**Write-Up**

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| **Experiment Number** | **Model** | **Result** | **Decision + Explanation** |
| 1 | **Conv3D** | **Throws OOM error** | **Reduce and find optimum batch size.** |
| 2 | **Conv3D** | **Train\_Acc:0.84**  **Val\_Acc:0.78** | **Optimizer-SGD** |
| 3 | **Conv3D** | **Train\_Acc:0.83**  **Val\_Acc:0.71** | **Optimizer-Adam**  **So keeping SGD as optimizer** |
| 4 | **Conv3D** | **Train\_Acc:0.95**  **Val\_Acc:0.82** | **Changed image size to 120X120** |
| 5 | **CNN(VGG16) + RNN(Bidirectional LSTM)** | **Train\_Acc:0.9985**  **Val\_Acc:0.72** | **Train accuracy is great but model is overfitting** |
| 6 | **CNN(Resnet50) + RNN(GRU)** | **Train\_Acc:0.965**  **Val\_Acc:0.85** | **model gives best accuracy among others. Hence choosing it for final model.** |

Choosing metrics as categorical\_accuracy because:

1. Categorical accuracy is a commonly used metric for multi-class classification tasks, including gesture recognition. It measures the percentage of correctly classified samples out of the total number of samples in the dataset.
2. In the context of gesture recognition, the goal is to accurately classify different hand gestures, each corresponding to a specific class. The categorical accuracy metric provides an easy-to-understand measure of how well the model is performing in terms of recognizing these different gestures.