

Stance Detection & Fake News NLG Proposal

Anonymous ACL submission

1 Introduction

The term *Fake News* has gained popularity following the 2016 United States presidential election and the vote for the United Kingdom to exit the European Union (Rose, 2017)(Kucharski, 2016). Fake News refers to articles that meet poor journalistic standards, and contain incorrect or misleading information. It's suggested that these articles, and their tendency to be shared on social media had discernible effect on the events of the USA election, and Brexit (Allcott and Gentzkow, 2017).

Determining whether or not a news article is fake is difficult. A Stanford study shows students from middle school through college have difficulty distinguishing real news articles from advertisements (Wineburg et al., 2016). As a result, attempts have been made to automate the detection of fake or misleading news articles (Conroy et al., 2015)

The purpose of this research is to apply natural language processing and machine learning techniques to analyzing the validity of news articles. In particular, we will begin by following the outline presented by Fake News Challenge (Challenge).

The *stance* of a text is the attitude it expresses towards a particular target (Augenstein et al., 2016).

2 Previous Work

3 Proposed Approach

References

Hunt Allcott and Matthew Gentzkow. 2017. Social media and fake news in the 2016 election .

Isabelle Augenstein, Tim Rocktäschel, Andreas Vlachos, and Kalina Bontcheva. 2016. Stance detection with bidirectional conditional encoding. *arXiv preprint arXiv:1606.05464* .

Fake News Challenge. ????. Fake news challenge stage 1 (fnc-i): Stance detection. <http://www.fakenewschallenge.org/>.

Niall J Conroy, Victoria L Rubin, and Yimin Chen. 2015. Automatic deception detection: methods for finding fake news. *Proceedings of the Association for Information Science and Technology* 52(1):1–4.

Adam Kucharski. 2016. Post-truth: Study epidemiology of fake news. *Nature* 540(7634):525–525.

Jonathan Rose. 2017. Brexit, trump, and post-truth politics.

S Wineburg, S McGrew, J Breakstone, and T Ortega. 2016. Evaluating information: The cornerstone of civic online reasoning.