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** | **Conv2D + TimeDistributed + GRU + Epochs(10)** | **Accuracy – 0.81** | **Looks promising, so trying with LSTM in place of GRU** |
| **2** | **Conv2D + TimeDistributed + ConvLSTM2D + Epochs(10)** | **Accuracy – 0.68** | **LSTM reduced accuracy, so trying with Conv3D** |
| **3** | **Conv3D + Dense(256) + Epochs(10)** | **Accuracy – 1.00** | **Looks over fitting , so increasing Dense layer** |
| **4** | **Conv3D + Dense(256) + Dense(512) + Epochs(10)** | **Accuracy – 0.73** | **This looks lesser than 1st result, so trying with more epochs** |
| **5** | **Conv3D + Dense(256) + Dense(512) + Epochs(35)** |  | **With 35 epochs getting error “**No space left on device” |
| **Final Model** | **Conv2D + TimeDistributed + GRU + Epochs(30)** | **Accuracy – 0.93** | **This is the best model we could achieve when number of epochs increased to 30** |