|  |  |  |  |
| --- | --- | --- | --- |
| **Experiment Number** | **Model** | **Result** | **Decision + Explanation** |
| 1 | Conv3D | Generator error | Incorrect image processing and resizing |
| 2 | Conv3D | Model not trainable as a lot of parameters | GPU memory not sufficient. Reduce the size of the image/Reduce the number of layers |
| 3 | Conv3D | Accuracy: 0.35 | Reduce the size of the image/Increase no of frames. |
| 4 | ConvLSTM | Accuracy: 0.32 | Increase the amount of trainable data/ reduce the filter size |
| 5 | ConvLSTM ( VGG16) | Accuracy: 0.50 | Increase the amount of trainable data/ reduce the filter size |
| 6 | ConvLSTM ( MOBILENET) | Training Accuracy: 1 Val Accuracy: 0.71 | Overfitting occurs as training accuracy is 1.0, reduce the drop out. |
| 7 | ConvLSTM | Accuracy : 0.72 | Try transfer learning to increase accuracy |
| 8 | ConvLSTM ( VGG16) | Accuracy : 0.87 | Now try mobilenet with LSTM |
| 9 | ConvLSTM ( MOBILENET) | Accuracy: 0.93 | Accuracy improved |
| 10 | Conv3D | Training Accuracy: 0.85 Validation Accuracy: 0.5 | Vey high loss of data, overfitting issue, Conv3D is not working |
| **Final Model** | **ConvLSTM ( MOBILENET)** | Max. Training Accuracy 0.98 Max. Validaiton Accuracy 0.93 | With batch size 32, 24 no of frames and input size (84 X 84) we get max accuracy. |