MARYAM MURTAZA

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PROFILE

To utilize my extensive expertise in Python and deep learning, including computer vision to design and implement cutting-edge AI solutions that deliver measurable business value, while fostering continuous professional growth and demonstrating unwavering tenacity and a results-oriented mindset.

EDUCATION

Master of Science in Artificial Intelligence **Oct 2024 - Nov 2026**

The Islamia University of Bahawalpur | Bwp-Pak

BS Information Technology Oct 2019 – May 2023

The Islamia University of Bahawalpur | Bwp-Pak

CGPA: 3.70 (82%)

SKILLS

- Python (certified by corvit)
- Object Oriented Programming
- Machine learning,
- Deep learning, Convolutional Neural Network (CNN)
- OCR
- Computer Vision (OpenCV,YOLO)
- Scikit-learn, Tensorflow Pandas, Numpy, Plotly, seaborn,
- Version Control – Git
- Problem Solving

EXPERIENCE

Data Manager Intern **Dec 2024 – Present**

Deputy Director Social Welfare Bait ul Maal | BWP-Pak

- Recorded and maintained accurate data in both physical and digital formats. Prepared comprehensive monthly reports using Microsoft Office tools. Supported administrative tasks related to data management and reporting.

Computer Vision Intern Jun 2024 – Sep 2024

ITsolera Pvt Ltd | Isalamabad-Pak

- As a Team lead, I have gained hands on experience managing and executing multiple projects that leverage advanced computer vision algorithms. My responsibilities include guiding teams, developing and implementing vision-based solutions, and ensuring project success through effective management and technical expertise

Artificial Intelligence Intern Mar 2023 – Aug 2023

Onex.Ai | Bwp-Pak

- Gained hands-on experience in AI and machine learning while contributing to a variety of impactful projects. Developed and fine-tuned machine learning models to predict equipment failures, resulting in a significant reduction in downtime. Employed the predictive maintenance system, while establishing efficient data pipelines for streamlined data processing This experience enabling me to address diverse AI challenges across healthcare and environmental monitoring domains.

FINAL YEAR PROJECT

Built "**Diabetic Retinopathy Detection Software**" by using tools:

- Tensorflow, Keras, matplotlib
- Kaggle Dataset(Gaussian filtered)
- Transfer learning (VGG16)

PROJECTS

Real-Time Predictive Maintenance system:

- This Python code is designed to create a real-time dashboard for visualizing sensor data predictions using Deep learning models. The dashboard is built using Dash and Plotly libraries.

CV Parsing Using OCR:

- This project implements a CV (Curriculum Vitae) parsing system that extracts and analyzes text from CVs using Optical Character Recognition (OCR). It leverages libraries such as Tesseract OCR and spaCy to process documents and extract structured information.

Computer-Vision Based Cursor Controller:

- This project implements a hand gesture recognition system using MediaPipe and Keras, designed to control the computer cursor based on recognized hand gestures. The system is trained on a dataset of hand gestures and can recognize various commands such as scrolling up, scrolling down, moving left or right, and more.

Auto-capture Selfie by Detecting Smile:

- This Streamlit-based application uses OpenCV to detect faces and smiles in real-time from webcam feed. The app automatically captures an image when a smile is detected, or you can manually capture an image using a button. The captured images are saved locally with a timestamp.

Face Recognition Security Application:

- This repository contains code for a Face Recognition Security Application built using Flask, OpenCV, MTCNN, and FaceNet. The application allows real-time face detection and recognition, comparing webcam input with stored face embeddings.

Traffic Sign Recognition Using Deep Learning:

- Developed a deep learning-based Traffic Sign Recognition system to classify various road signs.Implemented and compared the performance of VGG16, MobileNet, and ResNet architectures.

Realistic 3D modeling from 2D Images:

- Developed a deep learning pipeline for 3D reconstruction from 2D images, Implemented **MiDaS** to predict depth maps from single images, enhancing 3D reconstruction accuracy.

Sensor Insights Dashboard:

- This is a simple Streamlit web application for visualizing and analyzing sensor data from a CSV file. It provides various data preprocessing and visualization options. The application is built using Python and leverages libraries such as Pandas for data manipulation and Plotly for data visualization. what will i assign name to this project