

Talha Zain

Islamabad, Pakistan | P: +92 340 5555550 | talha.10.zain@gmail.com | linkedin.com/in/tal hazain10/

SUMMARY

As a Data Engineering professional with over 1.5 years of experience, I am driven by a passion for building robust data infrastructures to enhance organizational decision-making and performance. With expertise in designing and managing data pipelines, ETL processes, and big data technologies, I ensure seamless data flow and system stability. I also have strong knowledge of databases and SQL, allowing me to efficiently query, optimize, and manage data storage systems. My keen interest and experience in large-scale data processing enable me to extract and organize complex datasets for actionable insights. I aim to continuously innovate and apply cutting-edge data engineering techniques to solve real-world problems and create impactful solutions.

EXPERIENCE

IT Solutions – Islamabad

Jan 2024 – Sept 2024

Data Engineer

- Developed and optimized data pipelines to support predictive churn models using big data technologies, facilitating efficient customer retention strategies.
- Collaborated with cross-functional teams, translating business requirements into scalable, end-to-end data pipelines and reliable data infrastructure solutions.
- Proficiently managed Teradata, GaussDB and Hadoop systems, overseeing ETL processes, daily operations, and troubleshooting tasks, ensuring seamless data flow, system stability, and high-performance data processing.

Fun Doctrina – Islamabad

Jul 2023 – Dec 2023

Data Scientist

- Built and managed data pipelines for efficient preprocessing and feature engineering, integrating data from diverse sources to support churn analysis and model training.
- Collaborated with teams to design scalable data pipelines and implement AI workflows, utilizing neural networks, deep learning frameworks, and reinforcement learning.
- Engineered and deployed advanced LLMs, including Llama and GPT-3, by developing robust data preprocessing pipelines, applying transfer learning, and fine-tuning models to address complex NLP challenges, boosting the company's AI capabilities.

CODISTAN – Islamabad

Jul 2022 – Sept 2022

Software Engineer

- Collaborated with the development team to build and maintain various web applications and websites.
- Acquired hands-on experience with modern web development practices, including responsive design, accessibility, and user experience design.

EDUCATION

NUCES, FAST – Islamabad

Aug 2019 – May 2023

Bachelor of Computer Science

F.G Degree College, Wah Cantt – Pakistan

Aug 2017 – June 2019

Pre Engineering

PROJECTS

AITRAX – Pulmonary Fibrosis Progression Using Deep Learning

- Using TensorFlow and Keras, the model predicts and tracks disease progression with 72.56% accuracy by leveraging medical imaging data like CT scans for training deep learning models. The project's results have contributed to developing more effective treatment strategies for pulmonary fibrosis and enhancing patient outcomes.

Cardiovascular Risk Prognostication and Classification System

- The model achieved a 96.82% accuracy rate in predicting heart disease likelihood, as assessed through cross-validation and comparison with actual medical outcomes. This success underscores the potential of machine learning in healthcare, suggesting that similar models could be developed for other diseases to enhance global health outcomes.

CERTIFICATIONS

IBM: Tools for Data Science

IBM: Big Data 101

IBM: Databases and SQL for Data Science (Python)

IBM: Data Science methodology

Microsoft: Microsoft Azure Fundamentals (AZ-900)

IBM: Machine Learning with Python

IBM: Data Analysis With Python

ADDITIONAL SKILLS

Skills: Python, SQL, Azure, ETL Processes, Big Data Processing, Data Visualization, Data Analysis, Data Processing, Database Management, NLP, Data Pipeline Development, MySQL, Data Modeling, Teradata, GaussDB, Clickhouse, Hadoop, Hive.