Face Recognition Based Attendance System

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1 Face Detection

bbox_extractor.py : This detects faces in all the images present in **train** folder which contain all the images for training.It saves the output ,which is bounding boxes detected in the original images,in folder **output_bbox** and the final cropped out images of respective bounding boxes in the folder **final_bbox**

2 Feature Extraction

face_feature_extractor.py : This uses images present in **output_bbox** directory as an input extract the feature vectors of each image using opencv and dlib. For each image we get a feature vector of size (68,2), these are then stored in the disk after pickling as **face_feature.pickle**.

3 Face Recognition

face_recognizer.py : This uses the extracted feature vectors pickled in **face_feature.pickle** as an input. We have used Resnet state of the art model to recognize the faces.

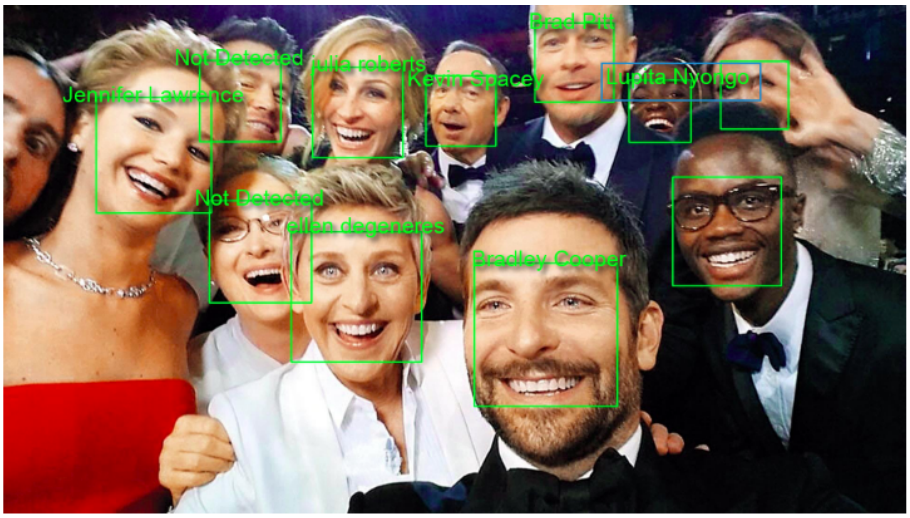

Figure 1: Recognised faces