Paper Title

The State of Human-centered NLP Technology for Fact-checking

Paper Link

https://www.sciencedirect.com/science/article/abs/pii/S030645732200320X

1.1 Motivation

The motivation behind this paper is to review the capabilities and limitations of current NLP technologies for fact-checking and to further explore the design space for how these technologies can be harnessed and refined to better meet the needs of human fact-checkers**.**

1.2 Contribution

It highlights the growth of fact-checking initiatives and organizations, such as PolitiFact, Snopes, Fact-Check, First Draft, and Full Fact, and the role of the International Fact-Checking Network (IFCN) in training and providing resources for fact-checkers and journalists.

1.3 Methodologies

Interpretable methods, such as probabilistic graphical models, are used for fact-checking, allowing users to directly override model decisions. Natural language generation models, such as GPT-3, can assist in formulating adversarial claims for fact-checking.

1.4 Conclusion

The paper advocates for reorienting the goals of NLP tasks from full automation towards decision support, where humans play a crucial role in the fact-checking process. The paper calls for more research on benchmark development to support the extrinsic evaluation of human-centered fact-checking technologies.

2.1 First Limitation

The datasets constructed for research may not fully capture how fact-checkers work in practice, leading to limitations in the algorithms built on them.

2.2 Second Limitation

The paper does not extensively discuss the potential biases and disparate impact that may arise in the identification of check-worthiness, particularly in relation to claims that may cause harm to marginalized groups.

2.3 Third limitation

The paper does not delve into the technical details of the NLP technologies reviewed, such as the specific models and algorithms used, which may limit the depth of understanding for readers seeking more technical insights.

3 Synthesis

The paper's focus on human-centered strategies and the role of humans in the fact-checking process can inform the development of hybrid systems that combine human expertise with NLP technologies for more accurate and reliable fact-checking