# Stance Detection in Tweets

W266 Natural Language Processing - Final Project

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Abstract

TBD - Abstract goes here

## 1 Background and Objective

Text

#### 1.1 Background

More text

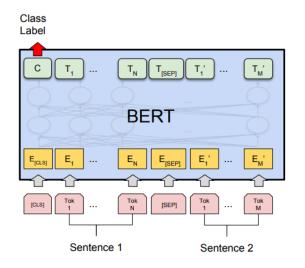
### 2 Data

SemEval 2016 Task 6 (see Mohammad et al. 2016)

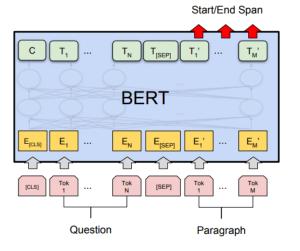
# 3 Methodology

#### 3.1 Others

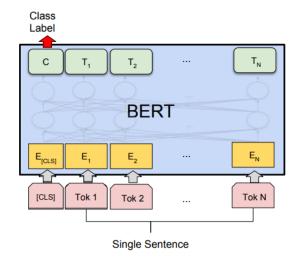
BERT (see Figure 1 from Devlin et al. 2018)



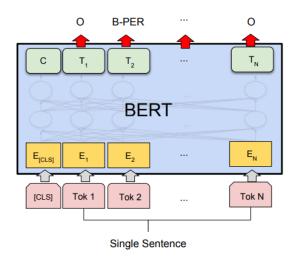
(a) Sentence Pair Classification Tasks: MNLI, QQP, QNLI, STS-B, MRPC, RTE, SWAG



(c) Question Answering Tasks: SQuAD v1.1



(b) Single Sentence Classification Tasks: SST-2, CoLA



(d) Single Sentence Tagging Tasks: CoNLL-2003 NER

Figure 1: BERT by Task (Source: @devlin2018bert)

- 3.2 Ours
- 4 Results
- 5 Conclusion
- 5.1 Discussion
- 6 Limitations
- 6.1 Error Analysis
- 6.2 Further Work

## References

Devlin, Jacob, Ming-Wei Chang, Kenton Lee, and Kristina Toutanova. 2018. "BERT: Pre-Training of Deep Bidirectional Transformers for Language Understanding." http://arxiv.org/abs/1810.04805.

Mohammad, Saif, Svetlana Kiritchenko, Parinaz Sobhani, Xiaodan Zhu, and Colin Cherry. 2016. "SemEval-2016 Task 6: Detecting Stance in Tweets." In *Proceedings of the 10th International Workshop on Semantic Evaluation (SemEval-2016)*, 31–41. San Diego, California: Association for Computational Linguistics. https://doi.org/10.18653/v1/S16-1003.