Behzad Nabavi

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EDUCATION

Sharif University of Technology   Tehran, Iran
Bachelor of Computer Engineering; Cumulative GPA: 18.97/20.00   Sep. 2020 - Present

Allameh Helli Pasdaran High School
Affiliated with National Organization for Development of Exceptional Talents (NODET)   Tehran, Iran
Diploma in Mathematics and Physics; GPA: 19.60/20.00   Sep. 2017 - Sep. 2020

RESEARCH INTERESTS

- Computational Social Choice
- Mechanism Design
- Network Science
- Algorithmic Game Theory
- Auction Theory
- Learning-augmented Algorithms

RESEARCH EXPERIENCE

Sharif University of Technology   Sep. 2024 - Present
Research Intern under the supervision of Prof. Hamid R. Rabiee

- Worked in the Data Science and Machine Learning Lab (DML) on debiasing LLMs for fact-checking through democratic and republican perspectives and achieving fairness.

Tehran Institute for Advanced Studies (TEIAS)   Sep. 2023 - Present
Research Intern under the supervision of Prof. Masoud Seddighin

- Collaborated with Golnoosh Shahkarami from the Max-Planck Institute (MPI) to address the metric distortion problem through the learning-augmented framework and improved the consistency-robustness trade-off for the randomized voting rules.

University of Michigan   Jun. 2023 - Nov. 2023
Research Intern under the supervision of Prof. Grant Schoenebeck

- Worked on modeling the conference peer review process as a Stackelberg game, analyzing and comparing different conference designs using key metrics such as review burden, conference value, and average author utility. This work resulted in the paper 'Conference Design with Strategic Authors,' currently under preparation for submission to NeurIPS 2024.

Institute for Research in Fundamental Sciences (IPM)   Jun. 2023 - Sep. 2023
Research Assistant

- Assisted Prof. Samira Hossein Ghorban in developing lecture notes for the Game Theory course, conducted research and literature reviews to ensure the accuracy and comprehensiveness of the lecture notes.

HONORS & AWARDS

Nationwide University Entrance Exam   Aug. 2020
Mathematics & Physics, Ranked 206th (Among +155,000)

Iranian National Physics Olympiad   Aug. 2019
Bronze Medal

TEACHING EXPERIENCE

Numerical Computation, Instructor: Prof. Samira Hossein Ghorban   Fall 2023, Fall 2024
Teaching Assistant

Scientific and Technical Presentation, Instructor: Prof. Shohreh Kasaei   Spring 2024, Fall 2024
Teaching Assistant

Algorithmic Game Theory, Instructor: Prof. Masoud Seddighin   Spring 2023, Spring 2024
Head Teaching Assistant of Coding Assignment

- Created video lectures for Linear Programming workshop.
- Collaborated on course projects' desing and implementation.
- Held quizzes and graded the papers.

Machine Learning, Instructor: Prof. Fatemeh Seyyedsalehi   Spring 2024
Teaching Assistant

Game Theory, Instructor: Marzie Nilipour   Spring 2023
Teaching Assistant

Compiler Design, Instructor: Samaneh Hosseinmardi   Spring 2023
Teaching Assistant

Probability & Statistics, Instructor: Prof. Ali Sharifi-Zarchi   Fall 2022
Teaching Assistant

Fundamentals of Programming, Instructor: Alireza A. Mohammadi   Spring 2022
Teaching Assistant

Relevant Coursework

- Game Theory (Coursera)
- Algorithmic Game Theory (Stanford CS364A, online, audited)
- Algorithms Design (18.2/20)
- Artificial Intelligence (20/20)
- Convex Optimization (18.8/20)
- Fundamentals of Economics (20/20)
- Advanced Programming (20/20)

Work Experience

Cafe Bazaar   Tehran, Iran
Software Engineer   Jul. 2022 - Jan. 2023

- Worked in one of the largest tech companies in Iran as a software engineer, developed an online wallet and payment system used by Bazaar App Store, which provides service to thousands of users.

Allameh Helli Pasdaran High School   Tehran, Iran
Head of Physics Olympiad Department   Sep. 2020 - Sep. 2021

- Instructed Calculus and Electrodynamics and prepared talented high school students for participating in National Physics Olympiad.

Other Experiences

8th Winter Seminar Series in Advanced Topics of Computer Science   Feb. 2023 - Apr. 2023
Executive Staff

AI Challenge   Feb. 2022 - Aug. 2022
Marketing & Executive Staff

7th Winter Seminar Series in Advanced Topics of Computer Science   Dec. 2021 - Feb. 2022
Media & Executive Staff

Cultural Studies Group   Dec. 2021 - Present
Committee Member

Rayanesh (Department's Journal)   Nov. 2021 - Present
Committee Member

Projects

MIPS CPU: Implemented MIPS ISA with Verilog programming language for Computer Architecture project.

Graph Clustering: Implemented graph clustering with Python programming language for Linear Algebra project.

Crypto Alert: Implemented Cryptocurrency Alert System with Java programming language.

Yu-Gi-Oh!: Replicated Yu-Gi-Oh! card game with Java programming language for Advanced Programming project.

Skills

Programming Languages: Python, Java, C/C++, R, Go, Verilog, MIPS Assembly

Tools: Docker, Kubernetes, Grafana, LaTeX, Version Control

Languages: Persian, English