Muhammad Rayyan

Software Engineer

LinkedIn GitHub Email Medium Portfolio

Summary

I am a dedicated Astronomy and Astrophysics enthusiast with a strong foundation in Artificial Intelligence and Machine Learning. My ambition is to leverage AI technology to make significant contributions to the fields of Astronomy, Healthcare, and Education. I believe that by merging these passions, I can play a pivotal role in advancing our understanding of the cosmos and enhancing critical aspects of human well-being and education.

Relevant Experience

Software Engineer intern @ Telenor Microfinance Bank

Jul 2023 – Aug 2023 // Onsite

- Gained valuable hands-on experience in developing online shopping app using Spring Boot and MySQL as database.

Projects

Autonomous Vehicle Object Detection using YOLOv8 on KITTI Dataset

Feb 2024

- Built a system using YOLOv8 and KITTI data to detect multiple objects for self-driving cars. It helps cars see and understand their surroundings accurately in real time.

Fake News Detector using LSTM.

Feb 2024

- Developed a fake news detector using LSTM and natural language processing techniques. It helps identify misleading information, enhancing trust and reliability in news consumption.

Online Shopping App

Jan 2024

- Created an advanced online shopping app with React.js and Firebase, featuring Stripe payment integration and machine learning-driven recommendations. Includes a user-friendly interface, responsive chatbot, and map integration for easy location selection.

Breast Cancer Detection

Jul 2023

- Created a breast cancer detection system using machine learning techniques. It helps doctors identify potential cases early, improving chances of successful treatment.

Student Performance Prediction

Jul 2023

- Developed a student performance prediction model using data analysis and machine learning. This tool helps educators foresee students' academic progress.

Cryptocurrency Portfolio Manager

Jan 2023

- Built Crypto Portfolio Manager using React.js as frontend and SQL as database.

American City Graph: Shortest Path Exploration

Jan 2023

- Built a GUI-based pathfinder using Visual Studio's .NET framework as frontend, and for implementation of pathfinder used Graph Data Structure and Dijkstra's algorithm.

Education

National University of Sciences and Technology

(NUST)

2021 - 2025

Bachelor of Engineering in Software Engineering

Skills

Programming Languages

Python, C++,Java, JavaScript, SQL

Libraries / Frameworks

NumPy, Pandas, Matplotlib, Seaborn, sklearn, TensorFlow, OpenCV, yolov8, Nltk.

Interests

Machine learning, Deep learning, Data Science, NLP, Computer Vision, Generative AI

Relevant Courses

Machine Learning

Offered by Standford online.

Maths for ML & Data Science

Offered by deeplearning.ai.

Web Development

Offered by uni of Michigan.

React.js

Offered by Meta.

Interests

Astrophysics and Quantum Physics.