MEHDI MOOSAVI

✉ Mahmoos2078@gmail.com   **in** Mehdi Moosavi   ⚙ Mehdi Moosavi

WORK EXPERIENCE

Machine Learning Engineer   *Sep. 2023 - Feb. 2024*
F.B.P Co.   Tehran, Iran (Part-Time)

- Designed and implemented a **machine learning pipeline** for **time series forecasting** of research paper trends, experimenting with various models to improve adaptability.
- Developed a **graph-based research network analysis system**, applying **community detection** and **link prediction** to identify relationships between papers and authors.
- Built and deployed **Flask APIs** for seamless integration of machine learning models into the platform, improving model accessibility.

EDUCATION

University of Tehran   *2023 - Present*
M.Sc in Machine Learning and Robotics

Thesis: *Robust Zero-Shot Learning for Image Classification*

University of Tehran   *2018 - 2023*
B.Sc in Electrical Engineering (Control Engineering)

Thesis: *Extracting Fingerprints from Images of Hands*

TECHNICAL SKILLS

Programming	Python, C/C++, R, LaTeX
ML/DL Frameworks	PyTorch, TensorFlow, Scikit-learn, Keras
Tools	Git, OpenCV, Flask, Docker

SELECTED PROJECTS

LLM Fine-Tuning: Fine-tuned **LLAMA3** on the **Multi-NLI dataset** for natural language inference, optimizing performance using **LoRA** and **quantization**.

Visual-Language Model Training: Fine-tuned **Paligemma VLM** on the **CLEVR dataset** to enhance visual reasoning capabilities.

Retrieval-Augmented Generation (RAG): Built a **RAG model** with **LLAMA3** for structured knowledge extraction from NLP reference books.

Diffusion Model for Image Generation: Trained a **DDPM** from scratch on the **Sprites dataset** using **UNet** architecture and **DDIM** sampling.

ADDITIONAL SKILLS AND LANGUAGES

Soft Skills: Critical Thinking, Problem-Solving, Communication

Languages: Persian (Native), English (Full Professional, IELTS: 7.5), Spanish (Limited Working)