Exp No.	Model	Result	Decision + Explanation
1	Pre trained VGG16 + GRU	Overfits the training set. Validation accuracy was low : 76%	Overfitting can be reduced by applying dropout, normalization and by reducing units in GRU layer.
2	VGG16 + GRU with dropout and normalization	Validation accuracy reached 80%	Add dropout and normalization after all layers
3	Pre trained VGG16 + GRU with dropout and BatchNormalization after each layer	Validation loss reduced to 0.41	Problem of overfitting resolved.
4.	Pre trained VGG16 + CNN3D - BatchNormalization after every CONV layer -Dropout after Dense layer. - Chosen optimizer as SGD with LR=0.01, Imagesize=120 x 120 Number of images=15	Model learning was not good and accuracy diff was close to 22-25%	Reduced learning rate so that gradient could propagate towards global minima.
NOTE: Model learning was effective with just 15 frames. Initial 5 frames and those that were at the end did not contribute towards the accuracy of the model. Lot many improvements, experiments and variations can be added to improve these models, but due to limited computing resources, it is not possible to achieve. Even on Google Colab, training the model and machine learning is taking a lot of time.			