

# Shaheer Suhail

Final Year Computer Engineering Student

✉ sh5suhail.pk@gmail.com | GitHub | Portfolio

## EDUCATION

### National University of Science & Technology (NUST)

Bachelor of Engineering in Computer Engineering

September 2022 – MAY 2026

Islamabad, Pakistan

## RELEVANT COURSEWORK

- Digital Image Processing

- Object Oriented Programming

- Data Structures & Databases

## EXPERIENCE

### Zapply

Full Stack Engineer

December 2026 – Present

Remote, US, Full-Time

- Tech Stack: JavaScript, Chrome Extensions, DOM, Mutation Observers, Communication API, Git
- Develop and optimize autofill functionality for multiple platforms, leveraging DOM queries, selectors, and runtime scripts to enhance efficiency.
- Implement dynamic field detection using Mutation Observers and message passing APIs to ensure accurate real-time form filling.
- Refactor platforms codes, resolve large-scale merge conflicts, and prepare pull requests.
- Workflow optimizations with internal tools to ensure reliability and process accuracy.

### PsychiatrAI

Full Stack AI Intern

June 2025 – August 2025

Remote, Pakistan

- Tech Stack: LangGraph (Backend), LangSmith, LangChain, LangSmith Python, Redis, Vercel, Render
- Developed a mental health chatbot leveraging Cognitive Behavioral Therapy principles to facilitate structured therapeutic sessions and provide AI-powered guidance.
- Engineered backend architecture for CBT conversation flows using LangGraph nodes and LangChain components for context-aware interactions.
- Deployed LangGraph on self-hosted platforms utilizing LangGraph Server APIs and integrated backend services with React.js frontends featuring responsive UIs.

### CARE Pvt. Ltd.

AI/ML Intern

June 2025 – July 2025

Islamabad, Hybrid

- Conducted comprehensive model research and selection for machine learning application in healthcare domain.
- Researched and evaluated fetal CLIP model architecture for medical imaging analysis.
- Documented research findings and model performance metrics for fetal CLIP model implementation.
- Compiled technical documentation detailing model selection criteria, evaluation results, and recommendations.

### Fiverr

Desktop Development Engineer

January 2024 – June 2024

Freelance, Remote

## PROJECTS

### Mission Logging and Tracking Mobile App for Pakistan Army Pilots

- Tech Stack: Django REST Framework, PostgreSQL, Railway(deployment)
- Developed a cross-platform mobile application for Pakistan Army pilots to streamline mission logging and tracking operations.
- Built Django REST backend with PostgreSQL database for efficient mission data storage and retrieval.
- Enabled real-time mission tracking with filtering capabilities by pilot, location, and date for unit commanders.

### CRM Agent – Marketing AI

- Tech Stack: LangGraph, Supabase, MCP, Gemini API, Python
- Developed an AI powered CRM agent that automates client management and marketing workflows using structured customer data and RFM analysis.

- Built LangGraph workflows for CRM automation and intelligent decision making with human-in-the-loop validation checkpoints.
- Applied RFM analysis for customer segmentation and designed AI driven campaigns for **re-engagement, referral, and loyalty programs**.
- Integrated with Supabase for real-time data management and used Model Context Protocol (**MCP**) for seamless tool integration.

#### Meeting Assistant with CrewAI Flow based Automation

- **Tech Stack:** CrewAI, Slack API, Trello API, Python
- Built a meeting assistant using CrewAI to extract action items and tasks from meeting transcripts.
- Integrated Slack API to automatically push extracted tasks and updates to team channels.

#### Mental Health Insights in the Tech Industry Using Interactive Data Visualization

- **Tech Stack:** Streamlit, Python, Flask, Audio Processing
- Built an interactive dashboard using Streamlit for visualizing trends in burnout, support, and awareness.
- Applied data exploration and storytelling techniques to highlight key behavioral patterns.

#### Speech, Music, and Noise Detection System |

- **Tech Stack:** Python, Flask, Audio Processing
- Developed classification model that analyzed audio input into speech, music, or noise.
- Achieved 93.5% validation accuracy.

#### Efficient Word Finder with File Ranking and Links

- **Tech Stack:** C++, Data Structures, Algorithms
- Developed a word search engine with interactive user interface for efficient multi-file word searching and ranking.
- Implemented Ternary Search Tree data structure for optimized word lookups and file location extraction.
- Built file ranking system based on word occurrence frequency to prioritize most relevant results.

#### Intelligent Driver Drowsiness Detection & Safety System

- **Tech Stack:** C++, Arduino, ESP32
- Designed drowsiness detection system using computer vision to monitor driver's eye closure patterns and alert mechanisms.
- Programmed ESP32 microcontroller to automatically engage vehicle safety protocols when driver unresponsiveness is detected.
- Implemented hardware integration with motors and sensors for automated vehicle safety feature control.

### CERTIFICATIONS

---

**Introduction to Deep Learning & Neural Networks**

Coursera

**Advanced Learning Algorithms by Andrew Ng**

Coursera

### SKILLS

---

**Languages:** Python, Java, C++, JavaScript

**Frameworks:** LangChain, LangGraph, TensorFlow, CrewAI

**Technologies & Tools:** Supabase, Redis, Vercel, Render, Chrome Extensions,

**Knowledge:** Regression, Classification, ANNs, CNNs

**Version Control & Collaboration:** Experience in version control using GitHub for collaborative project development

### ACHIEVEMENTS

---

**NUST High Achiever Award 2023**

**Institution Topper High School**

### EXTRACURRICULAR ACTIVITIES & COMMUNITY SERVICE

---

**Seminar & Workshop Organizer:** Organized various seminars and workshops as part of curricular activities.