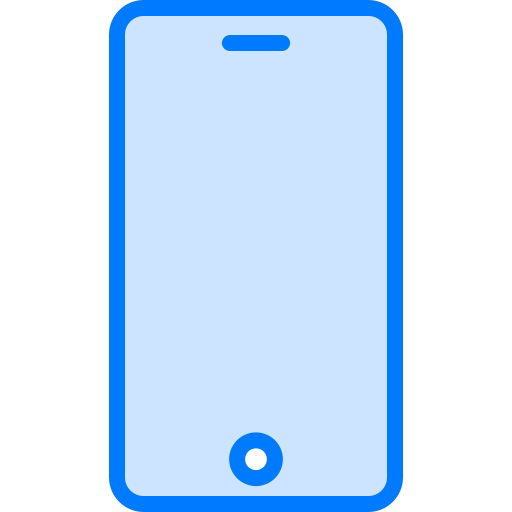
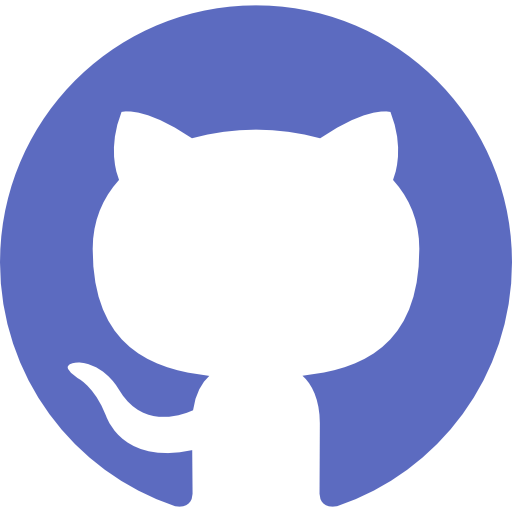
Muhammad Talha

 [LinkedIn](https://www.linkedin.com/in/muhammad-talha-933481210/) |  +92-3085941722 |  [itsmuhammadtalha1@gmail.com](mailto:itsmuhammadtalha1@gmail.com) |  [GitHub](https://github.com/itsMuhammadtalha/)

# Education

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

* Relevant Courses : Data Structure, Algorithm, Data Science, OOP, Computer Modeling, Final Year Project in **Predictive Analytics.**

# Experience

## 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 Participant** – 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 and Dynamic Signaling -** [**Code**](https://github.com/itsMuhammadtalha/Real-Time-Traffic-Analytics-and-Congestion-Control) **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.

# Classifying Cyber Attacks in Networks - [Code](https://github.com/itsMuhammadtalha/classifying-cyber-attacks-in-network-) June 2023

* Applied classification and clustering techniques using Python for detecting and analyzing cyber attacks.
* Performed data aggregation and visualization with pandas and matplotlib.
* Authored a professional report incorporating findings, using LaTeX for documentation.

# Detection of Osteoarthritis in Radiographic Images - [Code](https://github.com/itsMuhammadtalha/Detection-of-Osteoarthritis-using-Advance-Segmentation-in-Radiographic-Images) 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++** | MySǪL | Postgres | Git | Linux | **Apache Spark** | **Apache Kafka** | Apache Airﬂow
* Data Wrangling | Data Visualization | **Machine Learning**.
* **Predictive Analytics** in Traffic Signaling

# Certifications

* Data Analysis with Python | Data Science Methodology | Data Science Orientation | Tools for Data Science V2 -  [Coursera IBM](https://www.credly.com/badges/67dbd099-eb20-49e2-a7e9-246169de1c75/public_url)

# Others

* **Data Science Teachers Assistant** - Fast NUCES **2024**

Mentored students in Data Science Subject, Teaching different tool and techniques