**GESTURE RECOGNITION Experiments**

Even before starting the experiment, I faced issues with importing of modules like imresize and imread, as they were deprecated from current scipy version, and thus not getting imported  
The solution was them was to import it in following ways:

1. *from imageio import imread*
2. *from skimage.transform import resize*
3. *from matplotlib.pyplot import imread*

After importing the necessary modules, below are the experiments I have tried

| Experiment No | Experiment Tried | Output Obtained/ error thrown | Solution/Rectification |
| --- | --- | --- | --- |
| 1 | Neural net followed by rnn(GRU) , batch size 64, 2 layers, epochs 10 | Stop Iteration error thrown | Change the batch size |
| 2 | Neural net followed by conv3d , batch size 64, 3 layers, epochs 30 | Stop Iteration error thrown | Change the batch size |
| 3 | Neural net followed by rnn(GRU) , batch size 16, 2 layers, epochs 10 | Low accuracy around 20% | Tried increasing the epochs within same architecture |
| 4 | Neural net followed by conv3d , batch size 64, 3 layers, epochs 30 | Accuracy around 70%, time taken more | Increasing epochs |
| 5 | Neural net followed by conv3d , batch size 64, 6 layers, epochs 60 | Accuracy around 60%, time taken more | More layers decreased accuracy |
| 6 | Neural net followed by rnn(BiL-LSTM) , batch size 16, 2 layers, epochs 60 | accuracy around 60% | Tried increasing the epochs within same architecture |
| 7 | Neural net followed by conv3d , batch size 74, 5 layers, epochs 70 | Accuracy around 80%, time taken more | Best till now |

To conclude, the NN with conv3d has given good results but all the experiments have taken time, and conv3d has taken more time.