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SGN-41007 Assignment 2

Project report

# PROJECT REPORT

Since our team score is lower than 0.70 on the public leader board, so we make the 2nd task given on the course. In here, we are using 2-layer LSTM with 512 and 64 as the dimensions of the outputs, respectively. These LSTM layers are followed by dropout of 0.2. Finally, on the top, we use Dense layer. We also tried to add more LSTM layers, but the accuracy keeps on decreasing.

## Train a LSTM network

We split the data to 80% training data and 20% test data using the command “GroupShuffleSplit()”. The result is as follows:



## Regularize the network

We use L1-kernel regularization for each layer with the value of 0.01. As a result, the accuracy is lower than without regularization.



## Kaggle submission

Using the above configuration, we have the score of 0.20750. However, we also try the L2-regularization and the score is 0.5392

## Summary

In the nutshell, our previous prediction is better than using the recurrent network.