

Progress Report: Text Classification Competition

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Progress:

So far, the data preprocessing pipeline and model definition have been completed. I decided to try using the recently developed BERT transformer encoder architecture rather than an LSTM as I originally planned for this project. Most of my time thus far has been dedicated to preprocessing the data and learning how to use BERT in Tensorflow. At present, I decided to use only the most recent context element in conjunction with the response text in the model for simplicity and to cut down on computation. Should the results of such a model not prove sufficient I will look into adding the rest of the context back into the model input.

Remaining Tasks:

Model training/testing and hyperparameter tuning still has yet to be done. Following that, the source code submission/documentation and the video demo will have to be completed.

Challenges/Issues:

At present, I am simply concatenating the response tweet with the context to feed into the BERT model as a single input. Ideally, I would like to have multiple inputs to the model, i.e. one input for the response text and one input for the context text, but I have been running into issues getting that to work in Tensorflow. I am still working on this aspect of the model.