Shaheer Suhaib

✉ sh5suhaib.pk@gmail.com | ⃝ github | ⊕ portfolio

EDUCATION

National University of Science & Technology (NUST)	September 2022 – April 2026
Bachelor of Engineering in Computer Engineering	*Islamabad, Pakistan*

RELEVANT COURSEWORK

- Digital Image Processing
- Object Oriented Programming
- Data Structures & Databases

EXPERIENCE

PsychiatrAI	June 2025 – August 2025
Full Stack AI Intern	*Remote, Pakistan*

- **Tech Stack: React, TypeScript, LangGraph(Banckend) ,LangChain, LangSmith Python , Redis, Vercel, Render, Docker,**
- 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.	June 2025 – July 2025
AI/ML Intern	*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	January 2024 – June 2024
Desktop Development Engineer	*Freelance, Remote*

PROJECTS

Mission Logging and Tracking Mobile App for Pakistan Army Pilots

- **Tech Stack: Django REST Framework, PostgreSQL, Flutter(Dart) ,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: React.js, 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, Firebase, Computer Vision**
- 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++
Library: React
Frameworks: LangChain, LangGraph, TensorFlow, CrewAI
Knowledge: Regression, Classification, ANNs, CNNs
Version Control & Collaboration: Experience in version control using GitHub for collaborative project development
DevOps & Tools: Docker

ACHIEVEMENTS

NUST High Aciever Award 2023
Institution Topper High School

EXTRACURRICULAR ACTIVITIES & COMMUNITY SERVICE

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