Fazeel Asghar

Contact: +92-3126690033 , fasghar40@gmail.com | Portfolio | GitHub | LinkedIn |**Address:** Pakistan, Bahawalpur, Punjab

EDUCATION

Islamia University Bahawalpur

Bachelor of Science - IT, Information technology

WORK EXPERIENCE

Safe Rh | *AI Engineer-Backend* **On Site Bahawalpur** Aug *2022 – June 2024*

- Fine-Tuned LLaMA for a Medical Chatbot, enabling AI-driven medical assistance.
- Integrated IoT Medical Devices with Django, enabling real-time patient monitoring.
- Trained ML Models for heart disease prediction using real-time patient data.
- Optimized Data Pipelines for seamless IoT-to-Django data transmission.
- Debugged & Optimized Systems to enhance data accuracy and performance.
- Collaborated with International Research Teams to align AI with healthcare needs.
- Developed a Scalable AI-Driven Rural Health Monitoring System. Check it out → https://safe-rh-mis.com/

UWS | *Research Internee* **On Site Scotland** *June 2024 - Aug 2024*

- Designed & Developed an AI-Integrated Smart Wheelchair with IoT-based vital signs monitoring for enhanced patient care.
- Implemented Obstacle Detection & Avoidance using YOLOv8n Lite, Arduino UNO, and ultrasonic sensors for autonomous navigation.
- Engineered Real-Time Health Monitoring by transmitting patient vitals to a remote MySQL database, ensuring continuous tracking and timely interventions.
- Designed & Optimized a Medical Database in MySQL to efficiently store and manage real-time health data from IoT sensors.
- Impact & Achievements: Improved mobility and healthcare accessibility for critical patients through AI-driven automation.

PROJECTS

Small Autonomous Car (Taxi Simulation) **Final Year Project** *July 2025-Current*

- An autonomous small car prototype simulating a taxi service.
- Designed and executed obstacle detection, path planning, and real-time navigation
- using GPS and sensors. Integrated a mobile-based interface for location selection, enabling automated pick-and-drop functionality.
- Utilized Raspberry Pi, OpenCV, and machine learning for efficient decision-making and safe autonomous movement.

RAG-based Interview Q&A Generator **Private Company** *Mar 2025*

- Built a system that allows users to upload their resume/CV to generate tailored interview questions and answers. Integrated a vector database for efficient document retrieval and contextual relevance.
- Utilized LangChain, FAISS, and Gemini API to ensure high-quality, personalized responses based on the uploaded resume. **Check out here:** Resume Q&A Gen

Fine-Tuned Llama-2-Chat as a Django Web App **University Project** Jan 2025

- Created a Django-based web application integrating a fine-tuned Llama-2 chatbot trained on a university dataset.
- The chatbot assists students with academic queries, course details, and administrative support in real time.
- Implemented Hugging Face Transformers, PyTorch, LangChain and PEFT for model adaptation, with a user-friendly frontend for seamless interaction and dynamic response generation.

MLOPS Deployed (Vehicle Insurance & Weather Forcasting) **Private Company** Dec 2024

- Private company proposed these projects to use it as a Microservice on the client's website, ensuring real-time processing and scalability.Deployed a weather forecasting system as a cloud-based Microservice, enabling accurate and automated predictions.
- Enforced MLOps practices, including CI/CD pipelines, Docker and ECR for seamless deployment on EC2 and monitoring. **Click here:** Vehicle Insurance prediction & Weather Forcasting
- Optimized cloud infrastructure for enhanced model performance, reliability, and real-time data processing.
- Ensured efficient data ingestion and automated model updates for both applications.

SKILLS

Generative AI, LangChain, RAG, Fine-Tuning, Hugging Face Transformers, Large Language Models (LLMs), LORA, QLORA, Computer Vision, Object Detection, MLOps, Mlflow, Model Deployment, Databricks, AWS, EC2, ECR, S3, IAM, Docker, CI/CD, Django, FastAPI, PostgreSQL, MySQL, SQLite, MongoDB, Flask, Prompt Engineering, AI-Driven Automation, Predictive Modeling, IoT, Sensors.