Fahim Sabir

Pakistan   fahim.sabir011@gmail.com   www.linkedin.com/in/fahim-sabir   (+92) 332-8493818

https://github.com/fahimai001   https://www.kaggle.com/fahimsabir

Professional Experience

JMM TECHNOLOGIES, AI Engineer   January 2025 – present
A. Appointment_Booking_Agent   Peshawar, Pakistan

- Developed an Appointment Booking Agent that automates scheduling by collecting user information (name, email, date, time, purpose), storing it in a database, and sending confirmation emails. The system validates inputs to prevent scheduling conflicts and ensure data integrity.
- Enabled SMTP-based email notifications for appointment confirmations and cancellations, ensuring clear user communication.
- Build the backend of the Website and restful APIs for AI system using python and Flask.
- Deployed the Backend system to AWS using EC2 instance and container for the integration with the frontend.

B. Cryptocurrency Trading Bot Development:

- Engineered a data pipeline using DVC to fetch real-time cryptocurrency data from Binance API, performing comprehensive exploratory data analysis and feature engineering to enhance prediction accuracy through market indicators and historical patterns.
- Implemented and benchmarked multiple regression models (Linear Regression, Random Forest, Decision Tree, XGBoost) to forecast next-day closing prices, selecting Linear Regression and XGBoost as final models based on minimum RMSE metric.
- Deployed the trading system as a containerized Flask API using Docker and AWS EC2, creating an end-to-end solution from data acquisition to production model serving that integrates real-time market data for automated trading decisions.

C. Research_Assistant_ChatBot

- Developed an AI-powered research assistant utilizing the Gemini API that automatically generates comprehensive topic reports, provides relevant recommendations with source links, and creates concise summaries of research papers, enhancing information accessibility and research efficiency for users across various domains while maintaining high contextual accuracy.
- Implemented a Flask-based API wrapper to handle API requests efficiently, created an interactive chat interface allowing users to query research papers directly, and incorporated source verification mechanisms to ensure quality and reliability.

D. Reading Books Tracker - Django Web Application: https://aidev001.pythonanywhere.com/

- Developed a responsive Django web application enabling users to manage their reading journey by adding, tracking, and updating status of both technical books and novels between "Not Started," "Reading," and "Done" states.
- Designed intuitive user interface with CRUD functionality allowing seamless addition, status updates, and deletion of books, enhancing the overall reading experience and organization. Successfully deployed the application on PythonAnywhere cloud platform for client review.
- Implemented book categorization system separating technical literature from novels.

Horizon Tech Service NSTP_NUST, Machine Learning Engineer   2024/06 – 2025

- Developed "Chat_with_Multiple_Sources" solution enabling users to interact with diverse document formats (PDF, , TXT, DOC) and websites through natural language queries. Implemented ChromaDB for efficient storage and retrieval of document embeddings, optimizing search performance and context relevance. Optimized Gemini API with prompt engineering for higher-quality responses across information sources.

   Islamabad, Pakistan

Education

Computer Science, University of Science and Technology, Bannu CGPA: 3.44   2020 – 2024
   Bannu, Pakistan

- Extensively studied Data Analytics, Database Management Systems such as MySQL, Machine Learning, Deep Learning, NLP, Generative AI, MLOps, and Cloud Computing

Skills

Machine Learning/Data Analysis:: Python, TensorFlow, Keras, OpenCV, Pytorch, HuggingFace, Scikit Learn, Numpy, Pandas, Matplotlib

Data Engineering and Cloud Computing: SQL, ETLs, Docker, AWS(EC2, ECS, S3, SageMaker), Data Versioning Control (DVC), MLflow, Versioning Control

Generative AI: LLMs Finetuning, LangChain, LangGraph, Crewai, OpenAI (Assistant API, Batch API), Prompt Chaining, Prompt Engineering

Backend Technologies: Flask, FastAPI, Django, Dash

Projects

Google Chrome Plugin for YouTube Comments Sentiment Analysis (FYP)   2023/05 – 2024/02
Tech Stack: Python, Numpy, Pandas, Matplotlib, NLP, DistilBert, Bert, Deep Neural Networks, Flask

- Trained a model with an accuracy of 96% for three sentiments using BERT and Deep Neural Networks.
- Integrate the trained model into a Chrome extension that allows users to visualize YouTube comments as Positive, Negative, or Neutral. Dockerized and Deploy on AWS EC2 instance.

Pakistan Suicide Bomb Attacks Analysis   2023/09 – 2023/11

- After Cleaning the data, I performed detailed Analysis and Visualization to get some Insights from the Dataset. Like:
  - Total Number of People Killed, Cities Where Most Number of Attacks Happened, Targetted Sect etc.

Certificates

LangChain: Chat with Data
Stanford Online | DeepLearnig.ai

Building AI Agent with Crewai | DeepLearning.io

ChatGPT Prompt Engineering for developers | DeepLearning.io

Building Agents using LangGrapahs DeepLearning.ai