Seyed Mohammadreza Alavi

School of Electrical and Computer Engineering - University of Tehran

EDUCATION

B.Sc. in Computer Engineering

Sep 2021 - Present

University of Tehran

GPA: 18.64/20 (top 10 percent)

High School Diploma in Mathematics

Sep 2018 - May 2021

Rouzbeh High School

GPA: 19.56/20 (top 10 percent)

RESEARCH INTERESTS

- Artificial Intelligence (Machine Learning, Deep Learning, Neural Networks, Natural Language Processing, Algorithmic Recourse)
- Data Science
- Security and Privacy
- Cryptography, Blockchain, and Cryptocurrencies
- Networking

CERTIFICATIONS

ICDL Institute

CERTIFICATIONS	
Neural Networks and Deep Learning (Certificate) Coursera - DeepLearning.AI	Oct 2024
Introduction to Blockchain & Bitcoin (Certificate) Maktabkhoneh	Sep 2024
Machine Learning Specialization (Certificate) Coursera - DeepLearning.AI - Stanford University	Sep 2023
Machine Learning with Python (Certificate) Maktabkhone	Sep 2023
Advanced Python Programming (Certificate) Maktabkhone	Aug 2022
Network Principles (Certificate) Maktabkhone	Oct 2022
ICDL	Apr 2019

EXPERIENCE

Research Assistant

University of Waterloo

Prof. Amir-Hossein Karimi

Research Assistant

Tehran Institute for Advanced Studies (TEIAS) - Khatam University

Prof. Behnam Bahrak

Teaching Assistant

Artificial Intelligence Course

Prof. Yadollah Yaghoobzadeh and Dr. Hakimeh Fadaei

Teaching Assistant

Engineering Probability and Statistics

Prof. Mostafa Tavassolipour and Prof. Abdole-hossein Vahabie

Teaching Assistant

Introduction to Computing Systems and Programming Course

Prof. Mohammadreza Hashemi and Prof. Hadi Moradi

Instructor

Python and Algorithm Course

Rouzbeh High School

SELECTED ACADEMIC PROJECTS

Star Wars

This project is a simulation of graphical star wars game that a ship tries to eliminate enemies and saves the hostage.

U-Taxi

This project is a simulation of an online taxi service that can be run on local host.

Snake Game

This project is a simulation of graphical snake game that a snake tries to eat mice.

Artificial Intelligence Projects

These projects are AI course projects include: Genetic Algorithm, Reinforcement Learning, Hidden Markov Model, Regression and Classification, Convolutional Neural Networks, and Clustering.

RISC-V Processor

These projects include RISC-V single cycle, RISC-V multicycle, and RISC-V pipeline.

Xv6 Operating System Projects

These projects include some modifications to the Xv6 operating system and we have added some features to this operating system.

Tiny Me

This project is a matching engine for a stock market that we have completed.

Function Craft

Function Craft is a functional programming language that we have designed and implemented in four phases.

SKILLS

Python, C/C++, HTML/CSS, Verilog/SystemVerilog, Algorithm, Data Structure, Artificial Intelligence, Machine Learning, Deep Learning, Neural Networks, Matlab, ICDL, Linux, Java, SQL, Database, Compiler, Cryptography, Blockchain, Cryptocurrencies, Algorithmic Recourse, LaTeX, Git, Data Science, Networking

SELECTED UNIVERSITY COURSES

Advanced Programming: 20/20

Engineering Probability and Statistics: 20/20

Data Structures and Algorithms: 19/20

Algorithm Design: 19/20

Artificial Intelligence: 19.5/20

Data Science: 18.5/20

Cryptocurrencies (Graduate Course): 17.1/20

Languages

Persian (Native)

English