Notebook by –

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| **Experiment Number** | **Model** | **Result** | **Decision + Explanation** |
| **1** | **Conv3D (model\_a)** | **Low batch sizes gave generator error.**  **Accuracy:** | **Chose to choose batch\_size as high as possible. Hence started with 51 for the base model.** |
| **2** | **Conv3D (model\_b)** | **For this new model (model\_b), we tried decreasing the number of layers.**  **Since batch\_size = 51 gave Out Of Memory Error (now we know the upper bound), we start experimenting model\_b with different batch sizes**  **Accuracy: 0.20**  **With batch\_size = 10** | **For model\_b, we decided to introduce a modified generator that yields sequence with only 1 channel. That is because the previous model seems to overfit, maybe because of too many parameters.**  **We also compared the same model on both the generators, and generator\_ex() (grayscale) seemed to mostly perform better than generator()**  **Using grayscale image sequences shouldn’t be a problem with gesture recognition, as color doesn’t really play a crucial role here. There could be different backgrounds, different subjects with different colored clothes.** |
| **3** | **Conv3D (model\_b)** | **Accuracy: 0.12** | **Increased the batch\_size to 20** |
| **4** | **Conv3D (model\_b)** | **Accuracy: 0.35** | **Increased the batch\_size to 30** |
| **5** | **Conv3D (model\_b)** | **Accuracy: 0.38** | **Increased the batch\_size to 40** |
| **6** | **Conv3D (model\_c)** | **Accuracy: 0.23**  **With batch\_size=10** | **Since model\_b wasn’t able to learn much, we tried increasing the model complexity with model\_C** |
| **7** | **Conv3D (model\_c)** | **Accuracy: 0.26** | **Increased the batch\_size to 30** |
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