Deliverable 1

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Abstract

1 Introduction

2 Task Description

2.1 Primary and Adaptation Tasks

The primary task will be to determine if a given tweet is sarcastic or not. The evaluation metric for this task is the F1 score for the sarcastic class. The adaptation task will be discriminating the sarcastic tweet from its non-sarcastic rephrase, as thus a simple accuracy score suffices as an evaluation metric. Both metrics are in line with the task authors' metrics.

2.2 Datasets

The training dataset is composed of English language tweets, which are marked for being 'sarcastic' or not. 'Sarcastic' tweets are further annotated for the 'type' of sarcasm they are (*rephrase, sarcasm, irony, satire, understatement, overstatement, rhetorical question*) in addition to author-generated non-sarcastic 'translations' of the tweet. For example, if a sarcastic tweet reads *The only thing I got from college is a caffeine addiction*, the author translation is *College is really difficult, expensive, tiring, and I often question if a degree is worth the stress*. The training dataset has 3466 tweets, 865 of which are marked as 'sarcastic.' There are two testing datasets that correspond to the different tasks (primary and adaptation). The primary dataset has 1400 tweets, 200 of which are sarcastic. The adaptation dataset has 200 tweets (all sarcastic), and 200 rephrases of said tweets.

2.3 Resources

(Bamman and Smith, 2015) provides a methodology for detection of sarcasm within conversational contexts. (Joshi et al., 2017) aggregates generally used approaches for sarcasm detection used across a number of studies.

The description for the shared task can be found at the SemEval 2022 Google site[1], while the GitHub repository hosting the training and test data can be found at (Abu Farha et al., 2022a) [2]

(Abu Farha et al., 2022b) describing the task has yet to be written but should eventually be published upon completion of submissions.

3 System Overview

4 Approach

5 Results

6 Discussion

7 Conclusion

References

Ibrahim Abu Farha, Silviu Oprea, Steven Wilson, and Walid Magdy. 2022a. isarcasmeval dataset. https://github.com/iabufarha/iSarcasmEval.

Ibrahim Abu Farha, Silviu Oprea, Steven Wilson, and Walid Magdy. 2022b. SemEval-2022 Task 6: iSarcasmEval, Intended Sarcasm Detection in English and Arabic. In *Proceedings of the 16th International Workshop on Semantic Evaluation (SemEval-2022)*. Association for Computational Linguistics.

David Bamman and Noah Smith. 2015. Contextualized sarcasm detection on twitter. In *Proceedings of the International AAAI Conference on Web and Social Media*, volume 9, pages 574–577.

Aditya Joshi, Pushpak Bhattacharyya, and Mark J Carman. 2017. Automatic sarcasm detection: A survey. *ACM Computing Surveys (CSUR)*, 50(5):1–22.

[1] https://sites.google.com/view/semeval2022-isarcasmeval

[2] https://github.com/iabufarha/iSarcasmEval