FACE,EYES,PEDESTRIAN AND CAR DETECTION USING OPENCV

1. The project is based on image processing and the purpose is to introduce a lightweight program for object detection using haar cascade.
2. openCV ,Matplotlib, FaceCascade
3. We would like to implement this live so we will try this on videos ,images as well as on webcam , we would use the haar cascade xml file which has been trained on 30x30 frontal face images, full body images and car images.We will read the continuous frames of images from the video and webcam and convert it into a grayscale image and factor it into a 30x30 image as present in the dataset.then we will use face cascade detectMultiScale function on the image . Then we will make a bounding rectangle on the face.Then we will finally display the image.For the
4. week1: we will learn about face cascade classifier and openCV and its functions
   week2: Implementation of the project on different light conditions and situations
5. Wanted to learn more about different algorithms and data structures and apply them to make programs more efficient.
6. My teammates and I have a very deep interest in deep learning and image processing So, we wanted to do a project on that. PyCK gave us a good opportunity to use our knowledge and implement those in a project.
7. References: DS303(IITB) : Image classification
   CS231n Lectures videos on YouTube(MIT)

.