

Amir Pourmand

Machine Learning Engineer

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📝 blog [in](#) linkedin [github](#)

📍 Yazd, Iran

🎓 Education

Sharif University of Technology

Master of Science in AI and Robotics

Sep 2020 – Jun 2023 | Tehran, Iran

GPA: 18.83/20, Supervisor: Prof.
Hamid R. Rabiee

Yazd University

*Bachelor of Science in Computer
Engineering*

Sep 2016 – Sep 2020 | Yazd, Iran

GPA: 17.47, Supervisor: Prof. Vali
Derhami

🧠 Skills

Programming Languages (Python,
C#, SQL (T-SQL), Java)

Databases (SQL-Server, MongoDB)

Tools (Git, Docker, Bash, Latex)

🏆 Awards

**1st Rank in Iranian National
Entrance Exam in Computer
Engineering**

Sanjesh Organization
Aug 2020

**Silver Medal in 24th Computer
Engineering Olympiad**

Sanjesh Organization
Feb 2021

🌐 Languages

English

TOEFL: 103 (R: 27, L: 26, S:24, W:26)

Farsi

Native

👛 Professional Experience

Mofid Securities

Machine Learning Engineer

Jun 2023 – present | Tehran, Iran

In my role, I transformed AI concepts into practical products.
For instance:

- Built a conversational AI assistant with OpenAI's API to provide personalized financial guidance to customers
- Implemented speech recognition to automatically transcribe videos into text summaries, extracting key details
- Served some Open-source projects in production such as PyAnnote Diarization and Whisper for local usage
- Using Prompt Engineering approaches to use LLMs such as OpenAI and Claude effectively

Data Science and Machine Learning Lab, Sharif University of Technology

Deep Learning Researcher

Jan 2021 – Jun 2023 | Tehran, Iran

I worked under the supervision of Prof. Hamid R. Rabiee on these tasks:

- Developed and implemented a novel approach to enhance YOLO algorithm's performance in detecting polyps, utilizing semi-supervised learning and interpretability.
- Integrated pseudo-labeling for semi-supervised learning, improving algorithmic performance on both labeled and unlabeled data.
- Adapted PyTorch-GradCAM library to work with YOLOv5, enhancing transparency and interpretability in real-time polyp detection.
- Customized YOLOv5 for real-time detection of brain aneurysms in 2.5D CT scans.
- Modified YOLOv5 network structure to process multiple images as a single input, optimizing aneurysm detection accuracy.

Freelance

Software Developer

Jan 2019 – Sep 2019 | Yazd, Tehran

ECG Project: Developed a real-time Heart Rate Monitor App that displays data from a wireless ECG device via Bluetooth, addressing challenges of data distortion for consistent graph representation.

Etebarbafgh Project: Developed user-friendly web app for invoices, with a RESTful API for Android, and an ASP.NET app for seamless customer balance tracking.

Amapardazesh Sepand Inc

Software Developer - Full-Stack Web Developer

Jul 2016 – Jan 2020 | Yazd, Iran

The projects I worked on during my four years with Sepand Inc. were as follows:

- Designed and implemented RESTful APIs using C# and .NET Framework to be used in Android Client
- Query Optimization in SQL-Server
- Report generator for DataGridView in StimulSoft Report
- Integrating different devices (POS, Scale, SMS, TelegramBot) with Sepand Application
- Database Schema Comparer and Upgrader using DACPAC

Iran Khodro (4022 Branch)

Software Developer

Jul 2013 – Nov 2013 | Yazd, Iran

I worked on the development of a Windows-forms application for IranKhodro. This application focused on managing parking lots, controlling vehicle entrance and exit, and generating management reports. It marked my initial exposure to programming languages and provided hands-on experience in crafting solutions for real-world challenges.

Open Source Contributions

Maintainer of AI-folio Jekyll Theme (8k Stars, 10k Forks)

This is an academic theme for static websites using Jekyll Framework

Contributions to YOLOv5 (44k Stars)

I added some features into YOLOv5 Ultralytics repository.

Crawler for Persian Websites

I've written code to crawl some important news websites.