FAKE NEWS ANALYZER TOOL

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Abstract :   In this age of Digital India, producing and distributing content in form audio and visual content sharing of wrong information for their own benefit has become cheap and easy after the commencement of jio services. People are writing and making videos and uploading it to various popular websites such as Youtube and Google. Day by day, smartphones and data is getting cheaper, enabling people to consume and distribute information as and when they find time. Digital revolution has made people more informed. With more information, they can make better decisions.
The title of this project is "Fake News Analyzer Tool". This Project comes up with the idea of news detection by comparing it with other websites which are authenticated by the government. In our case we are using SM HOAX SLAYER for comparing the news which is misleading our generation in getting the actual fact. It is very possible that two articles that are similar in their word count will be completely different in their meaning.

I. INTRODUCTION

The New York Times referred fake news as **a made-up story with an intention to deceive**, often for a gain of secondary intention; it is arguably one of the most serious challenges today faced by the news industry. In a December Pew Research poll, 64% of US adults said that **made-up news** has caused a **great deal of confusion** about the facts of current events. The goal of the **Fake News Analyzer** is to explore how artificial intelligence technologies, particularly machine learning should be used to fight the fake news problem. We believe that these AI technologies hold promise for significantly automating the procedure human fact checkers use today to determine if a story is real or a hoax.

Assessing the details of a news story is a very complex and tiring task, even for trained experts. Fortunately, the process can be broken down into steps or stages. The first step in identifying fake news is to understand what other news organizations are saying about the topic. Stance Detection involves estimating the relative perspective (or stance) of two pieces of text relative to a topic. To solve this problem, it is necessary to have an understanding on Fake News.

Fake News can be classified as:

1) **Click Bait**: In this category the headline of a topic are highly exaggerate and they are so eye catchy that a user must click on that but the information is false or wrong so the website should generate the ad revenue.

2) **Propaganda**: In this category the author wants to promote his agenda intentionally by misleading articles.

3) **Satire or Parody**: In this category there is no intention to cause harm but has potential to fool.

4) **Misleading** : In this category the use of information is to frame an issue or an individual

5) **Manipulative**: In this category genuine information or imagery is manipulated to deceive

Fake news has many differences compared to traditional suspicious information, like spams, spams usually exist in personal emails or specific review websites and barely have a local impact on a small number of audiences, while the impact of fake news in online social networks can be huge due to the massive number of users globally, which afterwards is boosted by the extensive information sharing and propagation among these users.

These characteristics of fake news mentioned above poses new challenges on the detection task. Besides detecting fake news articles, identifying the fake news creators and subjects will be the most important, which will help completely remove a large number of fake news from the origins in online social networks. Generally, for the news creators, besides the written articles, we can get the profile information from either the social network website or external libraries such as Wikipedia or government certified database, which will provide fundamental information of the user background. For the news subjects, we can also obtain its description in text form or other information, which can be used as the base for news subject credibility. From a higher-level perspective, the tasks of fake news article, the detection of creator and subject are highly related; since the article is written from a trustworthy person will have a higher credibility, while the person who posts wrong information will have a lower credibility. Similar correlations can also be observed between news articles and news subjects.

II. LITERATURE REVIEW

2.1 Overview

In this chapter, we would discuss and present the current state of the art in research for analyzing and measuring trustworthy information from Twitter (Social Networking Site). Section 2.1.1 discusses the research work to assess, measure, quantify and detect good quality content from Twitter. In section 2.1.2, we would present the research done to characterize the role of Twitter during real world events. In the last section, we summarize the implications and research gaps in analyzing trustworthy information from Twitter during real-world events.

2.1.1 Quality Assessment of Content Posted on OSM

This section presents the research work done in the space of extracting and analyzing trustworthy and credible information from Twitter, Facebook during real world events. One major challenge in consuming content from Twitter is that it is difficult to filter out good quality content from the large volume of content created. The quality of content on Facebook, Twitter is polluted with the presence of phishing, spam, advertisements, fake images, rumors and inflammatory content.

Media such as Facebook, which is a micro-blog, is more suited for dissemination and sharing news based information, since it is mostly public, and gives a bigger range of audience for the content posted. Hence, majority of the work discussed in this survey, is centered on Twitter. Researchers have used various classical computational techniques such as classification, ranking, characterization and conducting user studies, to study the problem of trust on Twitter. Some of the researchers who applied various kinds of classifiers (Naive Bayes, Decision Tree, SVM) to identify spam, phishing and not credible content on Twitter, using message, user, network and topic based features on Twitter.

2.2 A Blog Report by Whatsapp on spreading of Fake News

After being condemned by the Indian government for the spread of misinformation, Whatsapp has started testing tools to resolve the problem on its platform that has more than 200 million users in India.

The company has updated whatsapp with a Suspicious Link Detection feature that will help the users identify suspicious links within the application. The application analyses the link to detect whether it is redirecting to another website.

If Whatsapp finds the link to suspicious, it adds a label on the massage called as "suspicious link". The link will show a warning that says, "This link contains usual characters. It may be trying to appear as another site."

The website further said that the analysis of link occurs "locally" which means that the app does not transmit any data to the servers based at whatsapp, making users assure that the company is not compromising on the encryption for messages.

The feature is in the development stage and is part of 2.18.204 beta version on Google Play Store. WhatsApp is expected to roll out the feature after more polishing it.

Apart from misinformation, the new WhatsApp tool will help users to identify the spam and fraud links. The company recently added a feature which will mark a label at forwarded messages, making it easier for the user to identify the links
This latest feature comes very early after Whatsapp received flak from the government of India for not doing enough to control the spreading of rumors.

While the law and order machinery is taking steps to find culprits, the abuse of platform like Whatsapp for repeated circulation of such provocative content is matter of concern, the ministry of electronics and information technology said.

Whatsapp responded quickly, saying that it is taking steps to reduce fake news and roumers on the platform. It has also started a crowdsourced programme of researchers to identify issues related to misinformation on Whatsapp.

Stating that it was working with the society to address the problem, it said, "For this first phase of our program, Whatsapp is having a competitive set of awards for the interested researchers who will explore issues that are related to misinformation on Whatsapp. It welcomes the proposals from any social science or related discipline that insights into the impact of technology on society in this problem space."

"The Whatsapp Research Awards will provide fund to the independent research proposals that are designed to be shared with company and a wider scholarly and policy communities. These are unrestricted monetary awards that offer investigators the freedom to deepen and extend their existing research portfolio. Applications are welcome from individuals with established experience studying online interaction and information technologies, as well as from persons seeking to expand their existing research into these areas," it said in a statement.

III.PROPOSED WORK

The proposed system is a updating the existing Fake News System. The drawbacks posed by the previously available system will be rectified by this system. The Fake News System has four research directions out of which the entire project will be implemented on one of the four directions. The four categories of research directions are[3]:

1) Data Oriented
2) Feature Oriented
3) Model Oriented
4) Application Oriented

► Fake news Analyser tool is implemented to remove the draw backs of existing system.

► It has four research direction out of which the entire project will be implemented on of the four direction.

► Directions used are: Data oriented, Feature oriented, Model oriented, Application oriented.

► Fake news will be detected by comparing it with our system.
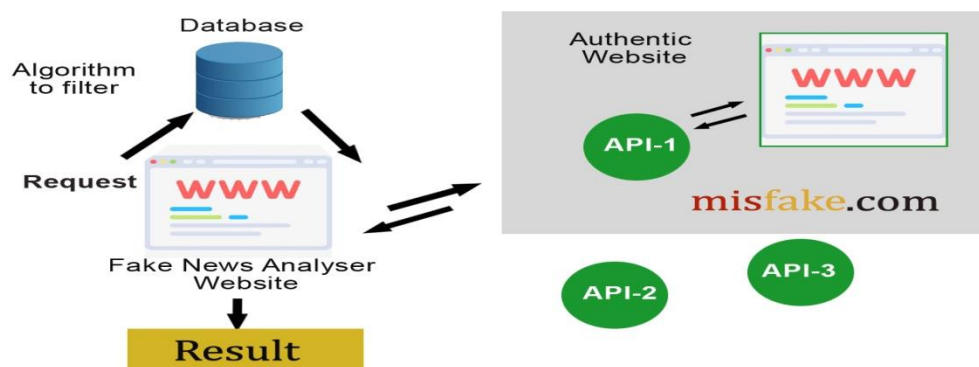
▶ There are three modules associated with this project.The first module consists of the development of website,the second module consists of the API generation i.e. taking the API of an authenticated site(in our project its smhoaxslayer site),the third and the final module consists of the database and implementation of Neighbour's Algorithm for searching and comparing fake news with the real news.

▶ MODULE 1:The website development along with the contents associated with the website.

▶ MODULE 2:The API generation and implementation of it for the website.

▶ MODULE 3:Implementation of Neighbour's Algorithm for detecting fake news.

V. CONCLUSION

In this paper we give a short state of the art towards an understanding of fake news. Fake news is an important concept which may have serious real world consequences. Even though the scope of fake news diers (ex: including satire or rumors as fake news), the challenges exist for the automatic detection of misinformation for all. The diusion mechanisms of fake news is an important step towards understanding and preventing the spread of misinformation. The importance of social media in the spread of fake news cannot be underestimated. Deeper understanding of human psychology on fake news could be helpful to develop tools for detection and prevention of misinformation. The existing methods for automatic fake news detection are mostly based on linguistic and machine learning techniques. In addition to these methods image analysis is applied. With the increasing popularity of the term fake news, the research towards automatic detection also increases rapidly. The manual fact checking done by professional journalists give the researchers opportunity to understand the nature of misinformation and work more e-ciently towards the automatic detection of fake news.

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