Muhammad Waqas Ali

Phone number: (+92) 3353470167 (Mobile) | **Email address:** aliayubi167@gmail.com | **LinkedIn:** https://www.linkedin.com/in/mwaqasali98/ | **Github:** https://github.com/WaqasAliDS |

Address: Karachi, Pakistan (Home)

ABOUT ME

Passionate AI/ML Engineer and Data Scientist with expertise in developing innovative solutions using machine learning, deep learning, and NLP. Experienced in creating scalable AI applications and delivering impactful data-driven insights.

WORK EXPERIENCE

CELERITAS DIGITAL – NEW YORK, UNITED STATES
AI/ML ENGINEER – 01/09/2024 – CURRENT

• Designing and deploying AI-powered solutions, including task-specific AI agents and generative AI applications.
• Developing machine learning models for classification and clustering using Python.
• Building and fine-tuning neural networks with TensorFlow and PyTorch for deep learning applications.
• Implementing NLP systems for text generation, sentiment analysis, and named entity recognition.
• Creating Retrieval-Augmented Generation (RAG) systems and fine-tuning large language models for custom applications.
• Conducting hyperparameter tuning and model optimization for enhanced performance and scalability.
• Integrating machine learning models into production systems with seamless deployment and monitoring.

TECHMA ZONE – KARACHI , PAKISTAN
DATA SCIENTIST AND AI CONSULTANT – 01/10/2023 – CURRENT

• Utilized Python for API data extraction, web scraping, and SQL for data management.
• Spearheaded data cleaning, preprocessing, and normalization.
• Conducted exploratory data analysis and statistical analysis, leveraging python.
• Employed Power BI for data visualization and reporting.
• Implemented ML models for predictive analytics and optimization of projects.
• Developed conversational AI chatbot with NLP and LLM for personalized, human-like interactions.
• Collaborated with cross-functional teams to translate requirements into solutions.
• Facilitated communication between technical and non-technical stakeholders.

TECHMA ZONE – KARACHI, PAKISTAN
TRAINEE DATA SCIENCE – 01/02/2023 – 30/09/2023

• Gained experience in Python-based ML models, EDA, ETL, and SQL for data management.

DIN ENERGY LIMITED (WIND POWER PLANT) – KARACHI, PAKISTAN
ELECTRICAL ENGINEER – 02/02/2021 – 31/07/2022

• Analyzed operational data to identify and rectify faults promptly, optimizing performance.
• Utilized analytical skills to ensure compliance with energy standards and agreements.
• Conducted reliability tests and inspections, ensuring operational readiness.
• Identified areas for improvement to enhance operational efficiency.

EDUCATION AND TRAINING

06/10/2023 – 15/06/2025 Karachi, Pakistan
MS DATA SCIENCE NED University of Engineering and Technology

Website https://www.neduet.edu.pk/

09/11/2016 – 07/10/2020 Karachi, Pakistan
BACHELORS OF ELECTRICAL ENGINEERING NED University of Engineering and Technology

Address 75270, Karachi, Pakistan | **Website** https://www.neduet.edu.pk/ | **Field of study** Electricity and energy |

Final grade 3.63/4.00

CERTIFICATION

Applied Data Science with Machine Learning

Completed immersive data science and machine learning program at Techma Zone, mastering advanced techniques and real-world problem-solving for data-driven decision-making.

IBM Data Science Professional Certificate

Acquired comprehensive skills in data analysis, machine learning, and data science methodologies through a rigorous program by IBM on Coursera, blending theoretical knowledge with practical applications in real-world scenarios.

Data Driven Decisions with Power BI

Successfully completed the 'Data-Driven Decisions with Power BI' course, acquiring skills in data analysis and visualization, and enhancing the ability to drive strategic decisions through insights.

PROJECTS

Data Science and Artificial Intelligence

Vision-Care AI – Medical Imaging Diagnosis
• Built a custom CNN-based system for automated detection and classification of medical conditions with high diagnostic accuracy.
Cardio-Pulse Guardian – Cardiovascular Risk Prediction
• Applied supervised ML techniques for heart disease risk detection, focusing on feature selection and model performance.
AI-Powered Education Chatbot
• Developed a RAG-based chatbot to assist U.S. educators with lesson planning, PBL, and real-time Q&A.
NLP Recommendation Systems
• Created resume and movie recommendation engines using NLP for personalized, context-aware results.
Real Estate Price Prediction
• Built a deep learning model leveraging historical and economic data to forecast urban property prices.
AI Agents for Workflow Automation
• Designed intelligent agents using NLP and reinforcement learning to automate workflows and streamline decision-making.

SKILLS

Soft and Hard Skills

Python (NumPy, Pandas, Scikit-learn, TensorFlow, PyTorch) | Machine Learning | Deep Learning | Natural Language Processing (NLP) | Large Language Models (LLMs) Data Engineering | Data Processing | Model Development | Model Optimization | AI Agents | Generative AI | Retrieval-Augmented Generation (RAG) | Recommendation Systems | Reinforcement Learning | Data AnalysisCloud | APIs | Deployment and Integration | Data Manipulation | Computer Vision