

SUMMARY

Batch size – 16.

For 32 and 64 it was taking much RAM and colab stopped working.

Experiment Number	Model	Trainable Parameters	Result	Decision + Explanation
1	Conv3D	669,829	Training acc - 76.43% Validation acc - 26.00%	Though the loss is decreasing, Model is over fitting. To avoid over fitting, Increasing the dropout and number of epochs.
2	Conv3D	1,250,949	Training acc - 88.82% Validation acc - 71.00%	Model is performing better but this still exits the problem of over fitting and there is many fluctuation in the model. Adding an l2 regularization to avoid over fitting. Increasing the dropout and number of epochs for more stable model.
3	Conv3D	669,381	Training acc - 90.05 % Validation acc - 71.00%	Model accuracy has increased but the model has not overcome the problem of over fitting. Instead of a Conv3D model, we will now try with a CNN + RNN model.
4	MobileNet + GRU	5,019,589	Training acc - 96.38 % Validation acc - 93.00%	Model has performed well on less number of epochs. But there is high fluctuation in the model. Will try to reduce the dropout and increase the number of epochs to see the performance.
5	MobileNet + GRU	5,019,589	Training acc - 99.72 % Validation acc - 94.00%	Model has performed well with good accuracy as well as has there is less fluctuation.