Modern Talking: Key-Point Analysis using Modern Natural Language Processing

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Abstract

TODO

1 Introduction

Test citation (Bar-Haim et al., 2020a)
TODO

2 Related Work

2.1 Argument Clustering

2.2 Key Point Analysis

Given the first track of the shared task analyzing key points is crucial. In their work (Bar-Haim et al., 2020a) Bar-Haim et al. proposed an approach for summarising large argument collections to small sets of key points. Thus covering a sufficient amount of all arguments. They showed that domain experts can very quickly create pro and con key points, which are a able to capture the gist of the arguments on the given topic. All this without being exposed to the arguments themself. Furthermore they developed the large-scale dataset ArgKP which is the foundation of this shared task. In a later work (Bar-Haim et al., 2020b) Bar-Haim et al. constructed an automatic method for key point extraction which can compete with key points created by human domain experts. The method consists of two aspects. Assuming that the key points can be found among the given comments they first select short, high quality comments as key point candidates an then select the candidate with the highest data coverage. Using the HuggingFace transformer framework they fine-tuned four different models from which ALBERT (Lan et al., 2019) had the best F1 score with 0.809 but RoBERTa (Liu et al., 2019) (F1 score of 0.773) was choosen for key point extraction since it had a 6 times faster inference time. In the paper (Egan et al., 2016), Egan et al. proposed a summarising for informal arguments such as they occure in online political debates. By extracting verbs and their syntactic arguments they retrieve points which can make key content accessible. By grouping these points they propose to create discussion summaries.

2.3 Stance Classification

3 Data

TODO

4 Approach

TODO

4.1 Baseline

TODO

5 Results

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6 Conclusion and Future Work

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6.1 Future Work

TODO

References

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A Appendix

We release our source code online under the free MIT license.[1]

[1] https://github.com/heinrichreimer/modern-talking