderick H. Cushman Associate Professor
Decision, Risk, and Operations, Graduate School of Business, Columbia University
wm2428@gsb.columbia.edu