

# Kainat

Islamabad | kainatafzal195@gmail.com | +92 3078944506 |

<https://www.linkedin.com/in/kainat-afzal-597702251/>

With 3.5 years of experience specializing in Machine Learning and Artificial Intelligence, I am passionate about building smart, scalable solutions that solve real-world problems. With hands-on experience in deep learning, predictive analytics, and data-driven systems, my aim is to leverage technology to drive innovation, improve efficiency, and create meaningful impact. I thrive in fast-paced, forward-thinking environments where continuous learning and creative problem solving are key

## Technical Skills

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**Programming Languages:** Python

**Frameworks & Libraries:** Flask, FastAPI, Hugging Face, LangChain, Transformers, PyTorch, TensorFlow

**Technologies:** Generative AI, Deep Learning, Machine Learning, Artificial Intelligence, n8n Workflows, DALL·E, OpenAI, Flux

**LLM Tooling & Vector Stores:** FAISS, ChromaDB, Pinecone

**Development Skills:** API/Endpoint Development, Model Integration, Prompt Engineering, SQLite Integration

## Education

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**University of Engineering and Technology Taxila**, BS in Computer Engineering 2019 – 2023

- GPA: 3.45/4.0
- **Coursework:** Machine learning, Advance Algorithm, Signal and System, Digital Image processing

## Experience

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**Generative AI Engineer**, Mobify – Islamabad (DHA Phase 1, Sector F), Pakistan Oct 2025 – Present

- Developed AI-powered applications utilizing LLMs, vision models, and speech technologies for language translation, conversational AI, and image processing.
- Built scalable NLP pipelines, conversational agents, and image filtering tools using custom and pre-trained models (TensorFlow, PyTorch, Hugging Face).
- Created production-ready REST APIs with FastAPI/Django and collaborated with cross-functional teams on innovative AI solutions.

**Generative AI Engineer**, Alright Tech Private Limited – Islamabad, Pakistan Apr 2025 – Sep 2025

- Working on end-to-end deployment of Generative AI systems.
- Building intelligent applications integrating LLMs with production APIs.
- Designing pipelines for scalable data ingestion and response generation.

**AI/ML Engineer**, NKU Technologies Pvt Ltd. – Lahore, Pakistan Nov 2023 – May 2025

- Designed and deployed AI solutions to enhance product performance.
- Optimized deep learning models for real-time insights and forecasting.
- Built forecasting models for sales and revenue prediction.
- Developed chatbots, recommendation systems, and computer vision applications.
- Integrated scalable AI systems with cross-functional teams.

**Machine Learning Engineer**, Data Science Innovation Hub (DISH), UET – Rawalpindi, Pakistan Aug 2022 – Sep 2023

- Processed large datasets and built ML pipelines for predictive modeling and performance optimization.
- Conducted AI research, evaluated models, and developed real-world NLP applications including sentiment

analysis and text summarization.

- Explored advanced AI tools, models, and techniques for improved system performance.

## Projects

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### Revenue Forecasting System

- Built predictive models using Moving Average and Exponential Smoothing for revenue trend analysis.

### Voice-Enabled Real Estate Bot

- Developed a voice-enabled chatbot using Voiceflow, Voiceglow, and Make.com for real estate Q&A automation.

### Object Detection Suite

- Built custom YOLO models to detect faces, mobile usage, fire, and PPE compliance.

### PDF Document QA Bot

- Enabled Q&A over documents using similarity search with Pinecone and LangChain.

### Face Recognition Attendance System

- Automated attendance using OpenCV, Face Net, and Deep-face for identity recognition and logging.

### Alex RAG Bot

- Implemented Retrieval-Augmented Generation with vector search and OpenAI for domain-specific chatbot responses.

### Bible Q&A Chatbot

- Built a chatbot to answer Bible-related questions using semantic search and custom embeddings.

### Bible Social Media AI

- Created an AI-powered content planner to generate captions, reels, and quotes on social media based on Bible topics.

### Job Search Automation (n8n Project)

- Built an automation pipeline using n8n for job applications, HR outreach, and workflow automation.

### Prompt-to-Image-to-Video

- Developed a generative AI pipeline converting text prompts into images and transforming them into videos.

### Vehicle Speed Estimation App

- YOLO and OpenCV implemented in a Streamlit app to estimate real-time vehicle speed using object tracking.

### Smile Analyzer

- Developed a smile detection application using facial expression classification with deep learning.

### Smart Translator with Voice Features

- Developed multilingual translation system with integrated real-time voice interaction.

### SEO Content Generator

- Created AI-powered pipeline for generating SEO-optimized blog and website content.

### JSSL Football Registration System

- Built system for Free Trial and Free Camp registration with automated workflows and user data integration.

### Face Swap Application

- Developed face swapping for images and short videos (5-6 sec) using open-source Hugging Face models including Stable Diffusion and Flux, with FastAPI endpoints.

### Image Colorization & Restoration

- Built FastAPI endpoints to colorize black-and-white images and restore old (1900s) scratched photos using Zero-Scratching and advanced restoration models.