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.

|  |  |  |  |
| --- | --- | --- | --- |
| **Experiment Number** | **Model** | **Result** | **Decision + Explanation** |
| **1** | **Conv3D** | **Training Accuracy - 85.82 %**  **Training Loss - 0.35**  **Validation Accuracy - 85 %**  **Validation Loss - 0.42** | **Crop the images correctly, try to overfit on less amount of data** |
| **2** | **Conv3D** | **Training Accuracy - 76.62 %**  **Training Loss - 0.57**  **Validation Accuracy - 69 %**  **Validation Loss - 0.71** | **Reduce the size of the image/Reduce the number of layers** |
| **3** | **Conv3D** | **Training Accuracy - 84.62 %**  **Training Loss - 0.40**  **Validation Accuracy - 74 %**  **Validation Loss - 0.67** | **Increase the amount of trainable data/ reduce the filter size** |
| **4** |  | **Training Accuracy - 76.47 %**  **Training Loss - 0.59**  **Validation Accuracy - 74 %**  **Validation Loss - 0.69** |  |
| **5** |  | **Training Accuracy - 83.26 %**  **Training Loss - 0.42**  **Validation Accuracy - 85 %**  **Validation Loss - 0.40** |  |
| **6** | **Conv3D** | **Training Accuracy - 18.10 %**  **Training Loss - 1.60**  **Validation Accuracy - 26 %**  **Validation Loss - 1.47** | **Reduce Cropping** |
| **7** | **Conv3D** | **Training Accuracy - 86.73 %**  **Training Loss - 0.35**  **Validation Accuracy - 57 %**  **Validation Loss - 1.38** | **………………** |
| **8** |  | **Training Accuracy - 95.48 %**  **Training Loss - 0.14**  **Validation Accuracy - 69 %**  **Validation Loss - 1.09** |  |
| **9** | **Conv3D** | **Training Accuracy - 78.05 %**  **Training Loss - 0.57**  **Validation Accuracy - 56 %**  **Validation Loss - 1.19** | **Try ConvLSTM as Conv3D not giving desired accuracy** |
| **10** | **ConvLSTM** | **Training Accuracy - 82.2 %**  **Training Loss - 0.5**  **Validation Accuracy - 83 %**  **Validation Loss - 0.42** | **…………..** |
| **11** |  | **Training Accuracy - 98.94 %**  **Training Loss - 0.03**  **Validation Accuracy - 99 %**  **Validation Loss - 0.07** |  |
| **Final Model** | **……………….** | **………….** | **…………………** |