Mahyar Karimi

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EDUCATION

University of Tehran, School of Electrical and Computer Engineering

B.Sc. in Computer Engineering, Current GPA: 3.91/4.0 (18.6/20) (Top 10% of My Class)

Tehran, Iran 2018-Present

Karaj, Iran

Shahid Soltani 1 High School

Diploma in Matchmatics and Physics, GPA: 4.0/4.0

2014-2018

- Part of National Organization for Development of Exceptional Talents

Selected Coursework

My Top Grades During the B.Sc. Program are as Follows:

- Advanced Programming: 20/20

- Formal Languages and Automata Theory: 19.5/20

- Operating Systems: 19.5/20

- Programming Languages and Compilers: 19.4/20

- Formal Methods in Software Engineering: 18.9/20

- Design and Analysis of Algorithms: 20/20

- Data Structures and Algorithms: 20/20

- Artificial Intelligence: 20/20

- Discrete Mathematics: 20/20

- Engineering Probability and Statistics: 17.9/20

- Computer Networks: 16/20

- Signals and Systems: 17/20

Research Experience

Institute of Science and Technology Austria

Research Intern

Klosterneuburg, Austria

Summer 2022

- Worked under Supervision of Prof. Thomas Henzinger, on Monitoring Fairness of Decision Making Processes
- Scholarship Granted by the Austrian Agency for International Cooperation in Education and Research (OeAD-GmbH)

University of Tehran

Tehran, Iran

Research Assistant

August 2021 - Present

January 2022 - Present

- Collaborated with Dr. Hossein Hojjat on Causal Reasoning in Concurrent Systems

Work Experience

Divar Software Engineer Tehran, Iran

- Working on the Job Finding project as a developer.

Tapsell

Tehran, Iran

DevOps Intern

Summer 2021

- Experimented with some infrastructure technologies.

Teaching

Teaching Assistant at University of Tehran

Advanced Programming (Lecturer: Dr. Ramtin Khosravi)

 $Fall\ 2020-Spring\ 2022$

Teaching Assistant at University of Tehran Data Structures and Algorithms (Lecturer: Dr. Heshaam Faili, Dr. Fathiyeh Faghih) Fall 2020 - Spring 2022

Projects

Koloocheh (Python, gRPC)

June 2022

A Peer-To-Peer File Sharing System.

Jepeto Compiler (Java)

March-July 2021

A Compiler for the Jepeto Programming Language (Practice Language Designed at My Faculty.)

MP (Go) Implementation of a Message Broker in Go. March 2022

Dots and Boxes (C with Sockets)

October 2020

The Classic Game, with Sockets for Multiplayer Gaming and Client-Server Communication.

Book Classifier (Python, Jupyter Notebook, numpy, pandas, hazm) Persian Book Classifier using Naïve Bayes Classification Method.

October 2020

Tank Trouble (C++ with RSDL)

January 2020

Two-Player Game of Tank Battle, implemented with RSDL Graphics Framework.

Talks and Presentations

Monitoring of Fairness Properties in Markov Chains

September 2022

Presented my summer internship work to Prof. Henzinger and Chatterjee's group.

NetKAT: Semantic Foundations for Networks

Spring 2022

Presented main ideas of the paper to a class of computer engineering students.

ACHIEVEMENTS

• Ranked Top 2% Nation-Wide, National University Entrance Exam (Mathematics Group)

2018

Ranked Top 1% Nation-Wide, National University Entrance Exam (English-Exclusive Group)

2018

Semi-Finalist in National Mathematics Olympiad

2016, 2017

• Semi-Finalist in National Informatics Olympiad

2017

SKILLS LANGUAGES

- Programming Languages:
 - Skilled in Python, C++, C
 - Familiar with Go, Rust, Java
- Tools and Libraries: Numpy, Pandas, SPIN, ANTLR, NuSMV
- Technologies: Git, Docker, Kubernetes, Nginx, Redis
- English: Upper-Intermediate
 - Completed Adults Program at Iran Language Institute (2010-2016)
- Persian: Native