Semantic Textual Similarity

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Team 17 (PreNLPians)

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Problem Statement and Aim

To create a model that given a pair of sentences predicts the semantic relationship between them in terms of paraphrases, entailment, contradiction.

Description Of Work Done So Far

- 1. Finished reading the paper and attained thorough understanding of the paper.
 - a. Understood different layers in the paper.
- 2. Started exploring different python libraries for implementation of the model like pytorch, tensorflow and handling the datasets using torch text.
 - a. Decided we would stick with pytorch for the implementation of the paper.
- 3. Completed
 - a. Completed preprocessing of SNLI dataset.
 - b. Used torch text for preprocessing

c. Completed initializing class for BIMPM in pytorch

Comparing with the timeline

- 1. We had to complete the first iteration of basic code implementation and get the accuracies.
- 2. At this point of writing the doc we have almost completed writing basic code but faced errors while running the code.

TimeLine:

1. 21 October

a. Complete the baseline and get the accuracies as mentioned in the paper.

2. 28th October

a. Improving the baseline model by using BERT/XLNET representation of sentences and adding attention layers if required.

3. 7th November

- a. Qualitative Analysis of the model
- b. Literature review for the term paper.

4. 16th November

a. Final Deliverables with term paper.