|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |
| Model Name | Model Type | No of Parameters | Augmented | Train Accuracy | Validation Accuracy | Remarks | Decision |
|  |  |  |  |  |  |  |  |
| Model\_a Using Conv 3D | Conv 3D | 36,04,933 | No | 91.70% | 24% | Model is over-fitting. | Initially I consider conv 3d with different batch size and try to improve accuracy. But I am not getting good result. here I have chosen the model with best result using Conv 3D |
| Model\_b Using Conv 3D Adding more layers | Conv 3D | 41,94,853 | No | 83.71% | 26.00% | With more layers added model is over-fitting. | I have tried with increasing the parameters using Conv 3D but val accuracy did not change much |
| Model\_c Conv 3D Using Augmentation | Conv 3D | 11,17,061 | Yes | 89.67% | 45.05% | Model is over-fitting but improve the val accuracy | Then I use Augmentation with conv 3d and the val-accuracy has been improved |
| Model\_d Using CONV2D + LSTM | CONV2D + LSTM | 25,73,157 | No | 47.21% | 20.00% | Model is not working train accuracy also decreased | Then I tried with conv 2d + Lstm but I am getting very less val accuracy so I did not consider this architecture for further process |
| Model\_e Using Transfer Learning | Transfer Learning | 43,04,581 | No | 72.85% | 73.00% | Model performance is increased | Finally, I have got better result while using transfer learning. here I have used MobileNet to get the vector of the image |