Ibrahim Bin Umair

Data Scientist

ibrahim.binumair@gmail.com +92-342-0538780

https://www.linkedin.com/in/ibrahim-bin-umair/

I am a Full Stack Data Scientist specializing in Big Data and deep learning. My expertise spans database warehousing and cloud technologies, showcasing my adaptability to emerging technologies. I have applied my skills in real-world settings through internships and as President of the FAST Data Science Society, leading initiatives to bridge academic learning with industry practices. My Final Year Projects, Mobile camera-based PPG signal analysis, underscore my innovative approach and commitment to impactful technology solutions.

Education

BS- DATA SCIENCE - FAST NUCES ISLAMABAD **JUN'2024**

Relevant Coursework

Fundamentals of Big Data | Database Systems & Management | Data Warehousing and Business Intelligence | Data Mining | Deep Learning for Perception | MLOps | Data Analysis and Visualization

Experience

NDA **KSA, September 2023 - Present**

- Implementing and deploying end-to-end data engineered pipelines using · Cloud Technologies & Big Data tools for seamless data processing and storage.

Research Assistant - Knowledge and Discovery Lab **Islamabad, September 2023 - Present**

- ·Engaged in cutting-edge research projects, pushing the boundaries of data science and knowledge discovery.

Data Analyst Intern – Engro Enfrashare **Islamabad, July 2022 - August 2022**

- Analyzed GSM operation data for top vendors, contributing to significant improvements in telecommunication services. Automated several manual tasks.

President – FAST Data Science Society **Islamabad- August 2022 - July 2023**

- As President of the FAST Data Science Society, I elevated the society by organizing events, workshops, and seminars that connected academic learning with industry practices, and hosted multiple data science competitions to boost student engagement and skill development.
- I also successfully negotiated and signed a Memorandum of Understanding (MOU) with DataCamp, securing valuable resources and learning opportunities for society members

TEACHING ASSISTANT **FAST NUCES Islamabad**

- Fundamental of Big Data Analytics (02/2023 - 06/2023)
- Data Analysis & Visualization (09/2023 - 01/2024)
- Fundamentals of Big Data Analytics (02/2024 - 06/2024)

Skills

Big Data Analytics | Machine Learning | Deep Learning | Data Visualization | Feature Engineering | Data Mining | Database Management | Automation | Computer Vision | Full Stack Development | Statistical Analysis | Cloud Technologies | Data Engineering

Personal Projects

Final Year Project: Mobile Camera-Based PPG Signal Analysis for Vital Signs Detection

- Developing an end-to-end solution that utilizes mobile phone cameras to capture photoplethysmogram (PPG) signals, employing AI models to accurately extract vital signs from the captured signals. This innovative project demonstrates a unique application of mobile technology and artificial intelligence in healthcare, offering a non-invasive method for monitoring heart rate, oxygen saturation, and other vital parameters. The project involved extensive research, algorithm development, and real-world testing to ensure accuracy and usability.

Implementation of a Data-Warehouse

- Executed a data warehouse project, incorporating mesh join and real-time ETL processes to enable efficient data storage and retrieval.

Liveliness Face Detector Using AI

- Engineered an AI-based liveliness detection system to differentiate between real faces and photographs, enhancing security measures for identity verification processes. This project demonstrated advanced skills in facial recognition technologies, machine learning algorithms, and real-time data processing.

Interactive Dashboard using D3.js

- A dynamic and visually engaging dashboard created with D3.js, providing interactive data visualization and insights.

Voice Assistant (in Urdu) with the Help of Machine Learning

- A voice-activated assistant implemented with machine learning capabilities, designed to understand and respond in the Urdu language

Prediction of Human State using Smart phones Gyroscope Accelerometer

- Utilized Apache Kafka to process live data streams from a gyroscope accelerometer(mobile application), predicting human motion state with high accuracy.