Muhammad Rayyan

Software Engineer

Education

National University of Sciences and Technology

Bachelor of Engineering in Software Engineering

Experience

AI Research Assistant

National University of Sciences and Technology

 In my role as an AI Research Assistant, I work with a professor on exciting AI projects. I help with experiments, analyze results, and assist in creating new AI models and tools. My focus is on generative AI, and I support research and development to push the boundaries of what AI can do.

Software Engineer Intern

Telenor Microfinance Bank

 Developed an eCommerce site using Java's Spring Boot framework and Thymeleaf, integrating authentication and authorization features via Spring Security.

Projects

Coding Assistant / Python, Langchain, Openai API, Streamlit Github link

 Created a versatile Coding Assistant utilizing OpenAI API, Langchain, and Streamlit to generate real-time code in multiple languages, providing optimized solutions with considerations for space and time complexity. Integrated code explanations and debugging features for enhanced usability.

2D Multiple Objects Detection for Autonomous Vehicles / Python, YOLO v8/ v9 Github link Feb 2024

 Developed a system using YOLOv8, YOLOv9, and KITTI data to enable self-driving cars to accurately detect multiple objects in real-time environments.

Online Shopping App / React, Firebase, Material UI <u>Github link</u>

 Developed a feature-rich online shopping app utilizing Reactis and Firebase, incorporating seamless payment integration, machine learning-driven recommendation system, responsive chatbot, and map integration for enhanced user experience.

Skills

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

Developer Tools: VS Code, Netbeans, Google Colab, Jupyter Notebook

Libraries/Frameworks: Numpy, Pandas, Matplotlib, Seaborn, scikit-learn, TensorFlow, OpenCV, yolov8, Nltk, Langchain Interests: Machine learning, Deep learning, Data Science, NLP, Computer Vision, Generative AI

Awards and Achievements

- Aws-Udacity Nano degree scholarship awardee: Aws sponsored 1000 students for AI programming with python nanodegree course on udacity out of thousands and I was one of them.
- Google Codejam Participation: Participated in the qualifying round of one of the world's top coding competitions organized by Google during my 1st semester.
- Meta Hacker Cup: Participated in one of the world's top coding competition organized by Meta in 2023 in Practice round and Round 1.
- Greeper Green belt: Helped over 8000+ coders and developers to improve their coding skills.
- International Hackathons: Participated in multiple international AI hackathons organized by Lablab.ai, showcasing problem-solving skills and collaborative abilities on a global platform.

Courses and Certifications

- · Maths for ML & Data Science: Offered by deeplearning.ai
- Machine Learning: Offered by Stanford
- NLP: Offered by ineuron.ai
- GenerativeAI: Offered by FreeCodeCamp

Publications

Authored articles on Machine learning algorithms and applications. Medium

Jul 2024 – Present

Islamabad, Pakistan

Islamabad, Pakistan

Jul 2023 – August 2023

May 2024

Jan 2024

Sep. 2021 - Sep 2025