### **MUHAMMAD UMAR JAN**

Data Scientist

Contact: +92 3179919987 GitHub | LinkedIn | Kaggle

### **EDUCATION**

University of Engineering & Technology

Bachelor's Degree in Computer Systems Engineering

Islamia College Peshawar

Pre-Engineering

Peshawar, Pakistan 2021 - 2025 Peshawar, Pakistan 2019 - 2021

Email: umar2exe@gmail.com

Location: Charsadda, Pakistan

## **SKILLS SUMMARY**

Languages: Python, C++, SQL

**Frameworks:** TensorFlow, PyTorch, Scikit-Learn, Keras, Hugging Face Transformers, Hadoop (parallel processing) **Platforms and Tools:** VS Code, Google Colab, Jupyter Notebook, Kaggle Notebook, PyCharm, Anaconda, Docker

**Areas of Expertise:** ML workflows, NLP, LLMs, Lang-Chain, OpenAI, fine-tuning, RAG **Data Handling & Analysis:** Feature engineering, data visualization, statistical modeling

Cloud: AWS (sage-maker studio, S3-bucket, EC2, Lambda)

### **WORK EXPERIENCE**

## **Ezitech Institute**

Machine Learning Intern

Rawalpindi, Pakistan June 2024 – August 2024

- Developed predictive models using Random Forest, XGBoost and ANN on different datasets achieving 93%+ accuracy.
- Collaborated with cross-functional teams to translate business needs into actionable data solutions.
- Developed data models and insights that directly influence strategic decisions made by senior leadership.

# **National Centre of Big Data and Cloud**

Natural Language Processing Intern

Peshawar, Pakistan February 2025 – Present

- Achieved 95%+ accuracy in NLP tasks using Transformer and TensorFlow.
- Built NLP Pipelines with 80% faster pre-processing using NLTK, Spacy and feature extraction technique like TF-IDF and Word2vec.
- Deployed NLP models on AWS SageMaker, handling end-to-end model training, deployment, and monitoring.

# **ILLUSTRATIVE PROJECTS**

## Al-Powered Health Diagnosis & Recommendation Platform(FYP) | GitHub-LINK

2025

- Create an AI health diagnose platform with Flask and Scikit-learn. Which diagnose symptoms and predict disease.
- Achieved 90.58% accuracy using a Random forest model for condition prediction.

## Movie Recommendation App | GitHub-LINK

2024 cription.

- Built a content-based movie recommendation app using NLP Techniques and NLTK to process 5000 movie description.
- Predicted similar movies based on plot summaries and content feature using test similarity technique.

# Medical Chatbot Using RAG Technique(FYP) | GitHub-LINK

2025

- Developed a medical chatbot using RAG with FAISS for vector storage and Mistral-7B as LLM backend.
- Enabled accurate, context aware responses by retrieving relevant medical information from embedded document.

# Conversational Al Agent with Multi-Modal Tool Integration | GitHub-Link

2025

- Developed a voice-interactive AI agent using ElevenLabs for real time speech I/O.
- Implement dynamic tool-driven task executions like web-search, image generation and file operation.

#### **CERTIFICATIONS**

Python | Coursera | Certificate

Completed python course from Michigan covering fundamentals and data structures.

• Machine Learning | Coursera | Certificate

Completed a Machine Learning specialization focused on algorithms and model development.

Deep Learning | Coursera | Certificate

Completed an advanced Deep Learning program emphasizing neural architectures and practical implementation.

• Large Language Model | Coursera | Certificate

Completed an intensive Large Language Models course covering architecture and NLP applications.

Hadoop | Coursera | Certificate

Completed a comprehensive course on Hadoop ecosystem and big data processing.

AWS | Coursera | Certificate

Completed AWS Cloud Essentials course covering core cloud concepts and services.

92

nt