

# Mohammad Reza Aminian

## Curriculum Vitae/Resume

The University of Chicago, Booth School of Business

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### Research Interests

**Social / Ethical Operations, (Online) Algorithms, (Online) Learning, ML, RL, Optimization, Game Theory, Mechanism / Information Design**

### Education

2021 - **Ph.D. in Business: Management Sciences / Operations Management,**

Present *The University of Chicago, Booth School of Business, Chicago, IL, USA*

Advisor: Prof. Rad Niazadeh

Expected Graduation Date: July 2026

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

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

### Selected Honors and Awards (since 2012)

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

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*

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), and the top mark of the Iranian team,** *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 Group prize at International Mathematics Competition (KIMC),** *South Korea*

2014 **Second Runner up Team 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 (KIMC),** *Iran*

2014 **Membership of National Elite Foundation,** *Iran*

2013 **Selected as a member of the Iranian Team at International Zhautykov Olympiad (IZHO),** *Iran*

2013 **Gold medalist at 14th National Mathematics Competition (BIMC),** *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 (TAIMC)**, *Iran*

## Research

### **Real-Time Personalized Order Holding**

Designing practical approximation algorithms for the online order holding problem to enjoy the benefits of catching cancellations and multiorder consolidations. SSRN: 4644495

Co-authors: Prof. Will Ma (Columbia GSB), Prof. Linwei Xin (Chicago Booth)

### **Markovian Search with Socially Aware Constraints**

Incorporating ex-ante constraints in different aspects and variations of the sequential search problem. SSRN: 4347447

Co-authors: Prof. Vahideh Manshadi (Yale SOM), Prof. Rad Niazadeh (Chicago Booth)

• **Third Place, Service Science Best Student Paper Award**, *INFORMS Annual Meeting 2023*

## Talks

### **Real-Time Personalized Order Holding:**

**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:**

**Columbia Workshop on Fairness 2023**, Poster, NYC, NY, USA

**INFORMS 2023**, Phoenix, AZ, USA

**RMP 2023**, Presented by Rad Niazadeh, London, UK

**EC 2023**, Poster, Virtual

**MIW 2023**, Virtual

**NYC OPS Day 2023**, Poster, NYC, NY, USA

**INFORMS 2022**, Indianapolis, IN, USA

## Teaching

**T.A. Operations Management, Executive MBA**, Chicago Booth: 2024

**T.A. Managerial Decision Modelling, MBA**, Chicago Booth: 2023, 2024

**T.A. Linear Programmig, Ph.D.**, Chicago Booth: 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

## Languages

**Human** **Persian:** Native, **English:** Advanced, **Arabic:** Intermediate, **Turkish:** Intermediate  
**Computer** Matlab, Python, R, Java, C++, C,  $\text{\LaTeX}$

## Extracurricular Activities

Swimming, Hiking, Cycling, Table Tennis, Ecotourism, Watching Movie and Anime

## Selected Courses

**Graduate** Approximate Dynamic Programming, Market Design, Large Scale Optimization, Learning and Game Theory, Supply Chain, Dynamic Programming, Econometrics 2 and 3, Online Optimization 1 and 2, Approximation Algorithms, Stochastic Processes, Linear Programming, Advanced Microeconomics Analysis, Microeconomics 2 and 3, Graph Representation Learning, Deep Learning, Machine Learning, Causal Inference, Distributed Systems, Data Networks, Principles of Entrepreneurship, Convex Optimization 2, Queuing Theory (Both Sharif and Booth)

**Under Graduate** Artificial Intelligence, Introduction to Machine Learning, Graph Theory, Linear Algebra, Design Algorithms, Convex Optimization 1, Stochastic Processes, Probability and Statistics, Data Structures, Automata and Languages Theory, Numerical Analysis 1 and 2, Math Logic, Introduction and Advanced Programming, Math Analysis, Discrete Math, Differential Equations, Principles of Economy, Combinatorics