

Amir Hossein Mohsen Nezhad Baravati

Mobile: +39 379 143 4666

Email: amirhossein.mohsen@mail.polimi.it



Education

Master of Science, CSE, Artificial Intelligence

Sep 2023

Politecnico Di Milano

GPA: None for now

Just started my studies here at Polimi

Bachelor of Science, Computer Engineering

Sep 2018 - Sep 2022

Sharif University of Technology

GPA: 3.75/4 (Last two years GPA 3.87/4), CGPA: 17.61/20

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

High School Diploma in Mathematics and Physics

Sep 2013 - Jul 2017

Allameh Helli High School (Sampad School)

Member of the "National Organization for Development of Exceptional Talents" [NODET](#)

Research Interests

- Computer Vision
- Neuroscience
- Explainable Models
- Machine Learning
- Algorithms

Research Experience

Colloquial Meaning and Synonym Extraction, Sharif University of Technology

Sep 2022

Advisor: [Dr. Hamid Beigy](#), Department of Computer Engineering

Position: Lab Volunteer

Title: Extraction of Colloquial Words and Formal Meaning from Persian Corpus Using Deep Learning

Description: Methods and Crowdsourcing techniques

Independent and collaborative research into developing and designing new data pipelines to automatically craft a database of informal words and their corresponding synonym

Bachelor's Thesis, Sharif University of Technology, [DML Lab](#)

Dec 2021 - Sep 2022

Advisors: [Prof. Hamidreza Rabie](#) and [Prof. Hossein Asadi](#), Department of Computer Engineering

Position: Research Assistant

Title: Diagnosis of Thyroid Cancer Using Neural Networks from Cytology Slides

Description: Independent and collaborative research into the application of deep neural networks and machine learning on the diagnosis of thyroid carcinoma and exploring the potential of computer vision in assisting experts in their work

Classification of Blur Images, Sharif University of Technology, [DML Lab](#)

June 2021 - Sep 2021

Advisors: [Prof. Hamidreza Rabie](#), Department of Computer Engineering

Position: Lab Volunteer

Title: Classification of Medical Documents into Blur\Clear Using Classical Machine Learning Algorithms

Description: Assistance in study design and execution

Work Experience

SystemGroup Company, Tehran

Since Jul 2021

Position: Senior Flutter Developer, Junior Backend Developer

Description: I was mainly responsible for maintaining the backend server, adding new APIs, and designing new tables. Also, I was the primary maintainer and developer of our back-office and colleague panel clients

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 Startup, Tehran

Aug 2020 - Mar 2021

Position: Junior Flutter Developer

Description: I was primarily responsible for developing the neuronio android application

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

Teaching Experience

Holding Seminars and Internal Team Presentations in SystemGroup

2021 - 2022

Subjects of these presentations mainly were programming languages, best practices in programming, machine learning algorithms for different types of tasks, data structures, etc

Teaching Assistant of Fundamentals of Python Programming

Sep 2018

Instructor: [Dr. Hadi Talebi](#) at Sharif University of technology

Holding extracurricular classes for students

Awards and Honors

- Ranked 154th in the Nationwide Graduate Entrance Exam amongst over 30,000 participants in 2022
- Ranked 185th in the Nationwide Undergraduate Entrance Exam amongst over 200,000 participants in 2017
- Admittance in the [NODET](#) High School Entrance Examination in 2013

Selected Academic Projects

Signal Processing Final Project

Using python libraries to load and process audio signals in the Fourier domain

Advance Programming Final Project

Using Java language and JavaFx to implement the 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 a 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 classical methods and algorithms in python and OpenCV

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,
Data Analytics, Programming languages, Linear Algebra, Probability and Statistics, Data structures,
Algorithms

Virtualization and Containerization:

VMWare, Docker, etc

Operating Systems

Linux, Windows

Language Skills

Persian: Native

TOEFL English: Reading: 27, Listening: 23, Speaking: 22, Writing: 23 - Total: 95

Other Activities

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

References

[Prof. Hamid Reza Rabie](#)

Distinguished Professor, Department of Computer Engineering, Sharif University of Technology
Email: rabiee@sharif.edu

[Prof. Hamid Beigy](#)

Associate Professor, Department of Computer Engineering, Sharif University of Technology
Email: beigy@sharif.edu

[Dr. Hadi Talebi](#)

Associate Professor, Department of Computer Engineering, Sharif University of Technology
Email: hadi.talebi@sharif.edu

[Omid Gholami](#)

Team leader at Farsan in System Group Co. aka Hamkaran System, One of Iran's largest private software development companies.
Email: OmidGh@systemgroup.net