Dawood Sarfraz

Lahore, Pakistan

📞 +923061757838 ✉ dawoodsarfraz.cs@gmail.com in Dawood Sarfraz ⬡ Daudsarfraz 🌐 DawoodSarfraz

EDUCATION

National University of Computer and Emerging Sciences (FAST NUCES)

Bachelor of Science in Computer Science   *Sep 2020 - Sep 2024*

LANGUAGES AND TECHNOLOGIES

Programming Languages: Python, Julia, C, C++, MATLAB
Machine Learning Libraries: PyTorch, scikit-learn, TensorFlow, Keras, Numpy, Matplotlib, scipy, Panadas, seaborn, nltk, spaCy, OpenCV
Cloud & DevOps: Docker, Kubernetes, Jenkins
Tools & Technologies: Git, Trello, Pytest
Web Frameworks: Django, Flask, FastAPI, Gradio, Streamlit
Deep Learning: CNN, RNN, LSTM, HuggingFace, Transformers, Quantization, ONNX, YOLO

EXPERIENCE

Research Assistant   **Sep 2023 – Sep 2024**

Machine Learning Engineer   *Remote, Pakistan*

- Worked on a research project classifying skin cancer using CNN, ShuffleNet, and NasNet Models.
- Gained experience in medical data processing and deep learning architectures.

Anonymous Tree   **July 2023 – Aug 2023**

Machine Learning Engineer   *Remote, Pakistan*

- Worked as a Machine Learning Engineer.
- Assisted beginners in learning core concepts of Machine Learning.

PROJECTS

Deep Learning Approaches for Multi-Class Cancer Classification   **June 2024 – Sep 2024**

- Developed a classification method using a dataset of 10,000+ dermoscopic images.
- Addressed class imbalance with RandomOverSampler.
- Trained three CNN architectures: **Custom CNN** (Acc: 92%, Prec: 0.92, Rec: 0.92, F1: 0.92), **NasNet** (Acc: 93%, Prec: 0.94, Rec: 0.93, F1: 0.93), and **ShuffleNet** (Acc: 87%, Prec: 0.87, Rec: 0.87, F1: 0.87).

Enhancing Medical Education through Immersive Virtual Reality   **Sep 2023 - May 2024**

- Developing a **VR-based Medical Training System**.
- Created **VR medical simulations** with haptic feedback for realistic training of medical students.
- The goal of the project is to reduce costs and ethical concerns associated with traditional surgical training methods.
- [Project Link](#)

Duplicate Questions Pair   **June 2023 - July 2023**

- Build a model that can **Identify and Detect Duplicate** question pairs
- Applied different algorithms like **Random Forest Classifier, XB Classifier, Decision Tree Classifier**
- XGB Classifier performed very well and **achived 80% Accuracy**
- [Project Link](#)

Next Word Prediction   **Oct 2024 – Oct 2024**

- Worked with an unlabeled dataset consisting of approximately **2650** unique words and **800** lines.
- Applied preprocessing techniques and used **LSTM** with **Adam** as the optimizer.
- Achieved an accuracy of approximately **93%**.
- [Project Link](#)

Electronic Products Recommendation System   **April 2023 - May 2023**

- **Amazon Electronic Products** Dataset to develope a **Recommendation System**

- Used Algorithms like **KNN Basic, KNN Means, KNN ZScore, SVD, SVDpp, NMF, SlopeOne, CoClustering**
- **SVD and SVDpp** performed outstanding with **Maximum Accuracy**
- [Project Link](#)

Cyber Attacks Classification using Machine Learning   **Mar 2023 – April 2023**
- Project focuses on utilizing Machine Learing to **classify and identify different types of cyber attacks**
- Cleaning, normalizing, and transforming the collected data into a suitable formate
- Applied various algorithms **MLP** performed well with **93% accuracy**
- [Project Link](#)