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<https://github.com/Maan-14>

Education

UET Lahore

Lahore, PK

BS in Biomedical Engineering

May 2020 – May 2024

CGPA: 3.586/4.00 (served as a CR during my tenure)

Relevant Coursework: Object Oriented Programming, Artificial Intelligence, Machine Learning, Biomedical Instrumentation, DLD, Image Processing, Microprocessor Systems, Biomedical Robotics

Experience

Associate Software Engineer

Lahore, PK

Hegtavic

January 2024 – June 2024

- Worked on various projects related to Next JS, Typescript and Tailwind demonstrating expertise in this framework related to front end and worked on node and express.js at the backend.
- Worked on real world end to end project in a collaborative environment with the team such as real estate property management system and AI integrated AD Campaign management system.

Technical Intern – Medical Billing Products

Islamabad, PK

MTBC – Carecloud

July 2023

- Served as a technical Intern at Carecloud and got to know about their different products and their management as well as different programming languages along their involvement in product development. Got Skills on Front End of the product and the ticket management.

Skills & Technical Projects

Languages: Python, C, C++, Next.js, HTML, CSS, JS, Figma, Tailwind, Typescript

Specialization: React, Next.js, Node.js, Express.js, Flask, High fidelity prototyping – Figma, Matlab, WordPress, Bootstrap, Proteus, Blast & CLUSTAL Omega, Arduino, Machine Learning, Deep Learning, NLP

Thyroid Nodule Classification using SPECT scans | Deep Learning | Final Year Project

- Used machine learning state-of-the-art models to classify thyroid nodules. That involved different CNNs and their ensemble.
- Specifically Gathered the dataset of SPECT scans in collaboration with GINUM (under the umbrella of Pakistan Atomic Energy Commission).
- Developed an industry-academia link that included different professional doctors, engineers and Professors on a same platform.

Research Assistant for RAG-based Question Answering System | NLP, ML, AI

- Developed a real-time question-answering system using Retrieval-Augmented Generation (RAG) for enhanced information retrieval and response accuracy.
- Utilized libraries such as Hugging Face Transformers and ChromaDB for efficient question answering and document retrieval.
- <https://github.com/Maan-14/Complete-RAG-App.git>

Chatbot Marketplace Support Expert | NLP

- Designed, developed, and implemented a robust chatbot expert system utilizing NLP, ML and AI, effectively handling user queries and ensuring smooth interactions.
- It involved all end-to-end development starting from the Front End, to the Flask backend, and Model integrating into the project enabling the user to have a seamless experience.
- <https://github.com/Maan-14/Complete-App-LLM.git>

Phishing Detection App | React

- Developed a phishing detection system using machine learning models to predict fraudulent sites, paving the way for future research in cybersecurity.
- Implemented a real-time phishing detection application utilizing the Flask web framework, incorporating dynamic feature extraction, exploratory data analysis (EDA), feature engineering, and model evaluation.
- Designed and developed a responsive front end for the application using React, leveraging hooks and lifecycle methods to enhance user experience.

Extra-curricular Experiences

Prime minister National Innovation Award | 2023

Islamabad, PK

- Participated with our 'MILK Purity Project' and got shortlisted out of 12500 participants and got the chance to interact with leading businessmen at the Prime Minister's House. I too got the chance to join the 1-week idea pitching boot camp hosted by BIC UET.

Volunteer Service | Al-Kareem Welfare Society | Pakistan Flood Relief Campaign | 2022

Pakistan

- Transported essential food supplies to affected areas during the Pakistan Flood Relief Campaign. Collaborated with fellow volunteers to ensure efficient distribution of goods. Demonstrated compassion and dedication in providing assistance during the crisis.

Departmental Representative, University Community Services | 2023

Narowal, PK

- Selected as a representative of my department to engage in community services on behalf of the university along with other departmental representatives and guided students from different institutes of Narowal about the scope and opportunities within my department.

Honors & Awards

- Have served as a **vice-president** of my departmental society EMBS (Engineering in Medicine & Biology Society) and organized a number of different events and had collaborations with different local brands and companies for which received different certifications.
- Been an active member of IEEE international society and played an active part in **STEM**.
- Won first prize in the **Departmental Chess Competition** held at UET (2022)
- Won first position at **Sports Gala (2022)** in a chess competition held at UET.
- Received **Merit Scholarship**, awarded on SSC result with full fee deduction in high School.
- Received three **merit scholarships** on excellent academic performance at UET.
- Received a **Laptop from the Government of Pakistan** on remarkable SSC result.
- Represented my university in an inter-school Space competition held at **SUPARCO** and received honorary certificate
- Organized **Intra-University Chess Competition** hosted by UET Narowal Campus and received an honorary certificate.

References Available on Request.