

Muhammad Hamza

AI Automation Engineer · RAG Specialist · Python Developer

📍 Lahore, Pakistan (Open to In-Person) 📞 +92-322-626-3393 ✉️ hn374919@gmail.com
🌐 linkedin.com/in/muhammad-hamza 🐙 github.com/Hamzaishappy786 🏆 LeetCode: Top 10 in Pakistan

Technical Skills

AI & RAG: RAG Systems, LLM Fine-Tuning (QLoRA), LangChain, OpenAI/Gemini APIs, Prompt Engineering
Automation: n8n Workflows, Zapier, Custom Python Bots, API Orchestration, Visual Logic Execution
Databases: PostgreSQL (PGVector), Supabase, Neo4j, MongoDB, SQLite, FAISS Vector Indexing
Frameworks: FastAPI, Flask, PyTorch, TensorFlow, OpenCV (Computer Vision), Scikit-learn
Tools: Docker, Git, AWS, Vercel, Selenium (OCR & Scraping), Linux (WSL), Postman

Professional Experience

AI Chatbot Developer

Vestra Logics, Lahore

Feb 2026 – Present

- Architecting **RAG-based AI chatbots** for real estate firms, managing property inquiries and lead qualification via WhatsApp integration.
- Developed a custom **visual automation engine (n8n-inspired)** for node-based API orchestration and backend logic.
- Optimized **PostgreSQL queries** and refactored legacy systems, improving data retrieval speeds for AI response generation.

AI & Automation Developer

Paisol Technologies, Lahore

Jun 2025 – Aug 2025

- Built production-ready **LangChain pipelines** and GPT-powered automation for complex business workflows.
- Integrated external APIs and messaging platforms with real-time data pipelines to automate customer service.

Python & Automation Specialist

Freelance (Fiverr), Remote

Aug 2022 – Present

- Successfully deployed **100+ automation tools and bots** using Python and n8n for clients globally.
- Developed **OCR and data extraction pipelines** using Selenium and BeautifulSoup for high-scale web scraping projects.
- Engineered scalable APIs via **FastAPI** and **Flask**, managing cloud deployment on **AWS** and **Vercel**.

Teaching Assistant (GenAI & Deep Learning)

FAST NUCES, Chiniot-Faisalabad

Aug 2024 – Present

- Mentoring 200+ students on **RAG pipelines**, LLM fine-tuning, and neural network architectures.
- Facilitated labs on **Operating Systems (Linux)**, focusing on C-based system programming and kernel customization.

Key AI Projects

DoctorPath AI (RAG & Knowledge Graphs)

Built a clinical RAG system using **MIMIC-III** data. Architected a hybrid database using **PGVector** and **Neo4j** knowledge graphs to process structured/unstructured records and rank treatments using **FAISS**.

Clinical Decision System

Meet Made Simple (On-Device AI Summarizer)

Alternative to Fathom AI that records and summarizes meetings locally. Utilizes fine-tuned **1B-parameter LLMs** optimized for Intel CPUs. Integrated **Supabase** for logging and Google Drive for cloud backup.

Full-Stack AI App

CouChat (CV-Powered Privacy Tool)

Developed a messaging tool that uses **Computer Vision** to hide chat content when unauthorized viewers are detected by the camera.

Real-Time Computer Vision

Education & Achievements

FAST NUCES, CFD

BS Artificial Intelligence (Expected 2026)

- LeetCode Top 10 in Pakistan:** Solved 1,600+ problems across DSA and System Design.
- Automation Expert:** Built 100+ production bots for Telegram, Discord, and Web platforms.