HUMAN ACTIVITY DETECTION FROM VIDEOS

- This Project aims to detect various human activities from different input videos and from the real time video by using camera

- First detects humans in different actions from the videos. Recognition of actions is done afterward based on the change of the angular values subtended by various body parts.

- For action recognition angular features of body parts are extracted using a skeleton technique using openPose algorithm. Results for action recognition are comparable with the present state-of-the-art.

- This is machine learning project used for detecting the various actions of a human being from an input video and also from the real time video.

- First of all the video is uploaded and it is divided into frames of images using FFMPEG framework and from that the probabilities of actions from different frames are produced using basic image classification using CNN and at last the average of the probabilities are calculated and that will be the final output.

- UCF50-Action recognition dataset from kaggle website is used which contains 50 different actions

- We extract frames from the given video

- Use feature extractors(like CNN)to extract the features from all the frames

- Then classify every frame based on these extracted features