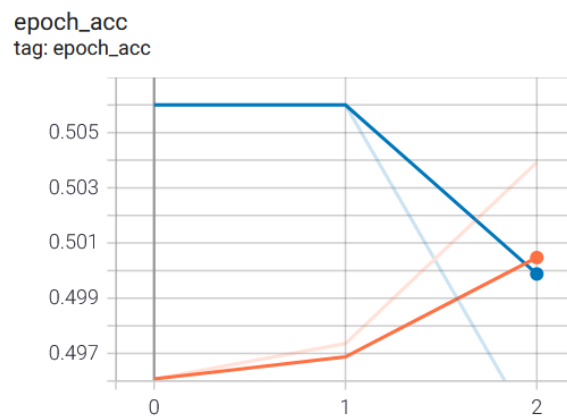


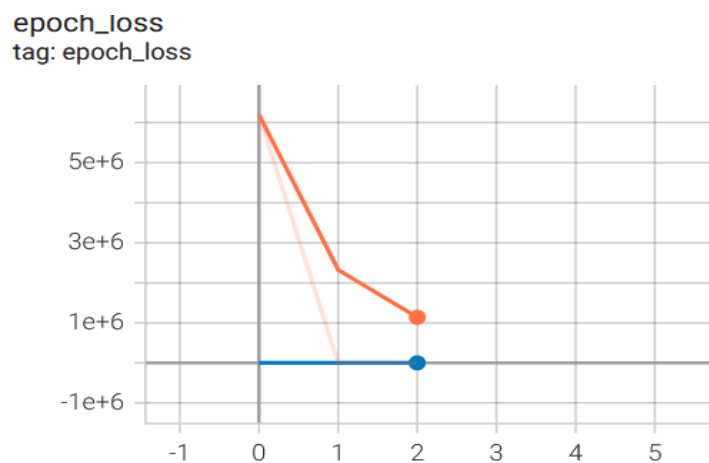
Model 1 Scalars

Train & Validation accuracy - - >



Hence, from the above graph we can see that as the number of epoch increases the train accuracy slightly increase & the validation accuracy is reducing around 50% which indicates us to modify the architecture to improve accuracy of the model.

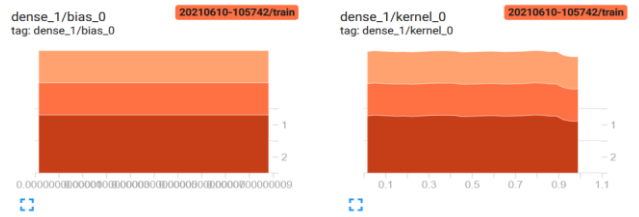
Train & Validation Loss - - >



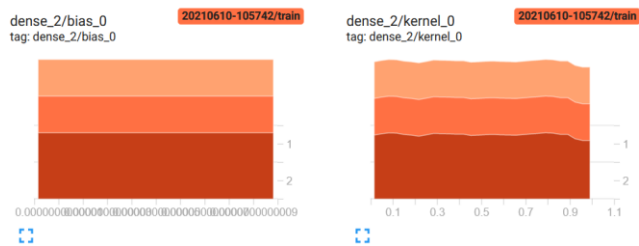
Hence, from the above graph we can see that as the number of epoch increases the validation loss remains as is but the training loss is significantly reducing.

Model 1 --> Weights distribution (Weights after each epoch does not change much in each layer)

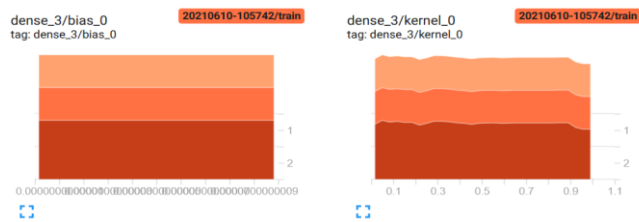
dense_1



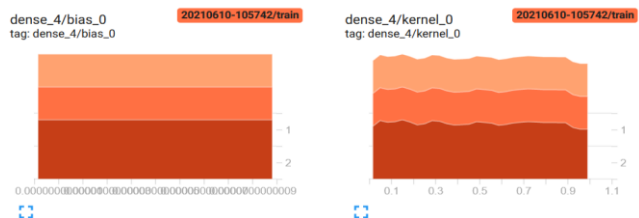
dense_2



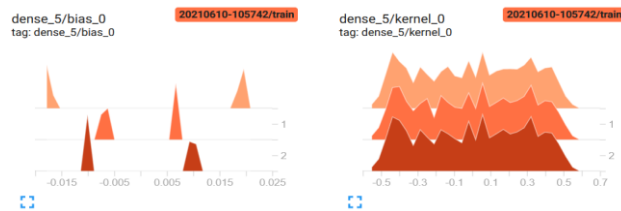
dense_3



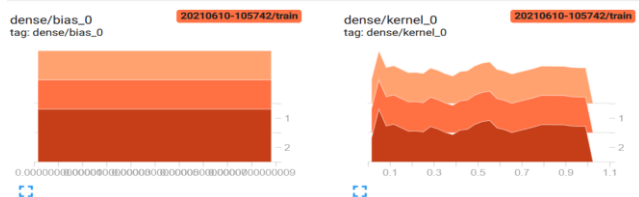
dense_4



dense_5

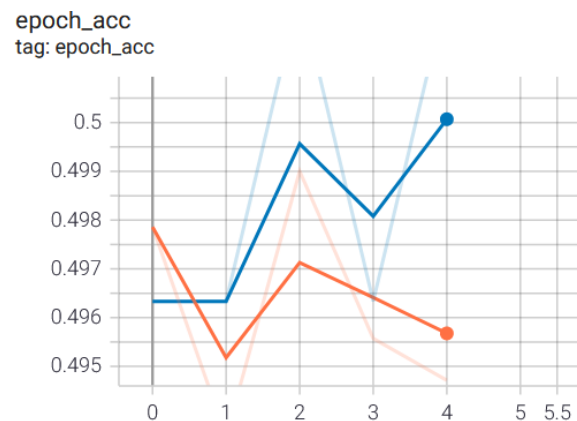


dense



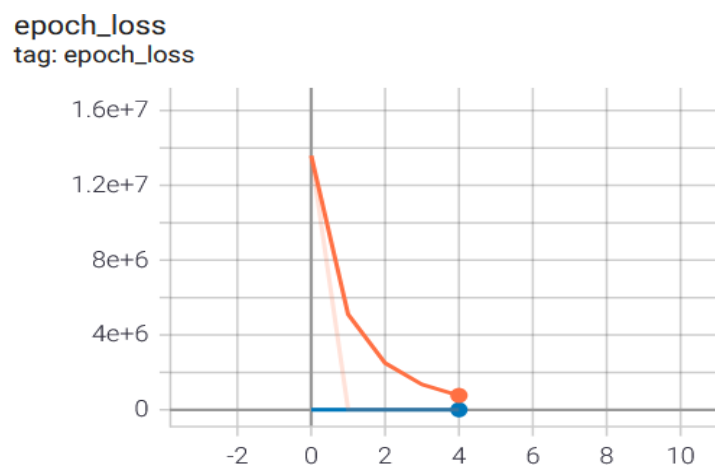
Model 2 Scalars

Train & Validation accuracy - - >



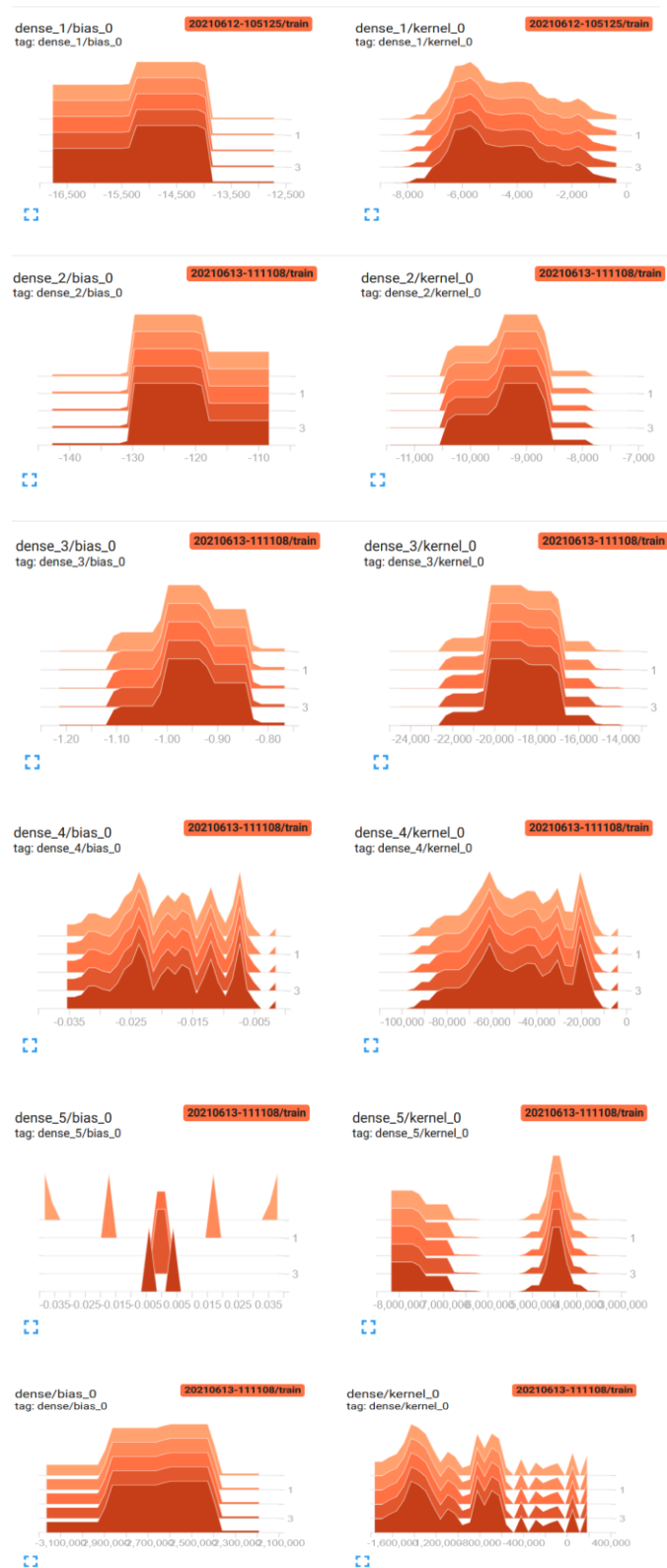
Here we can clearly see that the training accuracy is oscillating around 50% & validation accuracy is slightly improving hence, we have to modify the architecture to improve the performance of the model as well as try with other weight initializer.

Train & validation loss - - >



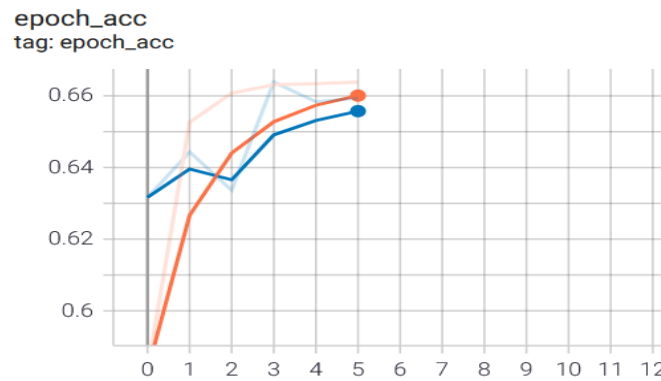
Hence, from the above graph we can see that as the number of epoch increases the validation loss remains as is but the training loss is significantly reducing.

Model 2 - -> Weights & bias (Weights after each epoch does not change much in each layer)



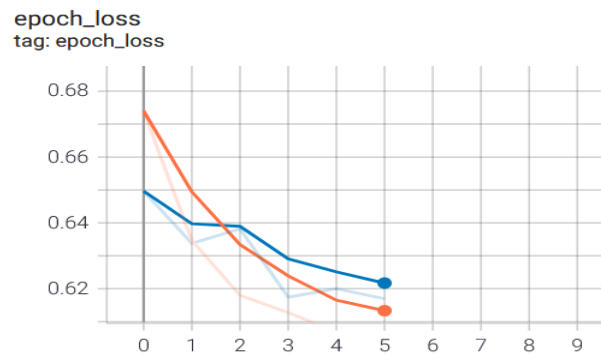
Model 3 -- >Scalars

Train & validation Accuracy - - >



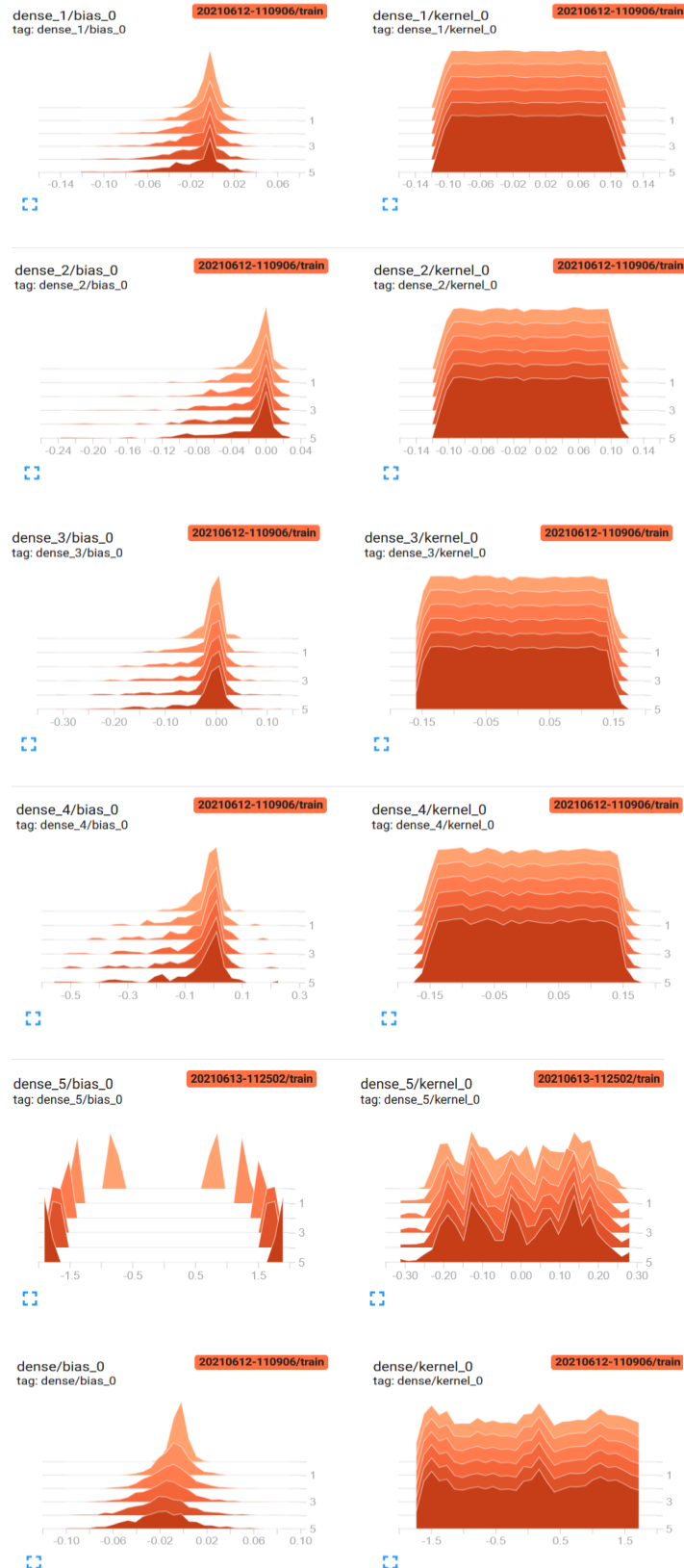
Here, we can infer that the validation accuracy & as well training accuracy is improving gradually as the number of epoch increases which indicates that model is performing better compared to the previous models(1 & 2).

Train & validation loss - - >



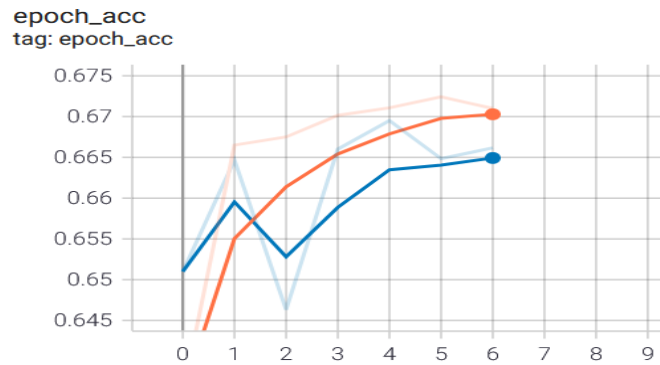
Here, we can infer that the loss is constantly reducing over epochs for both the training set and as well for validation set which indicates that we are at the right direction.

Model 3 --> Weights & bias (Initial layer weights are uniform over epochs whereas, last few layer weights are not uniform)



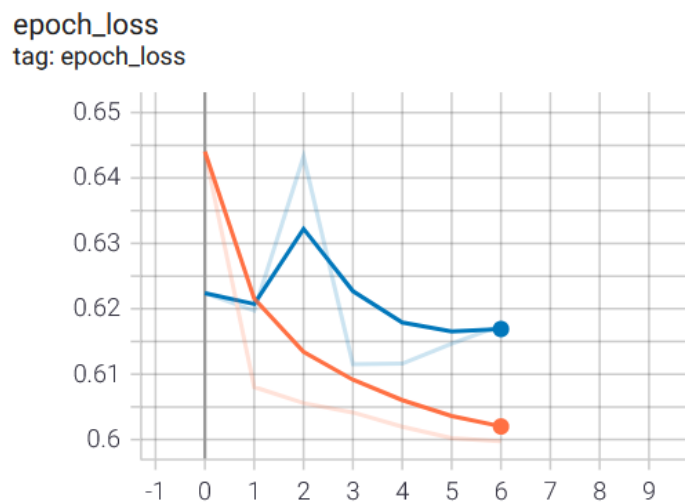
Model 4 -- > Scalars

Train & validation Accuracy - - >



Here, we can infer that both validation & training accuracy is improving drastically as epoch increases to 7. Hence, this model requires a bit more rigorous hyperparameter tuning to improve the accuracy on both train & validation data.

Train & validation loss - - >



Here, we can infer that the loss is constantly reducing over epochs for the training set and gradually reducing for validation set which indicates that we are at the right direction.

Model 4 - - > weights distribution (Here, we can infer that all the layer weights are normal over epochs except the last layer having uniform distribution with some peaks)

