

Maedeh Mirzazadeh

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Location: Tehran-Iran

RESEARCH INTERESTS

- Medical Image Analysis
- Machine Learning
- Deep Learning
- Computer Vision
- Robotics
- Dynamic Systems

EDUCATION

- **Amirkabir University of Technology** Tehran, Iran
B.S. in Computer Engineering September 2018 - current
GPA: **4/4 (19.34/20.0)**
Major related courses:
 - Principles of Computational Intelligence: 20/20
 - Principles and Applications of Artificial Intelligence: 20/20
 - Algorithm Design: 20/20
 - Data Structures and Algorithms: 19/20
 - Advanced Programming: 20/20
 - Dynamics: 19/20Supervisor: Prof. Reza Safabakhsh [homepage]
- **National Organization for Development of Exceptional Talents** Qom, Iran
High School Diploma in Mathematics and Physics September 2015 - June 2018
GPA: 19.96/20.0

TEACHING EXPERIENCE

- **Head Teaching Assistant, Principles and Applications of Artificial Intelligence** Spring 2022, Fall 2022
Instructor: Dr. Javanmardi [linkedin] Amirkabir University of Technology
- **Teaching Assistant, Algorithm Design** Spring 2022
Instructor: Dr. Bagheri [homepage] Amirkabir University of Technology
- **Teaching Assistant, Data Structure** Spring 2022
Instructor: Dr. Shahreza [website] Amirkabir University of Technology
- **Teaching Assistant, Operating Systems** Fall 2022
Instructor: Dr. Javadi [homepage] Amirkabir University of Technology
- **Teaching Assistant, Microprocessor and Assembly Language** Spring 2022
Instructor: Dr. Farbeh [homepage] Amirkabir University of Technology

HONORS AND REWARDS

- Ranked top **2%** among students of computer engineering department(**4 out of 176** students) 2018 - 2022
- Ranked top **1%** among over 144000 Iranian participants in the national university entrance exam(Regional rank of 366 and nationwide rank of 1247) 2018
- Awarded as university's exceptionally talented student 2018 - 2022

WORK EXPERIENCE

- **Institute for Research in Fundamental Sciences(IPM)** Tehran, Iran
Internship May 2021 - September 2021
Machine learning in detection and classification of leukemia
- **Quera College** Tehran, Iran
C++ Tutor December 2020 - December 2021
Teaching fundamentals of C++ and computational thinking at CodeUp 2 and 3 to a group of high school students

NOTABLE ACADEMIC PROJECTS

- **CoDet**
 - Implementation of an app-based COVID-19 detection system for CXR images and CT scans using VGG16, VGG19, ResNet50 and InceptionV3 models[code]
- **Projects Related to Principles of Computational Intelligence Course**
 - Implementation of a fuzzy expert system for heart disease diagnosis[code]
 - Implementation of a pure-python image classification model using fully connected neural networks and CIFAR-10 dataset[code]
 - Implementation of a neuroevolution algorithm using a simple game[code]
- **Projects Related to Principles and Applications of Artificial Intelligence Course**
 - Implementation of several search algorithms, multiagent minimax and expectimax algorithms, alpha-beta pruning, model-based and model-free reinforcement learning algorithms inside the Pacman world[code]

SKILLS

- **Programming Languages:** Java, C, C++, Python, SQL, ARM Assembly
- **Libraries and Frameworks:** Numpy, Matplotlib, TensorFlow, Keras, PyTorch
- **Engineering and Development Tools:** MySQL, SQL Server, Git, PyCharm, IntelliJ, DataGrip, Arduino IDE, Wireshark, Proteus

LANGUAGES

- **English:** Advanced TOEFL iBT(September 2022)
Total Score: 111/120
Reading: 30, Listening: 28, Speaking: 28, Writing: 25
- **Persian:** Native

EXTRACURRICULAR ACTIVITIES

- Referee and member of organization committee at “Student Demonstrative Robots” League March 2019
Iran Robocamp(FIRA CUP)
- Mentoring student projects September 2020
Rasta summer school