Fake News, Rumours, Hate: Social Media, Connecting or Destroying Lives?

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What I am going to cover in this talk?

- What the factors behind the rise in such things which in several cases result in loss of human life.
- Looking purely with Indian Perspective.
- What are the things that Govt./Civil societies are doing.
- What are activities going on in various research lab to control this problem

Introduction

Problem dates back to 4-5 years ago, when there was news of **Plastic content** in **Kurkure**, and **HIV Virus in Frooti**, still the problems remains same, to validate the claims of one spreading fake news.

The problem grew multifold with advance in technology and ability to reach greater audience, and we are still find ourselves helpless to tackle this problem.

Examples

Indian security personnel stand on July 10 near a commemorative poster for two men who were lynched nearby in Panjuri Kachari village in the northeastern state of Assam. | AFP-JIJI

ASIA PACIFIC

Death by 'fake news': social media-fueled lynchings shock India

AFP-JIJI

INDIA By David Gilbert and Zeenat Saberin Jul 17 2018, 2:41pm

India's fake news
epidemic is killing
people, and Modi's
government has no
plan to stop it

In India, 'fake news' and hoaxes catch fire as millions see YouTube for the first time

- YouTube is exploding in popularity in India, thanks to new, cheap data plans.
- Trending videos in India are often overwhelmingly hoaxes.
- Unlike other countries, India has its own "Trending" list on YouTube.
- · Fake new YouTube videos are spreading to other social media in India.

Reasons for widespread of Fake news

- Easy to create Fake news, but hard to investigate and debunk.
- Many people get news from their social media feeds could also make it harder to distinguish truth from fiction
- Since there are several languages and context dependent terms, it becomes increasingly difficult for machines to identify hoaxes.

Solutions available now

Beebom News Reviews PC v Internet Mobile v More v

Home > News > Kerala Schools Now Have Dedicated Classes to Help Kids Spot Fake News...

Kerala Schools Now Have Dedicated Classes to Help Kids Spot Fake News on WhatsApp

By Kishalaya Kundu - August 21, 2018 1:19 pm











Solutions (contd.)

Websites -

www.hoax-slayer.net

www.politifact.com/



Fake news can be identified by humans, machines or combination

Human

- human work by fact checkers
- · fact-checking industry appearing, looking for business model

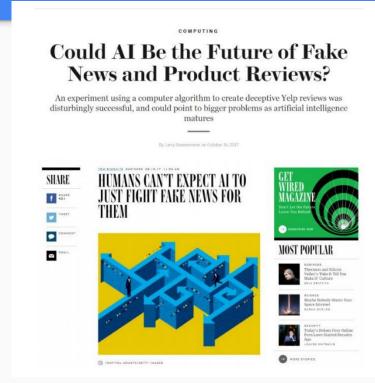
Human-machine teamwork

- machine identifies potentially fake stories
- double-checked by human

Machine only

artificial intelligence

Artificial Intelligence can help. But "Computer did it" is a fallacy





Using ML to detect fake news



Tools Available

- TweetCred: Real-Time Credibility
 Assessment of Content on Twitter
- Practical solution based on ranking techniques to assess credibility of content posted on Twitter in real-time.

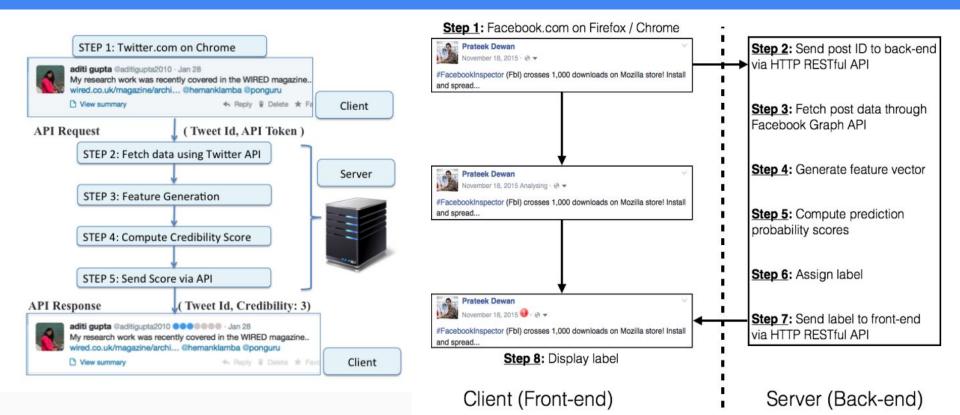


Tools Available

- Facebook Inspector (FbI): Automatic
 Real Time Detection of Malicious
 Content on Facebook
- Produces a Confidence score based on features such as Keyword, Source etc.



Working of such tools



Methodology

- Used Supervised Machine learning model to predict the possibility of tweet/facebook-post being fake news/lie.
- They used data set of Tweets during
 - Boston Marathon Blasts (7,888,374)
 - Typhoon Haiyan / Yolanda(671,918)
 - Washington Navy yard shootings(484,609)
 - Oklahoma Tornadoes (809,154)
- Considering user annotation as well.

Understanding Features used -

TweetCred -

- Presence of swear words, Presence of negative emotion words; Presence of positive emotion words.
- Number of followers, friends; time since the user if on Twitter; etc.
- Number of characters, Number of words, Number of URLs, Number of hashtags, Number of unique characters;

Understanding Features used -

FBI -

- Presence of !, ?, !!, ??, emoticons (smile, frown), no. of words, avg. word length, no. of sentences, avg. sentence length, no. of English dictionary words, no. of hashtags, hashtags per word, no. of characters, no. of URLs, no. of URLs per word.
- has HTTP / HTTPS, hyphen count, paramters count, parameter length, no.
 of subdomains, path length

Challenges Ahead

- Although such tools provide a great use, but they can only be in specific cases such as in News-Making Events.
- They are language specific and can't be relied while using on local languages.
- Malicious content generated during news-making events differs from malicious content in general.
- They can't be used in private conversation apps like Whatsapp which is major source of fake news these days.

Conclusion

Yes we can, But may we?

Gatekeepers are gone.

- only guerrilla war on fake news is possible technology to disturb circulation of fake news exists.
- most efficient if platforms cooperate.
- some approaches are clearly interfering with free speech users seem to be quite capable at identifying fake news.

EASY COME, EASY GO

Oxford researchers warn India of a fake-news epidemic as elections approach

By Ananya Bhattacharya • July 25, 2018