

## Summary

As an ML engineer, I apply my expertise to design and optimize machine learning models, solving complex problems through data-driven approaches.

I have a strong foundation in machine learning, programming, and statistics, with extensive experience in building and deploying scalable models on large datasets. Proficiency in tools like TensorFlow, PyTorch, and Scikit-learn allows me to create efficient pipelines for training and inference.

I excel at collaborating with cross-functional teams to identify challenges and implement AI-powered solutions.

## EDUCATION

### AmirKabir University of Technology (Tehran Polytechnic)

Tehran, Iran

M.Sc. in Artificial intelligence

Sep. 2024 – Sep 2026

Admitted based on bachelor's CGPA as a gifted talent (without exam program)

**Related Courses:** Natural language understanding (17.51 / 20) , ASR(? / 20), Deep learning(? / 20), NLP(? / 20)

### Bu-Ali Sina University

Hamadan, Iran

B.Sc. in Computer Engineering

Sep. 2020 – March. 2024

– **CGPA(Overall): 17.74 / 20** , last two years' GPA(60 credits) : **19.08/ 20** or (3.95/ 4)

– **Bachelor's Thesis (Grade: 19.9 /20)** : Multiple Sclerosis Lesion Segmentation in Brain MRI Using Deep Neural Network Under the supervision of [Prof. Hassan Khotanlou](#).

– **Related Courses:** Artificial Intelligence & Expert Systems(18.6/20), Machine Learning (19.23/20), Intro to Data mining (20/20) ,Software Engineering(20/20), Intro to computer vision (19/20), Data Structures(19.95/20), Engineering Mathematics(18/20), Signals and Systems(18/20), database (20/20), operating system (20/20) System Analysis and Design(20/20) , Database System Implementation (19.02/2)

## RESEARCH INTERESTS

- Machine Learning and Statistical Data Analysis
- multi-modal Deep Learning (Computer Vision , LLM, ASR)

## PUBLICATIONS

- **M. Hami**, M. Jamebozorg, “**Assessing The Impact of CNN Auto Encoder-Based Image Denoising on Image Classification Tasks**”, 13th International Conference on innovative technologies in the field of Science, engineering, and technology, **(Presented)**, Available at ResearchGate: [ [Link](#) ], [arXiv:2405.13256v1](https://arxiv.org/abs/2405.13256v1)
- M. Jamebozorg, **M. Hami**, S. Deh Deh Jani, “**Traffic control using intelligent timing of traffic lights with reinforcement learning technique and real-time processing of surveillance camera images**”, 6th International conference on traffic management and Safety, **( Presented)**, Available at ResearchGate: [ [Link](#) ], [arXiv:2404.10664v2](https://arxiv.org/abs/2404.10664v2)

## RESEARCH ASSISTANT EXPERIENCE

### **Bu-Ali Sina University, [[RIV Lab](#)]**

on-site, Hamedan, Iran

**Sep 2023 – March 2024**

**Jun 2023 – Jul 2023**

- *Doing Deep Learning & Computer Vision Projects related to my final Bachelor's Thesis*
- Under the supervision of [Prof. Hassan Khotanlou](#)

## WORK EXPERIENCE

- [Shatel company](#), **Machine learning engineer** [ [website](#) ] Tehran, on-site  
-Designing and deploying end-to-end Multi-modal models( like Speech-to-Text pipeline ) Sep 2024-Present
- [Nama Pardaz Payam company](#), **Machine learning engineer** [ [website](#) ] Remote, Contract  
April. 2023–Sep 2024  
- My tasks are mainly designing end-to-end Medical image processing pipelines (classification and segmentation)  
- I have worked with different dirty and imbalanced datasets  
- designing different OCR, object detection and tracking systems
- [TAD group company](#), **Junior Data Scientist** Tehran, Iran  
- I am **CEO** and **Data Scientist** of this Company (part-time) [ [company LinkedIn](#) ] June. 2023–Present

## TEACHING Assistant EXPERIENCE

- AmirKabir university of technology (Tehran Polytechnique)** Tehran, Iran
- “Computer fundamentals and programming workshop (C language)”, **Instructor: me** Sep. 2024–Jan. 2025
- Bu-Ali Sina University** Hamedan, Iran
- “Introduction to Computers and Programming “, Instructor: [Dr. Yousef Sanati](#) Sep. 2021–Feb. 2022
  - “Advanced Programming (c++)”, Instructor: [Dr. Yousef Sanati](#) March. 2022–Aug. 2022
  - “Data Structure”, Instructor: [Eng. Elham Afshar](#) March. 2023–Aug. 2023
  - “Data Base “, Instructor: [Dr. Yousef Sanati](#) Sep 2023 – March. 2024
  - “Artificial intelligence & Expert systems“, Instructor: [Dr. Mir Hossein Dezfoulan](#) Sep 2023 – March. 2024
  - “ Operating System “, Instructor: [Dr. Mir Hossein Dezfoulan](#) Sep 2023 – March. 2024
  - “Introduction to Computers and Programming (C++) “, Instructor: [Dr. Hassan Bashiri](#) Sep 2023 – March. 2024

## SELECTED PROJECTS

- 🚩 **LLM-based projects** [ [git](#) ] : I have fine-tuned various LLM models (such as BERT, RoBERTa, LLaMA 3.2, and GPT-2) for tasks including **sequence prediction**, **intent detection**, **slot filling**, **RAG design**, and multi-turn **chatbot** design using SOTA fine-tuned LLMs.
- 🚩 **Image Denoising Framework in Tensorflow** [ [git](#) ] : In this project, we investigate the effect of noise in image classification tasks, we have used **Autoencoder** for noise reduction and **VGG16**, **AlexNet**, **ResNet50**, and **Inception V3** for classification.
- 🚩 **Medical Segmentation** [ [git](#) ] : MS Lesion **Segmentation** in Brain MRI Images Using DNN (**U-Net++**). (**Demo**)
- 🚩 **Smart Crypto Crawler** [ [git](#) ] : Automated Crypto News **Crawler** with **Time Series Prediction**(using TCN and AR-RNN models), Sentiment Analysis, Keyword extraction, and machine translation which sends posts to Telegram.
- 🚩 **Smart text assistant** [ [git](#) ] : A simple web application that helps with sentiment analysis, text summarization, and spam detection for Persian and English languages.
- 🚩 **Advanced Graphical chess game** [ [git](#) ] : designed with **C++** and **QT** framework.

## Certificates

Introduction to TensorFlow for AI, Machine Learning, and Deep Learning: issued by DeepLearning.ai	Aug 2023
Neural Networks and Deep Learning: issued by DeepLearning.ai	Aug 2023
Databases and SQL for Data Science with Python (IBM): issued by Coursera	Jul 2023
Data Analysis with Python (IBM): issued by Coursera	Jul 2023
Machine Learning with Python (IBM): issued by Coursera	Aug 2023
Machine Learning specialization (Classification , Clustering & Retrieval): University of Washington	Aug 2023
Natural Language Processing with Classification and Vector Spaces	Sep 2023
Natural Language Processing with Probabilistic Models	Sep 2023
Fundamentals of reinforcement learning: issued by University of Alberta	Sep 2023
Introduction to Self-Driving Cars : issued by University of Toronto	Sep 2023

## LANGUAGES

English ( Professional working proficiency )

- Duolingo Standard Test Certification ( Link ) : Overall score : 105

Persian ( Native )

## HONORS AND AWARDS

- Served as Chief **AI engineer** in the '**Designing and Building a Rescue Robot with the Ability to Identify the Injured**' project. Secured **second place** in the challenge contest organized by the **Iranian National Elite Foundation**, February 2025.
- Awarded the prestigious *International Excellence Award scholarship (£10,000)* for the Master's program in Computing Science at **Glasgow University** in 2024.
- **Ranked 3rd ( top 8% )** among all undergraduates in the department class of 2020, Issued by Bu-Ali Sina University- Dec 2023
- **The first student** who graduated in 7 semesters at the computer engineering dept, Issued by Bu-Ali Sina University

## SKILLS

- **Programming:** Python – MATLAB - C/C++ , SQL
- **Frameworks & Libraries:** TensorFlow - Keras - PyTorch - Matplotlib - Pandas – Scikit-Learn – OpenCV- Flask
- **Tools & Technologies:** GitHub - Docker - Triton server- Qt Creator - Kaldi-K2 – elastic search
- **Databases Tools:** SQL Server - MySQL - NoSQL Database Systems – Neo4j
- **Operating Systems:** Linux, Windows, MacOS

## REFERENCES

- **Dr. Hassan Khotanlou**, Full Professor Professor at Bu-Ali Sina University  
[khotanlou@basu.ac.ir](mailto:khotanlou@basu.ac.ir) , [google scholar](#)
- **Dr. Muharram Mansoorizadeh**, Associate Professor at Bu-Ali Sina University  
[mansoorm@basu.ac.ir](mailto:mansoorm@basu.ac.ir) , [google scholar](#)