Methodology:

In our project, we are going to use a convolutional neural network to train our dataset and make a model. Neural networks aim to recognize underlying relationships in datasets through a process that mimics the functioning of the human brain. Such systems can learn to perform tasks without being programmed with precise rules. So to train our model we collected almost 7000 image data with different types of emotion labels like angry, disgust, fear, happiness, neutral, sad, surprise from an online source. In our neural network, we think there might be 2 hidden layers one for 128x128 size images and the 2nd layer is for 32x32 images. We are going to use computer vision for video capturing. In this case, we will use the python OpenCV library. We will crop out the face image and send it to our trained neural network model for output. Then we will find out the probable emotion of this person in the video.