|  |  |  |  |
| --- | --- | --- | --- |
| **Experiment Number** | **Model** | **Best Accuracy** | **Decision + Explanation** |
| **1** | **ModelConv3D1** | **77%** | **Model is overfitting , so we need to add data augmentation** |
| **2** | **ModelConv3D2** | **83%** | **Model is not overfitting but there are oscillations in validation loss.** |
| **3** | **ModelConv3D3** | **75%** | **Reduced filter size to (2,2,2). We have reduced number of parameters but accuracy has fallen down.** |
| **4** | **ModelConv3D4** | **83%** | **Filter size is (2,2,2) and we have tried adding more layers. Accuracy improves than the previous model. Lesser number of parameters than model 2** |
| **5** | **ModelConv3D5** | **59%** | **We added dropouts but accuracy dropped substantially as it has not learnt to generalize features.** |
| **6** | **ModelConv3D6** | **81%** | **We tried reducing the number of features to 0.6 million with dropouts. This is a low memory model.** |
| **7** | **ModelConv3D7** | **71%** | **Reduced number of parameters to 0.5 million. But accuracy drops. This is a low memory model.** |
| **8** | **ModelConv3D8** | **77%** | **Further reduced the number of parameters to 0.2 million. Better accuracy and a very low memory model.** |
| **9** | **CNN-LSTM** | **83%** | **Used CNN + LSTM for this model. Accuracy is quite good** |
| **10** | **ModelConv3D10** | **87%** | **Similar to Model 2 but with more augmentation . We get an improved accuracy.** |
| **11** | **ModelConv3D11** | **82%** | **Similar to model 3 but with more augmentation. Accuracy drops a bit.** |
| **12** | **ModelConv3D12** | **81%** | **Similar to model 4 but with more augmentation. Almost same accuracy.** |
| **13** | **ModelConv3D13** | **35%** | **Similar to model 5 but with more augmentation. Accuracy drops low as we have added dropouts** |
| **14** | **ModelConv3D14** | **78%** | **Similar to model 6 but with more augmentation. Accuracy is better.** |
| **15** | **ModelConv3D15** | **72%** | **Similar to model 7 but with more augmentation. Accuracy drops** |
| **16** | **ModelConv3D16** | **76%** | **Similar to model 8 but with more augmentation. Accuracy improves.** |
| **17** | **CNN-LSTM 2** | **82%** | **Similar to model 9 but with more augmentation. Accuracy is better.** |
| **18** | **Transfer Learning** | **63%** | **RNN +CNN with transfer learning with trainable params is false. Accuracy is low** |
| **19** | **Transfer learning with trainable params** | **95%** | **Execellent accuracy achieved RNN+CNN with a transfer learning and trainable params true.** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |