Muhammad Talha

LinkedIn | +92-3085941722 | itsmuhammadtalha1@gmail.com | GitHub

Education

Bachelor in Computer Science **Fast NUCES** **2020 - 2024**

- Relevant Courses : Data Structure (C++), Algorithm, Data Science, OOP, Computer Modeling,

Experience

Data Science Engineer - FOSL X **September 2024**

- Developed ETL Pipeline using Fivetran, Datado..
- Build Data Warehouse and Performed Data Analysis and Predictive Analysis .
- Maintained Data Integrity and streamlined data pipeline.

Data Science Intern - Asterisc Technocrat **August 2023 - November 2023**

- Developed and deployed data preprocessing pipelines to clean and transform large datasets for analysis.
- Built machine learning models to extract actionable insights and solve business challenges.
- Conducted exploratory data analysis (EDA) and presented results using visualization tools like Matplotlib and Seaborn.

Virtual Experience Program – Walmart Global Software Engineering, Forages (Virtual)

- Conducted market research and consumer needs analysis to create data-driven client recommendations.
- Analyzed data to identify trends and patterns, optimizing client-focused strategies.
- Delivered a structured solution approach showcasing problem-solving and data analysis skills.

Projects

Real-Time Traffic Analytics in Vehicular Adhoc - Code **FYP**

- Fetched real-time traffic data from Google API and simulated it using SUMO.
- Designed and implemented a real-time data pipeline with Kafka and Spark Streaming.
- ***Developed predictive models using SparkML to train a Random Forest Regressor for trafffc volume predictions.***
- Displayed ***real-time, historical, and predictive analytics*** on a Streamlit dashboard.

BrowserStack SIte testing - Manual Testing - Code **June 2023**

- Developed a comprehensive test plan to test the performance and functionality.
- Created Test Cases to cover key features such as *live testing* , *automated testing*, and responsive design
- Document test results in Jira (zephyr) providing clear defect report
- Compile a *summary report* to highlight the overall performance and stability

Detection of Osteoarthritis in Radiographic Images - Code **2023**

- Built a data preprocessing pipeline, including resizing, normalization, noise reduction, and data augmentation.
- Fine-tuned pretrained models with TensorFlow and PyTorch for knee osteoarthritis detection.
- Designed deep learning architectures to enhance model accuracy for image classification tasks.

Skills

- Python | Numpy | **Pandas** | Matplotlib | **C++** | MySQL | Postgres | Git | Linux | CI/CD | Jenkins.
- Apache Spark | Apache Kafka | Apache Airfow | ETL

Certifications

- Data Analysis with Python | Data Science Methodology | Data Science Orientation | Tools for Data Science V2 - Coursera IBM

Volunteer work

- **Data Science Teachers Assistant** - Fast NUCES **2024**
  Mentored students in Data Science Subject, Teaching different tool and techniques