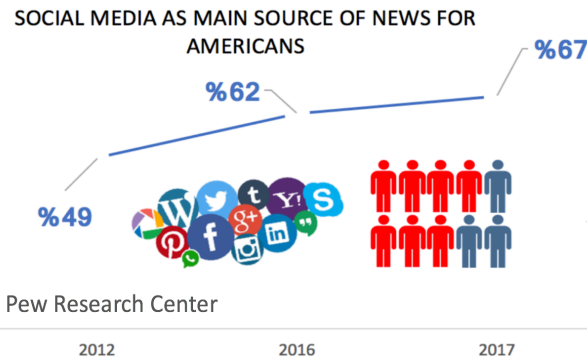


Fake News on Social Media



Introduction

%75 of Americans who recognized a fake news story from the US 2016 presidential election still viewed the story as accurate. This is why we strongly believe a comprehensive platform that integrates the psychological and technological factors of spreading false news on social media together has great application in providing novel insight to fake news phenomenon.

Experiments and results

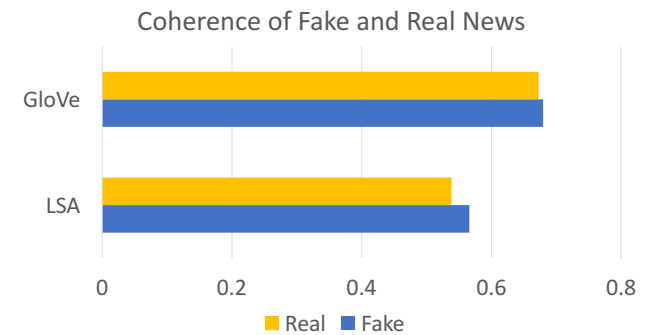


Table 1. FakeNewsNet [2] dataset statistics after pre-processing

Fact checker	Fake	Real	Total
PolitiFact	114	117	231
Buzzfeed	89	90	179
Total			410

Abstract

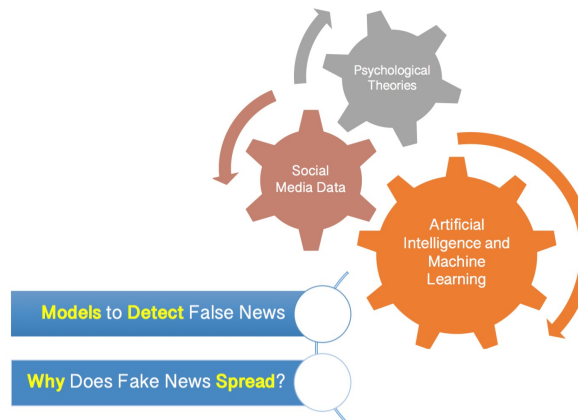
Current methods to fight against fake news:

- Training machine learning models to detect, classify, or cluster fake news
- Statistical analysis of fake news and using network-based techniques to understand how misinformation spreads [1]

But is it enough? NO!

We are combining **Artificial Intelligence** with experimentally-validated **psychological theories** to assess the likelihood of false information and the underlying psychological reasons behind spread of fake news.

What we are doing



Hypothesis: **more semantically coherent** stories/news articles are **more likely to be shared** on social media.

Future work

- Creating data resources for fake news related tasks using fact checked news stories and social media data
- Implementing better methods to measure coherence of text.

References

- [1] Vosoughi, S., Roy, D., Aral, S.: The spread of true and false news online. *Science* 359(6380), 1146–1151 (2018)
 [2] Shu, K., Wang, S., Liu, H.: Exploiting tri-relationship for fake news detection. *arXiv preprint arXiv:1712.07709* (2017)



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