For Bagging, we built X number of models with each model built using a subsample (with replacement) of the training dataset dataset, which had size of 60% of the training dataset. Afterwards, we implemented a voting system where each model had equal weights on the test set. In the event of a tie, we took into account the scoring/log-likehood (HMM)) or the confidence percentage (CNN/LSTM) for each model of its top prediction to deduce the final outcome.