Amir Pourmand

Machine Learning Engineer



- **■** pourmand1376@gmail.com **②** english blog
 - farsi blog in linkedin 🦸 github
 - Kaggle ♥ Yazd, Iran 💩 Married

Education

Master of Science in Al and Robotic,

Sharif University of Technology ☑ 09/2020 — 06/2023 | Tehran, Iran

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

Rabiee 🛮

Bachelor of Science in Computer

Engineering, Yazd University □

09/2016 - 09/2020 | Yazd, Iran

GPA: 17.47, Supervisor: Prof. Vali Derhami 🛮

Skills

Problem Solving

I could look at problem differently and maybe provide a better solution.

Programming

Languages

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

Databases

BigQuery, SQL-Server, MongoDB

Tools

Git, Docker, Bash, Latex

Professional Experience

Partnerz, Machine Learning Engineer ☐ 03/2025 — Present | Dubai, United Arab Emirates

Rahpoo, Al Consultant 🛮

09/2024 - 02/2025 | Tehran, Iran

- ASR (Speech-to-Text): Led a 3-person team to build a Persian ASR pipeline, design a quality evaluation service, and automate dataset creation from large call center data.
- ChatBot (RAG): Developed an RAG-based customer support chatbot, guiding architecture and retrieval pipeline design.
- NovaArc (360° Video Analysis): Advised on construction progress tracking system using semantic segmentation, zone detection, and rule-based reporting.

Onecliq, Machine Learning Engineer □

03/2024 - 01/2025 | Toroto, Canada

We built a Consumer Insight Engine, a platform that analyzes social media comments at scale to extract actionable insights.

- Scalable Processing: Handles 100,000+ comments using an AWS queue system with parallel Azure LLM deployments.
- Advanced Pipeline: Multi-stage system where each step builds on the previous—sentiment analysis, clustering, batch aggregation, cluster summarization, automated reporting, and chart generation.
- Al-Powered Analysis: LLMs for deep text understanding, enhanced with RAG for external knowledge.
- Optimized Workflows: Built with Dify (formerly LangChain), leveraging prompt engineering for performance.

The system transforms raw social media data into structured, insightful reports and visualizations for decision-making.

Mofid Securities, Machine Learning Engineer ☑

06/2023 – present | Tehran, Iran

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

- Built a conversational Al assistant with OpenAl'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 OpenAl and Claude effectively

Data Science and Machine Learning Lab, Sharif University of Technology, Deep Learning Researcher

01/2021 - 06/2023 | Tehran, Iran

I worked under the supervision of Prof. Hamid R. Rabiee ② on these tasks:

Languages

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

Farsi — Native

Awards

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

Sanjesh Organization ☑ 08/2020

Silver Medal in 24th Computer Engineering Olympiad, Sanjesh Organization ☑ 02/2021

Open Source Contributions

Maintainer of Obsidian Plugin (Obsidian Custom Font),

A plugin to set custom font for obsidian 🛮

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. □

- 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

01/2019 - 09/2019 | 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 07/2016 — 01/2020 | 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

07/2013 - 11/2013 | 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.