SMART INDIA HACKATHON 2020

Driver Warning System

Main Aim:

1. Visual Input → Vocal Output

Input:

Video input

- → Brake it into frames
- → Process the frames
- → Apply the algorithm
- → Get updated frames
- → Output the frames in a single video

Methods to tackle the problem statement:

Part 1: Traffic Signs, Traffic signal, Crowd detection

- → Collect large data-sets
- → Scaling all the pictures to a particular size (n x m)
- → Training a model using the datasets using deep learning modules
- → Saving the model
- → Implementing it in the problem statement

Part 2: Developing a text to speech chatbot

- → Using google text to speech python module (gTTS)
- → Making several test outputs and implementing it into our neural network
- → Making a GUI or an App or an Website

Part 3: How to collaborate:

- → We can use github to collaborate and change our code from anywhere
- → We make our codes into functions and modules and uplode it into github and make a master repo