This is a sample write-up. The write-up need not be in tabular form.

It doesn’t state that ConvLSTM will give you better results than Conv3D. The explanation should be as detailed as possible so that the logic behind the decision is conveyed. Also, there are a lot of things you can experiment with in the generator function and elsewhere. Please do not forget to specify the exact metric values, here Accuracy which drives your decision.

You can draw inspiration from the concepts taught in the Industry demo in CNNs to experiment with the data and different architectures.

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| **Experiment Number** | **Model** | **Result** | **Decision + Explanation** |
| **1** | **Model 1** | **-After 15 epoch training accuracy = 98.9% and validation accuracy = 75%**  **- Parameters = 1117061** | **-Look like this is overfitting.**  **- add dropout layer.** |
| **2** | **Model 2** | **After 25 epoch ---->training accuracy= 91% and Validation accuracy=80%**  **- Better the previous model**  **-Parameters =** 3,638,981 | **-Number of parameters increases.**  **-But performance is better the previous model**  **-let’s try to reduce the parameters.** |
| **3** | **Model 3** | **- training accuracy = 78.8% and validation accuracy = 79%**  **- Number of parameters also reduces.**  **-Parameters =** 1,762,613 | **-Reduce the filter size to (2,2,2)**  **-But performance decreases** |
| **4** | **Model 4** | **- At epoch 18/25, training and validation accuracy = 80%**  **- Accuracy has improved.**  **- Numbers of parameters =** 2,556,533 | **-Add the filter size (3,3,3)**  **- Learning rate improve at epoch 7.** |
| **5** | **Model 5** | **- At epoch 9/25 , training accuracy = 75.5% and validation accuracy = 65%**  **- Decrease the accuracy.**  **-Parameters=** 2556533 | **-Didn’t observe much improvement.**  **-adding number of dropouts.** |
| **6** | **Model 6** | **- At epoch 18/20, training and validation accuracy = 81%**  **- Number of parameters = 696645** | **-Perform better than previous model.**  **-Over-fitting reduces.** |
| **7** | **Model 7** | * At epoch 12/25, the training accuracy = 79% and validation accuracy = 76% * Number of parameters = 504709 | **-Numbers of parameters is minimum as compared to other model.**  **-Learning rate is not good.** |
| **8** | **Model 8** | * Training accuracy = 93% and Validation accuracy = 81%      * Numbers of parameters = 1657445 | **-Better performance as compared to other model.**  **-Learning rate is positive and inc.** |
| **Final model** | **Model 8** | **CNN+LSTM** | **- After running eight differnt models, I have finalised model 8(CNN+LSTM) is performing well compare to other model.**  **- Training accuracy = 93% and validation accuracy = 81%**  **- Number of parameters of model 7 is low but it's learning rate at Epoch 00018: learning rate to 3.9999998989515007e-05(negative)**  **-Although number of parameters is high but learning rate is positive and inc. at epoch 15.** |
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