# HEERTHI RAJA H

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Myself Heerthi Raja, skilled in Python, Pandas, and delving into Computer Vision through projects like Drowsiness Detection. My experience showcases skills in image processing, deep learning, and pattern recognition. Eager to contribute to the evolving landscape of Computer Vision with a hands-on and innovative approach.

## SKILLS

- Computer Vision
- Python
- Deep Learning
- Motion Estimation
- Pattern Recognition
- Feature Extraction
- Excel
- Object Recognition and Tracking
- Image Enhancement and Restoration
- Image Analysis
- Image Segmentation
- SQL ( MS SQL Server)

## PROJECTS

**Leaf Disease Detection** Using Deep Learning - Github

- Implemented a Convolutional Neural Network (CNN) for early-stage identification of plant diseases, incorporating transfer learning on pre-trained models and optimizing hyperparameters for superior accuracy.

**Diabetes Detection** Using Deep Learning - GitHub

- Engineered a predictive model using Long Short-Term Memory (LSTM) networks and feature-rich data preprocessing, achieving high accuracy in diabetes prediction through comprehensive patient data analysis.

**Road Sign Detection** Using Deep Learning - GitHub

- Developed an object detection system utilizing YOLO (You Only Look Once) architecture, fine-tuning on custom road sign datasets, and optimizing for real-time performance, enhancing autonomous vehicle safety.

**Smart Attendance System** with Face Recognition - GitHub

- Created a facial recognition-based attendance system employing the OpenCV library and dlib for real-time face detection and landmark localization, integrating with attendance databases for streamlined record-keeping.

**Drowsiness Detection System** Using Facial Landmarks - GitHub

- Implemented a drowsiness detection algorithm utilizing facial landmarks and Euclidean distance metrics, integrating seamlessly with computer vision libraries and contributing to driver safety by monitoring eye behavior.

**Gujarati Character Recognition** using CNN - GitHub

- Engineered a multi-layered CNN for Gujarati character recognition, incorporating data augmentation, dropout layers, and softmax activation for enhanced model generalization and improved accuracy.

**License Plate Recognition** Using OpenALPR - GitHub

- Developed a license plate recognition system using OpenALPR APIs, integrating edge computing for real-time image processing, optimizing for various lighting conditions, and ensuring robust vehicle tracking.

## EDUCATION

**Jamal Mohammed College** ***Trichy, TN***

*Bachelor of Commerce,* **CGPA: 8.0**

- Relevant Coursework: Machine Learning, Probability &Statistics, Data Visualization.

## Activities and Interests

Cycling, Hiking, Traveling, Reading Books.