Amir Hossein Mohsen Nezhad

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Education

Bachelor of Science, Computer Engineering (Sep 2018 - Sep 2022)

Sharif University of Technology GPA: 3.75/4 (Last two years GPA 3.87/4)

Bachelor of Science, Civil Engineering (Sep 2017 - Sep 2018)

First started my bachelor as a civil engineer, then changed my branch to computer engineering

Diploma In Mathematics and Physics (Sep 2013 - Jul 2017)

Allameh Helli High School (Sampad School)

A member of the national organization for development of exceptional talented individuals known as NODET

Research Interests

- Classification Methods That Produce Interpretable Results
- Computer Vision

- Neuroscience
- Deep-Learning for Computational Biology
- Biological Signal Processing

Research Experience

Bachelor's Project(Thesis)

Title: Diagnosis of Thyroid Cancer Using Neural Networks from Cytology Slides Advisors: <u>Prof. Hamidreza Rabie</u> and <u>Prof. Hossein Asadi</u>, Department of Computer Engineering, Sharif University of Technology

Colloquial Meaning Word Extraction

Title: Extraction of Colloquial Words and Formal Meaning from Persian Corpus Using NLP methods and outsourcing

Advisor: Dr. Hamid Beigy, Department of Computer Engineering, Sharif University of Technology

Classification of Blur Images

Title: Classification of Blur Medical Text Documents from Clear Images Using Classical Machine Learning Algorithms

Advisors: <u>Prof. Hamidreza Rabie</u> and <u>Prof. Hossein Asadi</u>, Department of Computer Engineering, Sharif University of Technology

Publication

Diagnosis of Thyroid Cancer Using Neural Networks from Cytology Slides

Currently in work to submit the paper with Mohammadrasoul Hajizamani and supervision of <u>Prof. Hamidreza Rabie</u>, Department of Computer Engineering, Sharif University of Technology

Work Experience

SystemGroup (Since Jul 2021)

Position: Senior Flutter Developer, Junior Backend Developer

Description: Building Mobile Apps, Web Sites, Designing Databases and Apis

Website Link: https://en.systemgroup.net

LinkedIn Page: https://www.linkedin.com/company/hamkaransystem

System Group Co. aka Hamkaran System is Iran's largest private software development company. The company provides enterprise software and support to businesses of all sizes located across the country.

Nilva (Aug 2020 - Mar 2021)

Position: Junior Flutter Developer Description: Building Mobile App

LinkedIn Page: https://ir.linkedin.com/company/nilva

Teaching Experience

Holding Seminars And Internal Team Presentation in SystemGroup 2021 - 2022

Subjects of these presentations were mostly about programming languages, Best Practices in Programming, Machine Learning Algorithms for Different Tasks, Data Structures, ...

Teaching Assistant of Fundamentals of Python Programming Sep 2018

Instructor: <u>Dr. Hadi Talebi</u> at Sharif University of technology

Holding extracurricular classes for students

Awards and Honors

- Ranked 154th in Nationwide Graduate Entrance Exam amongst over 30,000 participants in 2022
- Ranked 185th in Nationwide Undergraduate Entrance Exam amongst over 200,000 participants in 2017
- Admittance in the <u>NODET</u> High School Entrance Examination in 2013

Selected Academic Projects

Signal Processing Final Project

Using python libraries to load and process audio signals in fourier domain

Advance Programming Final Project

Using Java language and JavaFx to implement Farm Frenzy game

Machine Learning Introduction Project

Using GAN architecture to generate MNIST images

Probability and Statistics

Implementation of an algorithm to reconstruct an image given a probability distribution function from noisy version

Embedded Systems Final Project

Designing and implementing a system for hospitals to monitor patients' state online on a website

Fundamental Python Programming

Implementing Bounce Ball Game Using Python

National RoboCup Challenge

Designing a self driving car system in simulation with simple classic algorithm in python and opency

Skills

Programming

Academic And Research Related Skills: C, C++, Java, Python(Pytorch, Pandas, OpenCv, etc), LaTeX Work Related Skills: Python/Django, Dart/Flutter, Go, Javascript, Clean Code Practices, HTML/CSS

Theoretical Computer Science Experiences

Machine Learning, Deep Learning, Graph theory, Computer vision, Natural Language Processing, Crowdsourcing, Data Analytics

Virtualization and Containerization:

VMWare, Docker, etc

Operating Systems

Linux, Windows

Language Skills

• Persian: Native

• TOEFL: To be taken on 22 October 2022

Other Activities

- Computer simulation course instructed by <u>Dr. Farhadi</u> March 2021
- Machine learning course instructed by <u>Dr. Hosseini</u> September 2020
- Introduction to bioinformatics course instructed by <u>Dr. Ali Sharifi Zarchi</u> at Sharif University of Technology March 2020
- Makaton Seminar on Start-up ideas and a competition amongst participants on Fall 2018
- Blockchain workshop held at Sharif University of Technology on Spring 2018

Hobbies

- Video Games
- Fun Science Podcasts
- Ping Pong

- Movies/Series(Sci-fi, Mystery, Drama)
- Piano

References

Prof. Hamid Reza Rabie

Distinguished Professor, Department of Electrical Engineering, Sharif University of Technology

Email: rabiee@sharif.edu

Dr. Hadi Talebi

Associate Professor, Department of Computer Engineering, Sharif University of Technology

Email: hadi.talebi@sharif.edu

Ahmad Eslah

Board Member of SepidarSystem and a senior product director at System Group Co. aka Hamkaran System which is Iran's largest private software development company.

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