Rouhalah Ebrahimi

ebrahimirohollah@gmail.com | +989134544469 | http://www.ebrahimi.sbs
LinkedIn: https://www.linkedin.com/in/rouhalahebrahimi/ | GitHub: https://github.com/ebi19912
ISTANBUL, Turkey

Professional Summary

I'm Rouhalah Ebrahimi, a versatile software engineer and AI specialist with expertise in Python, machine learning, and full-stack development. I build intelligent systems—from LLM-powered platforms and computer vision models to cloud-native applications—focusing on real-world impact across healthcare, education, and enterprise. My projects include Cafe Suite, an AI-driven smart cafe management platform; HybridCXR, a deep learning system for multi-class lung disease detection; and Test98.ir, an advanced AI-driven educational platform. With a strong foundation in technical instruction and cross-disciplinary problem-solving, I bridge the gap between cutting-edge AI research and practical, scalable solutions.

Skills

English (Technical Reading & Writing) (80%) Python & AI Development (TensorFlow, PyTorch) (95%) LLMs & RAG Architectures (LangChain, Ollama) (90%) Computer Vision (OpenCV, Deep Learning) (90%) Data Science & Visualization (Power BI) (85%) Full-stack Development (FastAPI, Django, JavaScript) (80%) C# / .Net Core Development (75%) Linux System Administration & Cloud Computing (85%) Network Engineering (MikroTik, VoIP, CCNA) (80%) Database Management (MySQL, SQLite) (85%) Technical Instruction & Mentoring (95%)

Work Experience

Data Scientist & IT Specialist 2018 - Present

Yazd University of Medical Sciences

Developing AI-driven systems for educational and research processes.

Managing IT infrastructure, including servers (Cis, Padvish) and network security.

Specializing in **LLMs**, **RAG systems**, and medical data analysis.

Key Projects

HybridCXR: Advanced Multi-Class Lung Disease Detection Completed

A research-based project focused on developing a hybrid deep learning model for the multi-label classification of chest diseases. The system utilizes pre-trained convolutional neural networks to identify abnormalities in chest X-ray (CXR) images with high accuracy.

Technical Overview:

Designed and trained a multi-class deep learning model based on **VGG16**, **ResNet**, and **MobileNet** architectures.

Utilized the **NIH Chest X-ray 8 dataset** for training and validation.

Focused on improving the detection of rare abnormalities through fine-tuning and weight optimization.

Key Achievements:

This project served as a Master's degree thesis, receiving a top grade of **20/20**.

Presented at the AI Innovation Festival as a selected project.

Led to a published research paper titled "Presenting a Hybrid Deep Learning Model for Multi-Label Classification of Chest Diseases."

Impact: HybridCXR aims to assist radiologists by providing a reliable second opinion, potentially reducing diagnostic errors in medical imaging.

GitHub Repository

Cafe Suite: AI-Driven Smart Cafe Management Platform Ongoing

An innovative SaaS platform designed to modernize cafe management using Artificial Intelligence. It features automated inventory tracking, customer behavior analysis, and smart resource allocation to enhance operational efficiency.

Key Features:

AI-powered predictive analytics for sales and inventory.

Integrated management system for orders and staff scheduling.

User-friendly interface built with modern web technologies.

Technologies Used:

Backend: Python (FastAPI/Django), MySQL.

Frontend: HTML, CSS, JavaScript.

AI/ML: LLM integration and data processing tools.

Objective: To bridge the gap between traditional hospitality management and cutting-edge technology, ensuring a seamless experience for both owners and customers.

Test98.ir: Advanced AI-Driven Educational Platform Ongoing

A comprehensive online platform for educational assessments and recruitment testing.

Designed as a scalable web-based system for conducting interactive exams.

Features an AI-driven feedback system for learners.

Built to streamline the employment testing process for organizations.

Education

Master of Science in Artificial Intelligence and Robotics 2023 - 2025

University of Meybod (Public University)

Top-ranked student in the AI department.

Thesis: Lung disease detection from X-ray images using Transfer Learning (HybridCXR).

GPA: 17.85/20.

Honors & Awards

Top-Ranked Student & Outstanding Instructor - University of Meybod & Technical and Vocational Education Organization **2024 - 2025**

Publications

Presenting a Hybrid Deep Learning Model for Multi-Label Classification of Chest Diseases

Focusing on improving detection accuracy for rare lung abnormalities through fine-tuning and weight optimization in deep neural networks.

Interests & Hobbies

Exploring AI advancements. Developing smart gadgets and IoT devices. Mentoring young developers. Technical writing and blogging.