Mohammed Shihas

shihasck5@gmail.com | +91-7306474712| LinkedIn | GitHub

EDUCATION

Bachelor of Technology Computer Science and Engineering

Kerala | 2019-2023

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

EXPERIENCE

LUMINAR TECHNOHUB | DATA SCIENCE INTERN @

Kochi, Kerala | Jan 2025 - Present

- Developed data-driven solutions using Python, Pandas, and SQL, including predictive modeling and trend analysis.
- Created interactive visualizations with Matplotlib and Seaborn to enhance data insights.
- Built a diabetic retinopathy classification model using ResNet and PyTorch, addressing class imbalance.
- Developed a Flask-based YOLOv3 object detection app with a frontend for real-time predictions.

LUMINAR TECHNOLAB | DATA SCIENCE TRAINEE

Kochi, Kerala | Sep 2023 - July 2024

- Worked on data-driven solutions, leveraging Python, Pandas, and SQL for large-scale data analysis.
- Developed predictive models to analyze trends and improve decision-making.
- Created interactive data visualizations using **Matplotlib** and **Seaborn**, making insights more accessible.
- Assisted in **feature engineering and model evaluation**, improving model performance and reliability.

PROJECTS

DIABETIC RETINOPATHY CLASSIFICATION PyTorch, ResNet, Computer Vision, Augmentation

- Built a binary classification model to detect referable vs non-referable diabetic retinopathy.
- Handled severe class imbalance using data augmentation.
- Implemented ResNet for feature extraction and achieved 94.8% accuracy.
- Optimized model training using GPU acceleration for faster performance.
- Evaluated using ROC Curve, Precision-Recall, and F1-score.

YOLO OBJECT DETECTION WITH FLASK

FLASK

- Integrated a pretrained YOLO model for object detection and built a Flask frontend for deployment.
- Designed a user-friendly interface for uploading images and displaying real-time detection results.
- Optimized image processing and response time to ensure smooth performance.
- Implemented basic error handling and validation for user-uploaded images.

BABY CARING AID WITH THE APPLICATION OF ANALYSIS

COMPUTER VISION, MEDIAPIPE

- Developed a "Baby Caring Aid" system as a final year project.
- Integrated live video analysis to provide real-time assistance in baby care tasks.
- Leveraged advanced analysis techniques to interpret live video feeds.
- Offered insights and recommendations to caregivers based on video analysis.
- Achieved a notable accuracy score of 0.82.

SKILLS

Languages: Python, SQL, HTML, Bash

Machine Learning: Scikit-Learn, TensorFlow, PyTorch, OpenCV, NumPy, Pandas, Matplotlib, Seaborn

Deep Learning: ResNet, CNNs, RNNs, Transformers, GANs, LSTMs, Transfer Learning

CERTIFICATIONS

- Big Data and Data Science NACTET
- Introduction to Big Data Coursera
- Introduction to Machine Learning Coursera