

USAMA SHAKEEL

AI ENGINEER

[GitHub](#) [LinkedIn](#)

usamaaghwankhalil444@gmail.com

Artificial Intelligence Undergraduate (2021-2025)

+92 305 5620643 | Phone • WhatsApp

SUMMARY

AI Engineer specializing in Machine Learning solutions, with expertise in Deep Learning, NLP, Computer Vision, and Generative AI. Skilled in Large Language Models (LLMs), Retrieval-Augmented Generation (RAG), fine-tuning, and prompt engineering to develop intelligent, context-aware systems. Experienced in agent-based automation using frameworks like LangChain, AutoGPT, and CrewAI. Proficient in advanced applications such as image generation, vedio/image classification, virtual try-ons also include image processing predictive modeling as well as deploying scalable AI models for real-world applications. Skilled in solving complex technical challenges.

WORK EXPERIENCE

ENDEVSOLS AI Developer

- Digitalaalim (Islamic AI Chatbot)** Developed a GPT-4-based chatbot for Quran and Hadith queries, ensuring theological accuracy and seamless user interaction on [digitalaalim.in](#)
- Medical Chatbot:** Fine-tuned LLama 2 (13B) for medical dialogues, enhancing patient-doctor interactions with accurate and real-time AI-driven responses.
- Automated Pronunciation Evaluation** Developed an AI-powered Arabic letter pronunciation using Whisper, LLaMA 3 with Groq API. The model transcribes spoken input and compares it to reference pronunciations, providing real-time feedback on accuracy. Fine-tuned Whisper-small for Arabic speech recognition and integrated LLaMA 3 for automated pronunciation evaluation.
- Health & Food Analyzer for Healthcare** Developed a AI App that analyzes food, fruit, or drink images to provide personalized health recommendations. Using LLM, LangChain, it extracts insights based on user-uploaded images and health conditions (e.g., diabetes, fever). The app delivers concise, actionable dietary advice, ensuring informed food choices with persistent data visibility throughout the session.
- AI Career Advisor** An AI-powered system guiding students to the right career through academic, interest, and personality analysis, delivering a Bright Career Report with personalized pathways, learning plans, and learning resources, skill Gap Analysis and job market insights.

SELF PROJECTS

- AI Marketing Agency** Develop a React & FastAPI web app leveraging **custom agents** with LLM, function calling to automate Google Ads management. It handles auto campaign setup, auto audience targeting and ad scheduling, and create image ads using (Flux), reducing costs, saving time, and minimizing manual effort.
- Designed and implemented custom **transformer models**, **cnn** Model from scrtch without any library custom **hybrids models**, and advanced **neural architectures**, optimizing performance for NLP, computer vision, and time-series analysis.

EDUCATION

Degree	Institution	Grade/CGPA	Year
BSAI	Comsats University Islamabad Institute	3.00/4	2021-2025
Class XII	Sir Syed College Wah Cantt	727/1100	2018-2020
Class X	F.G Public High School Wah Cantt	831/1100	2016-2018

SKILLS

- Languages** Python, SQL
- Frameworks** PyTorch, TensorFlow, Keras, OpenCV, Scikit-learn, LangChain, Hugging Face, FastAPI, crewAI, SalesGPT, OpenAI, Groq
- Tools** Linux, Jupyter Notebook, PyCharm, MS Office
- Libraries** Keras, Pandas, Matplotlib, SciPy, CuDA