Maedeh Mirzazadeh

Email: maeede.mir@gmail.com Website: maedemir.github.io GitHub: github.com/maedemir LinkedIn: maedehmirzazadeh Location: Vancouver-Canada

Research Interests

Machine Learning

Algorithms

Computer Vision

Computational Biology

Deep Learning

Medical Image Analysis

EDUCATION

University of British Columbia

M.Sc. in Bioinformatics

Average GPA: 4/4 (91.7/100)

Major related courses:

EECE 571F (Deep Learning with Structures): 98/100
 BIOF 501A (Special Topics in Bioinformatics): 92/100
 CPSC 540 (Machine Learning and Data Mining): 85/100

Supervisor: Dr. Ali Bashashati [homepage]

Amirkabir University of Technology

B.S. in Computer Engineering

GPA: **4/4 (18.83/20.0)**

Major related courses:

- Principles of Computational Intelligence: 20/20

- Principles and Applications of Artificial Intelligence: 20/20

- Algorithm Design: 20/20

Advanced Programming: 20/20

Supervisor: Dr. Reza Safabakhsh [homepage]

Thesis: smart road asset management system [code]

National Organization for Development of Exceptional Talents

High School Diploma in Mathematics and Physics

GPA: 19.96/20.0

Qom, Iran September 2015 - June 2018

TEACHING EXPERIENCE

Teaching Assistant, CPEN 333

Instructor: Dr. Farshid Agharebparast [homepage]

University of British Columbia

Teaching Assistant, CPEN 211

Fall 2023

winter 2023

Spring 2022

Instructor: Dr. Tor Aamodt [homepage]

University of British Columbia

Head Teaching Assistant, Principles and Applications of Artificial Intelligence Spring 2022, Fall 2022
 Instructor: Dr. Mahdi Javanmardi [Googel Scholar]
 Amirkabir University of Technology

Teaching Assistant, Algorithm Design

Teaching Assistant, Data Structure

Amirkabir University of Technology

Instructor: Dr. Alireza Bagheri [homepage]

Spring 2022

Instructor: Dr. Sajad Shirali-Shahreza [website]

Amirkabir University of Technology

Vancouver, Canada

September 2023 - current

Tehran, Iran

September 2018 - August 2023

WORK EXPERIENCE

UBC AI in Medicine Lab(AIMIab)

Research Assistant

Vancouver, Canada September 2023 - current

Institute for Research in Fundamental Sciences(IPM)

Internship

Machine learning in detection and classification of leukemia

Tehran, Iran May 2021 - September 2021

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]

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)
- Awarded as university's exceptionally talented student

2018 - 2022

SKILLS

- Programming Languages: Java, C, C++, Python, SQL, HTML, CSS, ARM Assembly
- Libraries and Frameworks: Numpy, Matplotlib, TensorFlow, Keras, PyTorch
- Engineering and Developement Tools:
 Nextflow, MySQL, Docker, Kubernetes, 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