

MOHAMMED FALAH

Artificial Intelligence & Machine Learning Engineer

+971523554486 — sanufalahi5034@gmail.com

LinkedIn: www.linkedin.com/in/mohammed-falahi/ — GitHub: github.com/mohammedfalahi
Dubai, UAE — Available for Immediate Joining

PROFESSIONAL SUMMARY

Artificial Intelligence and Machine Learning Engineer with hands-on experience designing and deploying **production-ready AI** systems. Expertise in **Machine Learning, Deep Learning, NLP, Computer Vision, Agentic AI Systems, Large Language Models (LLMs), and Retrieval-Augmented Generation (RAG)**. Proven experience in developing **time-series forecasting models, AI automation platforms, RESTful APIs, and data pipelines**. Strong background in feature engineering, model evaluation, healthcare data workflows, and scalable AI deployment. Familiar with MLOps, Docker, cloud platforms (AWS), and model monitoring. Currently based in Dubai with immediate availability. Experienced in building **agentic workflows** where autonomous AI agents execute, coordinate, and monitor multi-step tasks.

CORE COMPETENCIES

- **Machine Learning, Deep Learning**, Predictive Analytics
- **Time-Series Forecasting**, Regression Models
- **NLP, LLMs, RAG**, HuggingFace Transformers
- **LangChain, Agentic AI**, Autonomous Agents, Tool Calling, Multi-Step Reasoning
- **Computer Vision**, CNNs, Multimodal Processing
- **Data Engineering**, Feature Engineering, Model Evaluation
- **FastAPI, Flask, REST API Development**
- **Model Deployment, MLOps**, Automation Systems
- **Healthcare AI**, Institutional AI Systems

PROFESSIONAL EXPERIENCE

Artificial Intelligence (R&D) Intern

Sep 2025 – Dec 2025

Boehm Tech LLP, Calicut, India

- **MyG Sales Assistant – AI-Powered Retail Intelligence** Sep 2025
 - Built a bilingual AI sales assistant using **RAG, LangChain, and Gemini LLMs**.
 - Implemented **intent detection, entity extraction**, fuzzy matching, and fallback logic.
 - Integrated **MongoDB, REST APIs**, and multi-platform interfaces (web, CLI, voice).
 - Improved response accuracy and reduced hallucinations using knowledge-grounded retrieval pipelines.
- **Hybrid Demand Forecasting System (Healthcare Inventory)** Dec 2025
 - Developed a **hybrid LSTM-XGBoost time-series forecasting model**.
 - Applied advanced **feature engineering**, retraining pipelines, and **explainable AI analytics**.
 - Optimized weekly medicine demand forecasting for healthcare inventory planning.

PROJECTS

VidScribe – AI-Powered Video-to-Presentation System

Feb 2025

- Built an AI pipeline converting video into structured **PowerPoint presentations** and **PDF summaries**.
- Implemented **Speech-to-Text, NLP summarization**, and **computer vision extraction**.
- Designed scalable processing pipeline for academic and training content reuse.
- Technologies: **Python**, NLP, Computer Vision, LLMs

Payroll - Workforce Management and Productivity Tracking System

Nov 2025

- Built AI-powered analytics platform using **FastAPI, MongoDB, React**, and **Electron**.
- Processed raw logs into **daily and monthly productivity intelligence**.

- Integrated **LLaMA-3** and **Groq LLMs** for performance summaries.

VidyaConnect – Academic Communication Assistant

- Built an **agentic AI system** that autonomously initiates **phone calls and SMS notifications** to parents for attendance and academic alerts.
- Implemented **decision-driven agents** for channel selection, context-aware message generation, and retry handling.
- Reduced manual administrative effort through **LLM-powered workflow automation**.

Seva Kraant – Smart Workforce Assignment System

Dec 2024

- Developed ML-based task assignment system using **BERT** for workforce skill matching.
- Implemented NLP pipelines for semantic similarity and decision automation.
- Built backend services using **Python** and **Flask**.
- Technologies: **Python**, Flask, BERT

Traffic Sign Board Detection

Aug 2024

- Developed CNN-based traffic sign recognition model for real-time inference.
- Performed preprocessing, data augmentation, and **model evaluation**.
- Integrated live video stream using **OpenCV**.
- Technologies: **TensorFlow**, **OpenCV**

EDUCATION

B.Tech in Artificial Intelligence and Data Science

MES College of Engineering, Kuttippuram, Kerala, India
CGPA: 6.7

May 2025

TECHNICAL SKILLS

- Programming: **Python**, JavaScript, SQL, R, Bash
- AI/ML: **Agentic AI**, LLMs, RAG, **TensorFlow**, PyTorch, NLP, Computer Vision, HuggingFace
- Data: **Pandas**, **NumPy**, Matplotlib, **MongoDB**, MySQL
- Backend: **FastAPI**, **Flask**, REST APIs
- Cloud & MLOps: AWS (basic), Docker, Model Deployment, Model Monitoring
- Tools: Git, GitHub, VS Code, Postman, Jupyter, Google Colab

CERTIFICATIONS

- AWS Cloud Practitioner Essentials – AWS
- Big Data Analytics – Great Learning
- Accessing Hadoop Data Using Hive – IBM
- Google Analytics – Google
- R Programming for Beginners – Simplilearn

ADDITIONAL DETAILS

- Nationality: Indian
- Date of Birth: 18 June 2002
- Visa Status: Visiting Visa