Khizar Ishtiaq

AI Engineer

+92 344 826 0340 | khizarishtiaq69@gmail.com | Haripur, Pakistan
linkedin.com/in/khizarishtiaq | github.com/1Khizar | khizarai.tech

Profile

AI Engineer with hands on experience building agentic AI systems, RAG applications and machine learning solutions for real world use cases. Skilled in Python, LangChain, LangGraph and FastAPI with experience developing AI products across web and WhatsApp platforms. Experienced in machine learning, MLOps, backend development, and deployment workflows with a focus on building scalable, reliable and production-ready systems that solve practical problems.

Technical Skills

- **Languages & Frameworks:** Python · FastAPI · Flask · Streamlit
- **Agentic AI & LLMs:** LangChain · LangGraph · RAG · Prompt Engineering · NLP
- **Machine Learning:** Scikit-learn · Deep Learning
- **Vector Databases:** Pinecone · ChromaDB · FAISS
- **Databases:** PostgreSQL · Supabase · Neon Postgres
- **MLOps & DevOps:** Docker · CI/CD · MLflow · DVC · Microsoft Azure · Render
- **Voice AI:** LiveKit · ElevenLabs · Twilio · WhatsApp API

Work Experience

Machine Learning Researcher — **Ottawa, Canada**
(Carleton University) — *Aug 2026 – Present*

- Developing machine learning and deep learning models for abnormal heart-sound classification using the PhysioNet CirCor DigiScope phonocardiogram (PCG) dataset.
- Designing an end-to-end PCG processing pipeline using signal preprocessing, Mel-spectrograms, audio segmentation, data augmentation, and deep neural networks.
- Developing multimodal PCG classification models using attention-based multiple-instance learning and Transformer architectures to extract diagnostic information from physiological sounds.

AI Developer — **Pakistan**
(Revnix) — *Oct 2025 – July 2026*

- Built agentic AI applications using LangChain and LangGraph, designing multi-step workflows to automate complex tasks.
- Used Docker and CI/CD pipelines to streamline deployment and improve the reliability of AI services.
- Developed FastAPI backends and integrated AI features into scalable REST APIs for real-world applications.

Python Intern — **Pakistan**
(ProSensia) — *Jun 2025 – Aug 2025*

- Developed Python-based backend systems and features for software applications.
- Delivered software solutions on schedule while following clean coding practices and structured problem-solving approaches.

Machine Learning Intern — **Pakistan**
(NextGenLearners) — *Jul 2025 – Aug 2025*

- Developed and evaluated machine learning models, working on data preprocessing, feature engineering, and model training.
- Built a Career Guidance Chatbot using Machine Learning, NLP, and Streamlit to provide personalized recommendations to users.

Web Development Intern — **Pakistan**
(RankingGrow) — *Jul 2024 – Sep 2024*

- Built responsive and user-friendly web interfaces using HTML, CSS, and JavaScript for client projects.
- Gained hands-on experience in frontend development, creating layouts that worked smoothly across different devices and screen sizes.

Education

BSc Artificial Intelligence — **Haripur, Pakistan**
Pak-Austria Fachhochschule (PAF-IAST) — *Feb 2024 – Feb 2028*
CGPA: 3.6 / 4.0

FSc Pre-Engineering — **Abbottabad, Pakistan**
Peace College — *Apr 2021 – May 2023*
Grade: A+

Projects

PrepCat – Medical Entry Test Preparation Platform
prepcat.live

- Built and deployed a production MDCAT/NUMS platform with mock tests, past papers, and an AI Tutor, live at prepcat.live.
- Developed an AI Tutor with streaming responses and persistent memory using LangChain and Celery + Redis for background tasks.
- Built an admin panel with role-based access control, and containerized the backend with Docker and GitHub Actions CI/CD.
- **Stack:** Python · FastAPI · Next.js · LangChain · Supabase PostgreSQL · Celery · Redis · Docker · GitHub Actions

AI Email Assistant – Agentic Email Automation
github.com/1Khizar/email-assistant

- Built an AI-powered email assistant that generates and sends emails from a single user instruction.
- Added a Human-in-the-Loop (HITL) step using LangGraph to review and approve emails before sending.
- Used LangChain built-in UI and FastAPI backend to support agent execution flow and workflow progress in real time.
- **Stack:** Python · FastAPI · LangChain · LangGraph · Groq LLM

Clara – Multi-Channel AI Medical Voice Assistant
github.com/1Khizar/medical-voice-ai-agent

- Built an AI assistant for hospital front-desk automation using LiveKit Realtime and LangGraph.
- Enabled real-time appointment booking via web (voice) and WhatsApp using agent-driven workflows.
- **Stack:** Python · FastAPI · Next.js · LangChain · LangGraph · LiveKit · WhatsApp API

FlameUP – Restaurant AI Chatbot
github.com/1Khizar/FlameUP-Resturant-Chatbot

- Built a multimodal RAG chatbot for web and WhatsApp with text and voice interaction.
- Integrated ElevenLabs voice AI, Twilio WhatsApp API, and ChromaDB for vector-based retrieval.
- **Stack:** Python · FastAPI · LangChain · Groq LLM · ChromaDB · Twilio · ElevenLabs

Sentiment Analysis MLOps Pipeline
github.com/1Khizar/Sentiment_Analysis_MLOPs_Project

- Built an end-to-end MLOps pipeline covering data preprocessing, feature engineering, model training, and evaluation.
- Implemented workflow automation for managing ML experiments and deployments.
- **Stack:** Python · ML · NLP · DVC · MLflow · FastAPI · Docker · DagsHub