

Results of experiments with majority voting on the IMDB dataset.

All experiments were performed with 100% sampling ratio, implying that all the inputs in the training dataset were used for training (except, of course, those of the validation dataset).

Parameters common to all experiments:

- 1) Maximum no. of epochs = 5
- 2) Validation set size = 0.2 (20%)
- 3) Learning rate = 0.005
- 4) Dropout = 0.8
- 5) Batch size = 25

The following experiments were performed with the parameters mentioned and accuracy in %. For evaluation, that model was used which showed the highest accuracy on the validation dataset. All accuracies reported below are on the test dataset.

N = No. of classifiers, H = No. of hidden units

Classifier no.	N = 5, H = 128	N = 5, H = 64	N = 7, H = 128	N = 7, H = 64
1	78.428	78.084	78.872	80.560
2	79.780	80.188	78.804	80.192
3	79.284	78.772	78.788	79.532
4	78.964	79.252	79.952	79.208
5	78.520	79.708	79.768	78.392
6	--	--	80.136	79.768
7	--	--	79.952	79.640
Majority voting	80.872	81.156	81.320	81.340
Improvement	1.092	0.968	1.184	0.780

Conclusion – Majority voting improved the accuracy by about 1 %. With 7 classifiers, the accuracy seemed to be slightly better than that with 5, although more data would be needed to verify that.