

SHOAIB UL HAQ

COMPUTER SYSTEMS ENGINEER

+923702171620 | shoaibulhaqq@outlook.com | Karachi, Pakistan



[shoaibulhaque](#)



[shoaibulhaque](#)

Computer Systems Engineer with a passion for software engineering and a strong foundation in programming. Eager to design scalable systems and thrive in dynamic environments by rapidly acquiring new skills and adapting to evolving challenges.

EDUCATION

Ned University Of Engineering And Technology

2021 - 2025

BE (Bachelors of Engineering) in Computer And Information Systems (CIS) Engineering

CGPA: 3.48/4.000

Adamjee Govt. Science College

2019 - 2021

Intermediate (Pre-Engineering)

Grade : A+

EXPERIENCE

Research Project Member - Neurocomputation Lab - NED

Sep 2024 - May 2025

- Achieved **>88% mAP** in real-time Urdu Sign Language alphabet recognition using YOLOv8n & YOLO-NAS.
- Built a robust system handling signing variations and multi-sign detection with a Streamlit & OpenCV front-end.
- Engineered and validated lightweight **ONNX** models for efficient mobile/edge deployment.

IT Intern - Karachi Development Authority (KDA)

Mar 2024 - April 2024

- Gained exposure to public-sector IT systems and their operational environment.
- Observed fundamental IT support and maintenance activities.

Machine Learning Intern - Neurocomputation Lab - NED

Sep 2023 - Oct 2023

- Applied Generative Adversarial Networks (GANs) to augment datasets for Diabetic Retinopathy classification.
- Increased dataset size and diversity to improve model generalization and training performance.
- Explored and compared multiple GAN architectures for medical image synthesis and quality evaluation.

PROJECTS

AI Code Reviewer

- Developed an AI-powered code reviewer web application using the MERN stack (React, Node.js, Express, MongoDB), integrating Deepseek R1 and Groq API for ultra-fast AI responses.

TaskMate AI

- Full-stack MERN application featuring real-time task collaboration with Socket.io, JWT authentication, and integrated AI assistant using Groq API and LangChain for intelligent productivity recommendations.

ResearchAI - Company Research Platform

- Built an AI research platform with CrewAI multi-agent system, Next.js, and Flask to auto-analyze company leadership content. Added real-time job tracking, async processing, and a TypeScript frontend.

Marketly - Django Marketplace Platform

- Built a Django-based e-commerce marketplace with user auth, category filtering, search, image uploads, and personalized dashboards using a modular app architecture.

AI-Powered News Summarization Platform

- Full-stack application combining web search, AI summarization (LangChain + Groq), and text-to-speech (ElevenLabs) to generate audio news reports. Built with FastAPI, React/TypeScript, featuring asynchronous processing and modern responsive UI

ACHIEVEMENTS

Secured NEDAASC Award for Final Year Project (FYP)

Sep 2024 - May 2025

- Awarded for FYP on 'Sign Language Translation', among 31 selected from 300 for tech innovation & social impact.

CERTIFICATIONS

- Python Essentials - **CISCO**
- Python for AI & Development - **IBM**
- Javascript- **FreeCodeCamp**
- MERN - **Udemy**

SKILLS & TOOLS

Frontend: React, HTML, CSS, Tailwind CSS, DaisyUI, Flowbite, JavaScript

Backend: Node.js, Express.js, Django, FastAPI, Flask, LangChain, CrewAI

Databases: MongoDB, MySQL, PostgreSQL, SQL

Languages: Python, JavaScript (also familiar with Typescript, Java and C/C++)

Other: Git, GitHub, Jira, Docker