Amir Pourmand

Machine Learning Engineer

✉ pourmand1376@gmail.com

🏹 blog   in linkedin   ○ github

📍 Yazd, Iran

🎓 Education

Sharif University of Technology ⇗
Master of Science in AI and Robotic
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 GPT-3 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 Al-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.