

EDUCATION

Bachelor's Of Computer Science - Comsats University Islamabad	2020 - 2024
One Year Diploma In Data Science - Data Institue Pakistan	2022 - 2023

AREA OF EXPERTISE

Technical: Machine Learning, TS Forecasting, Deep Learning, Recommender Systems, A/B Testing, NLP, Vector Databases
Cloud Platforms: Azure AKS, AWS Sagemaker, GCP, Docker, Kubeflow, KServe, MLflow, Kubernetes, Model Bit
Tools And Programming: Python, SQL, Data Structures, PySpark, Apache Kafka, LangChain, Retrieval Augmented Generation

TECHNICAL EXPERIENCE

Data Scientist Mar 2024 – July 2024
Kubar.io Seattle, Washington Remote

- Responsible for implementing Kubeflow pipelines for seamless data ingestion, model training, and deployment on Azure AKS, utilizing KServe for efficient model inference.
- Implemented Apache Kafka pipelines for real-time data integration from Azure and K8's metrics using Python, ensuring reliable data flow into MongoDB and Redis for advanced preprocessing and storage.
- Applied advanced time series forecasting techniques to optimize resource utilization, achieving significant cost savings in cloud computation.
- Collaborated closely with data engineers, product managers, and stakeholders to streamline ML workflows, resulting in a 30% reduction in deployment time and improved alignment with business objectives.

Data Scientist / Intern Dec 2023 — Feb 2024
Internee.pk - Lahore, Pakistan Remote,

- Conducted Advanced Web Scraping: Implemented sophisticated web scraping techniques to gather comprehensive and relevant datasets including relevant web pages and train the model on large corpus datasets.
- Performed Detailed EDA: Carried out meticulous Exploratory Data Analysis (EDA) to extract actionable insights and identify underlying patterns, supporting informed decision-making.
- Enhanced Predictive Models: Applied advanced feature engineering strategies to boost the predictive power of models, ensuring accurate outcome forecasts aligned with project goals.

Software Developer / Intern Jun 2023 — Oct 2023
Dexplat - Islamabad, Pakistan Remote

- Developed and optimized recommendation algorithms and AI chatbots using Langchain and Retrieval-Augmented Generation (RAG), enhancing user interactions and automating processes with robust algorithms and data structures.
- Built cross-platform mobile apps with Flutter and Firebase, integrating machine learning models to provide real-time, personalized customer service and maintain a consistent user experience with a dark theme.
- Collaborated closely with clients to tailor AI chatbot functionalities to specific business needs, incorporating robust object-oriented design and coding standards. This approach resulted in improved customer engagement, increased operational efficiency, and enhanced user satisfaction.

RECENT WORK

Recommendation System for Cloud Cost Optimization April 2024 — Aug 2024

Overview: Developed a system to optimize cloud resource utilization and reduce operational costs.

- Architected data pipelines with Apache Kafka for efficient data ingestion, model training, and storage in Redis. This solution addressed the challenge of managing large volumes of cloud usage data.
- Developed recommendation algorithms with XGBoost and deep learning models to enhance resource utilization and reduce costs. This approach solved the problem of inefficient cloud resource allocation and led to significant cost savings.
- Automated model deployment using Kubeflow Pipelines and KServe on Kubernetes for real-time inference and continuous integration. The implementation improved the scalability and reliability of the optimization system, ensuring real-time adjustments and ongoing cost reduction.

Language Translation and Processing System Aug 2023 — July 2024

Overview: Developed a language translation and text processing system using advanced AI techniques.

- Utilized BERT and transformer models for text summarization and translation, enhancing content recommendation accuracy. This approach addressed the need for more precise and context-aware translations.
- Trained LSTM and RNN models for English-to-Urdu and Urdu-to-English translation, improving translation quality. This solution tackled the problem of inadequate translation quality in existing systems, resulting in clearer and more accurate translations.
- Built a Flutter front-end integrated with Flask-based AI models and Firebase, optimizing system performance. The integration provided a seamless user experience and increased the system's efficiency and responsiveness.