

Negar Honarvar Sedighian

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Education

Shahid Beheshti University

Bachelor of Science in Computer Engineering

Tehran, Iran

Sep. 2020 to Feb. 2025[Expected]

- **Cumulative GPA: 17.42/20 (3.67/4)**
- **GPA of last two years: 18.23/20 (3.78/4)**
- Ranked **2nd** in admission among 90 admitted students.

Relevant Courses: GPA: 4/4

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|-----------------------------------|---------------------------|------------------------------|
| - Fundamentals of Computer Vision | - Machine Learning | - Computer Simulation |
| - Fundamentals of Robotics | - Artificial Intelligence | - Statistics and Probability |
| - Deep Reinforcement Learning | - Algorithms Design | - Data Structures |

Farzanegan 1 Secondary School

High School Diploma in Mathematics

Mashhad, Iran

Sep. 2017 to Jun. 2020

- **Diploma GPA: 19.98/20 (4.0/4.0)**
- Ranked **321st** in University Entrance Exam in Iran
- Ranked **1st** in admission among Sampad students in Khorasan Province.

Research Interests

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| - Application of Deep Machine Learning Methods in Health Care | - Graph Neural Networks Methods and Application |
| - Accelerated MRI Reconstruction | - Image Super Resolution and Denoising |
| - Deep Reinforcement Learning Algorithms and Their Application | - Policy Reproducibility in Deep Reinforcement Learning Algorithms |

Projects

- *Automated Stock Trading Strategy with DRL* *Jun. 2024*
 - Designing a Cascading Long Short-Term Memory - Proximal Policy Optimization (PPO) model which uses LSTM layers to capture temporal dependencies in stock data and a PPO algorithm to optimize trading decisions.
- *Farsi News Classification* *Mar. 2024*
 - The goal of this project is to develop a neural network model to classify news articles into their respective categories.
 - The dataset has been preprocessed with Tokenization and Feature Extraction.
- *Guidance of a Quadcopter for Object Detection* *Feb. 2024*
 - Designed a controller for a quadcopter to control its flight over boxes in an urban environment and detect target clothing items.
- *Tron Game Agent* *May. 2023*
 - This game consists of two real-time agents that try to create more walls than their opponent while avoiding collisions with each other and the boundary walls. The Unity framework is based on Chillin's monitor games.
 - The algorithm devised for this game is a combination of a Genetic Algorithm and Minmax, where the Minmax algorithm is used as the fitness function for the Genetic Algorithm.
- *Doodle Jump* *Mar. 2023*
 - A simple version of the Doodle Jump game with red square-shaped bugs, green broken platforms, and white platforms. The main character is a white rounded ball, which can be moved left or right with the 'j' and 'k' buttons.

Work Experience

Network Security Apprentice

Tehran, Iran

Dotin

Jun. 2023 to Oct. 2023

- Management of access levels for company members in various departments to available resources and information in each section by utilizing Windows Azure, as well as identifying and analyzing potential weaknesses and breaches in the network.

Teaching Assistant Experience

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| ○ Artificial Intelligence | Sep. 2024 - Present |
| - Lectured by: Dr. Armin Salimi | |
| ○ Discrete Mathematics | Sep. 2024 - Present |
| - Lectured by: Dr. Farshad Safaei | |
| ○ Algorithms Design | Sep. 2024 - Present |
| - Lectured by: Dr. Ramak Ghavamizadeh | |
| ○ Software Engineering | Feb. 2024 - Jul. 2024 (6 mos) |
| - Lectured by: Dr. Mehran Alidoostnia | |
| ○ Technical English | Sep. 2023 - Jul. 2024 (11 mos) |
| - Lectured by: Dr. Vahidi Asl | |
| ○ Computer Architecture | Sep. 2023 - Jan. 2024 (5 mos) |
| - Lectured by: Dr. Rahmati | |
| ○ Advanced Programming | Sep. 2023 - Jan. 2024 (5 mos) |
| - Lectured by: Dr. Vahidi Asl | |
| ○ Artificial Intelligence | Sep. 2023 - Jan. 2024 (5 mos) |
| - Lectured by: Dr. Mehrnoush Shamsfard | |
| ○ Compiler Design | Sep. 2023 - Jan. 2024 (5 mos) |
| - Lectured by: Dr. Mehran Alidoostnia | |
| ○ Computational Intelligence | Sep. 2023 - Jan. 2024 (5 mos) |
| - Lectured by: Dr. Shahab Nabavi | |
| ○ Operating Systems Laboratory | Sep. 2023 - Jan. 2024 (5 mos) |
| - Lectured by: Dr. Shahab Navabi | |
| ○ Statistic and Probability | Sep. 2023 - Jan. 2024 (5 mos) |
| - Lectured by: Dr. Farshad Safaei | |

Honors and Awards

- **Ranked 2nd** among 90 in admission among admitted students in the Computer Engineering department, Shahid Beheshti University, 2023.
- **Ranked 321st** in National entrance exam for B.Sc Studies among 160,000 students, 2020.
- **Ranked 1st** in **National Organization for Development of Exceptional Talents** Secondary School Entrance Exam in Khorasan , 2017.