Danyal Alam

danyalalam514@gmail.com 03175193965 linkedin.com/in/danyal-alam-272593312
github.com/Danyalalam

SKILLS

Languages — Python, SQL, HTML

Frameworks — Tensorflow/Keras, PyTorch, Pandas, NumPy, NLTK

MLOps — Git, Docker, MLflow, DVC, BentoML, CI/CD pipelines, GitHub Actions, RESTful APIs

Cloud Technologies & Databases — Microsoft Azure, AWS | MySQL , MongoDB

PROJECTS

Production Grade Machine Learning Project: | MongoDB,AWS,Docker,Git,CI/CD,FastApi
Visa Approval Prediction:

- **End-to-End Pipeline**: Built a full machine learning pipeline from data ingestion (via MongoDB) to cloud deployment using Docker and AWS services (EC2, S3, ECR).
- **Model Management**: Trained multiple models, evaluated them using Evidently AI for data drift detection, and pushed the best model to S3 for production.
- **CI/CD Integration**: Implemented automated CI/CD workflows with GitHub Actions and Dockerized FastApi applicatoin for seamless deployment on AWS, ensuring scalability and reliability.

End TO End Chest Cancer Classification with Mlops(DL): | CNN,Azure,CI/CD,Docker,Git,Flask

- **Developed An End-to-End Deep Learning Pipeline** : Designed and implemented a modular pipeline for chest cancer detection using CNN, ensuring scalable and maintainable code with enhanced reproducibility.
- **MLOps Integration for Automated Workflow :** Leveraged MLflow and DVC for experiment tracking and version control, and utilized Azure CI/CD pipelines for automated deployment.
- **Model Deployment with Docker and Flask :** Deployed the deep learning model in a Dockerized Flask application, optimizing it for real-world usage and making it accessible via REST API, ensuring rapid and reliable inference.

Transformer From Scratch In PyTorch: | PyTorch,Python,NLP

- **Architecture**: Implemented the full transformer architecture, including multi-head attention and feed-forward layers, using PyTorch.
- **Optimization**: Optimized model performance through careful hyperparameter tuning and gradient clipping techniques.
- **Performance**: Achieved comparable results to pre-trained models on NLP tasks such as machine translation or text classification.

EDUCATION

University Of Engineering And Technology Peshawar Sep 2020 – Jul 2024
• *Bachelors of Science - Electrical Communication Engineering* Peshawar, Pakistan
GPA 3.0/4.0

EXPERIENCE

Machine Learning Intern Aug 2024 – Sep 2024
Digital Empowerment Pakistan virtual

- Developed models using scikit-learn for classification and regression tasks. Utilized pandas for data manipulation and Matplotlib for visualization.
- Applied TF-IDF and Bag-of-Words for feature extraction. Implemented text preprocessing pipelines including tokenization, stemming, and stop word removal using NLTK and spaCy.
- Implemented CI/CD pipelines for ML models using GitHub Actions. Containerized applications with Docker and deployed on AWS/Azure. Monitored model performance and data drift using MLflow.

CERTIFICATES

Complete Machine Learning,NLP Bootcamp MLOPS & Deployment(Udemy): | Learned key concepts in ML, NLP, and advanced topics like deep learning and transformers. Worked on real-world applications using TensorFlow, PyTorch, and scikit-learn. Gained experience in MLOps for model deployment and optimization, focusing on practical workflows and automation.