

Experiments

Case Study

Washington State Legislature votes to change its name because George Washington owned Slaves



(a) $s = 0.024$

MORGUE EMPLOYEE CREMATED BY MISTAKE WHILE TAKING A NAP

Beaumont, Texas | An employee of the Jefferson County morgue died this morning after being accidentally cremated by one of his coworkers.



(b) $s = 0.044$

Fig. 5. Fake News

"Face the Nation" transcripts, August 26, 2012: Rubio, Priebus, Barbour, Blackburn



(a) $s = 0.966$

98 Degrees' 2017 Macy's Parade Performance Will Take You Right Back To The '90s



(b) $s = 0.975$

Fig. 6. True News

Chrissy Teigen and John Legend Have First Date Night Since Welcoming Son Miles: Pic!



(c) $s = 0.983$

- SAFE helps correctly assess the relationship (similarity) between news textual and visual information.
- For fake news stories in Fig. 5, their corresponding similarity scores are all low and SAFE correctly labels them as fake news. Similarly, SAFE assigns all true news stories in Fig. 6 a high similarity score, and predicts them as true news

Conclusion

- Proposed a similarity-aware multi-modal method, named SAFE, for FakeNews Detection
- The method extracts both textual and visual features of news content, and investigates their relationship.
- Experimental results indicate multi-modal features and the cross-modal relationship (similarity) are valuable with a comparable importance in fake news detection.