Tanveer Mahmood Mahin

Education

2020-2024 Islamic University Of Technology, IUT-OIC Bachelor of Science in Electrical and Electronic Engineering (GPA: 3.31 / 4.00) **Notre Dame College** 2017-2019 HSC (GPA: 5.00 / 5.00) 2009-2017 St. Joseph Higher Secondary School SSC (GPA: 5.00 / 5.00)

Experience

iTest Bangladesh Nov 2024 - July 2025

Trainee Design Verification Engineer

- Applied OOP concepts to develop testbenches in system verilog to achieve functional verification of various DUTs.
- Contributed in PCB design team designing loadboards using Allergo design suite.

RankWizards LLC Jan 2022 - Nov 2022

SEO Content Writer

- Functioned as a team player to maximize efficiency and worked effectively under pressure to meet deadlines.
- Conducted in-depth and thorough research on several topics to generate high quality content.

Notre Dame International Understanding and Relations Club

Oct 2017 - Mar 2019

Executive Committee Member

Organised Notre Dame College Model United Nations 2018.

Projects

Sign Language Detection using OpenCV And Mediapipe Library | Python, Tensorflow, mediapipe

- Implemented dataset generation by taking live feed input from webcam leveraging mediapipe holistics.
- Trained custom LSTM model for real-time detection

Braille Detection using Deep CNN | Python, Ultralytics, Tensorflow, Roboflow

- Link to Github Repository
- Final year thesis on braille detection. Prepared a custom Bangla braille dataset by annotating using roboflow bounding boxes. For detection used YOLOv8 and custom CNN architecture.

Bangla Literature RAG Assistant | Python, Pytessaract, Ollama, Chroma DB, Fast Api

- Link to Github Repository
- A multilingual Retrieval-Augmented Generation (RAG) system that understands Bangla and English queries.
- Retrieves relevant passages from a Bangla literature PDF, and generates precise answers using a local LLM

Eloquence bot: A LLM powered agentic Al Chatbot for quotes | React, Node, Mongo DB, Express, Groq

- Link to Github Repository
- Used React+Vercel for frontend, MongoDB+Express+Railway for backend.
- Implemented State management, REST API, Agentic AI workflow.

The Cloud BookCafe —A Full Stack Book Review Website | React, Node, MongoDB, Express, Groq

- Link to Github Repository
- Used React+Tailwind+Vercel for frontend, Firebase for authentication, MongoDB+Express+Railway for backend.
- Implemented REST API, State management, Login authentication with firebase.

Competitions

Data War, National Telco Warfare 2024 by EWU Telecommunications Club | Python, Jupyter Notebook, Tensorflow

• Top 14 out of 70 participants. Displayed practical use of theoretical knowledge by extracting useful insights and correlations from vast array of data using data analytics and machine learning techniques.

Technical Skills

Languages: C,C++, MatLab, Python,HTML.System Verilog,JavaScript Technologies: Pandas, NLTK, Tensor Flow, PyTorch, Allegro, React