Project Overview

This dataset is self made dataset in png format and was later converted to csv format with name train\_foo.csv.

The file that classifies gestures is ProjectEmojinator.py

The file that converts png to csv is pngToCSV.py

The file that will make png gesture dataset is datasetEmojinatorPython.creation.py

keras\_model->This method will make the architecture of Cnn,and will return the model Architecture and the callback list.Here the best model gets saved so there is only one model in callback list and that will be used later. Parameters::Imagedimensions x,y.,Classes /Packages used:Conv2D,MaxPooling2D,Flatten,Dense,ModelCheckpoint .

keras\_predict->This will take an image and model as a parameter and will return the alphabet class with maxprobablity to which the inputted image belongs to. Parameters::Model object ,Inputted Image. Parameters::Inputted Image.

get\_emojis->This will return emoji and will display emoji similar to the gesture according to the most probable class. Parameters:None.,Classes /Packages used:Opencv,os.

overlay->This method will display emoji on top of the frame .The emoji will be that which shows the maximum probability predicted by keras\_predict. Parameters:image,emoji,x,y,w,h.,Classes /Packages used:Opencv.

blend\_transparent->This method will take will do the settings regarding overlaying of the emoji. . Parameters:Frameimage,image to overlay.,Classes /Packages used:Opencv.

main->This method will switch on the video camera and it will record the gestures and save them as a png file when there is a colour matching skin colour of the humans.This method records 1200 images of a single gesture. Parameters:None.,Classes /Packages used:Opencv.