IRIET Volume: 08 Issue: 12 | Dec 2021

e-ISSN: 2395-0056 p-ISSN: 2395-0072

REAL AND FAKE NEWS DETECTOR SYSTEM USING AI CHATBOT

Liza Patel¹, Smruti Smaraki Sarangi², Omprakash Dewangan³

¹Student, Department of Computer Science, Kalinga University, New Raipur, Chhattisgarh, India ²Assistant Professor, Department of Computer Science, Kalinga University, New Raipur, Chhattisgarh, India ³Assistant Professor, Department of Computer Science, Kalinga University, New Raipur, Chhattisgarh, India

Abstract - Real and fake news detector system will simply detect a news whether it is correct or not using AI Chatbot. Here, we will be using a verified Chatbot and it will be available in the social media platforms through that we can be a verified user or we can be a verified Chatbot.

An AI Chatbot is a computer program that simulates human conversation, either via voice or chat communication. It is importantly being used to engage with users alongside the new user service calls of phone, email and social media.

Key Words: Chatbot, AI (Artificial Intelligence), human conversation, text communication.

1. INTRODUCTION TO REAL AND FAKE NEWS

Real news is news that it will basically depends to real events and represents those events with facts that have been checked and re-checked against other reports and found to be true, i.e., real. Fake news is a false or wrong idea or impression kind of information presented in the news. It is often having the target of disturbing the reputation of an individual. However, term does not have an accurate meaning, and is more applied to include any type of misleading information, including unintentionally and irresponsible system, and also by powerful personality to applied to any works lack of support to any personal individuals.

1.1 REAL AND FAKE NEWS DETECTOR SYSTEM

The advent of the World Wide Web and the rapid adoption of social media platforms (such as Facebook and Twitter) paved the way for information dissemination that has never been witnessed in the human history before. Besides other use cases, news outlets benefitted from the widespread use of social media platforms by providing updated news in near real time to its subscribers. The news media evolved from newspapers, tabloids, and magazines to a digital form such as online news platforms, blogs, social media feeds, and other digital media formats [1].

1.1.1 DETAILS OF FAKE NEWS

Fake news is detected and produces by antagonistic, particularly during social works. The work of anonymously fake news social sites has made it hard to search different sources of fake news. Sometimes, fake news contains abusive contents or articles in unidentified ways, and articles that seems to be case-sensitive or some attractive headlines that are not easy to be in the text. Fake news is a sensation that have grown so rapidly in now-a days.

1.1.2 SPREADING OF FAKE NEWS IN INTERNET

Everyone can easily make some new ideas and contents to present it however they want and spread it without the new and some important works. Combination of all information overloaded thins need to be detect. Another important factor is the fast mass media communication in which we are admiring daily, where news is publishing the moment they just happened. This really seems to lower news standards and minimum time to review the resources, and also from the main sites of social media platforms.

1.2 DETECTION OF FAKE NEWS ON INTERNET

Detecting of fake news on internet is really very basic and important step now-a -days. As real news contains a great rate of production. As a conclusion of the large quantity of obtained technologies. It is really very severe issue to detect a real news so, for to make easy such information we use these systems.

1.2.1 IDENTIFICATION OF FAKE NEWS

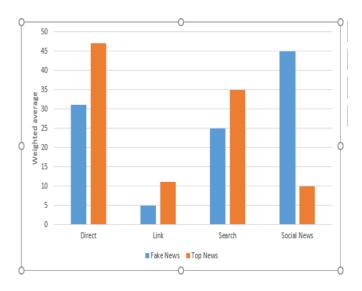
The process of promoting of technologies, digitally information as news is now being more not visible to users in whole world and achieves to the increase or addition of promoting incorrect news on internet. Fake news is easily available through social media platforms. There have been several answers and vigorous or determined attempt in the detecting incorrect or fake news where it is easily done with the help of AI (Artificial intelligence). Therefore, fake news shows the reader to have a trust on that fake and misleading information which seems these articles difficult to perceive. The measure of production of digital news is of high quality and fast, runs daily at every time, thus it is very hard for software's to detect this fake news.

1.2.2 INFERENCES OF FAKE NEWS DETECTOR

In the communication for the detection of fake news, the entire individuals would not have any truth. Fake news covers the work for deliberately cause problems and promoting ideas. These individuals who promote the incorrect details an advantage or profit by gaining incomes with the values of new beginnings on their publishing departments. By extending and spreading incorrect information varies with various wrong intentions to adapt IRIET Volume: 08 Issue: 12 | Dec 2021

www.irjet.net

favour in political issues, for business development and productive departments, or some revengeful works. working



Graph -1: Graph between real and fake news



Fig -1: Types of fake news

2. LITERATURE SURVEY

Several authors show the effectiveness of classifiers and models developed with these. Ahmed et al. (2017) [2] examine several machine learning techniques in the form of different classifiers which all display a high level of accuracy when used on fake news datasets, the most effective being the Linear SVM (Support Vector Machine) classifier. Faustini & Covões (2019) [3] also utilized SVM based algorithms with their One-Class Classification approach, which was concluded to have the potential to not only distinguish fake news from real news, but also from opinion-pieces and propaganda. Ozbay & Alatas (2019) [4] showed good results with the GWO (Grey Wolf Optimization) algorithm. Kaur et al. (2019) [5] showed how various machine learning classifiers were integrated into a single multi-level model in

which they could increase performance and results by working together, helping to offset each other's weaknesses. Classification relying on lexical rules, syntax, semantics, and similar factors achieved promising results, with the models being able to achieve results equal to that of the human ability to detect fake news (Pérez-Rosas et al., 2017 [6]; Waikhom & Goswami, 2019). [7]

e-ISSN: 2395-0056

p-ISSN: 2395-0072

Kai Shu et al. present FakeNewsTracker, a system to understand and detect fake news. FakeNewsTracker benefits researcher in identifying fake news by automatically collecting data for news and social context with a number of effective visualization techniques. The dataset has been built through Politifact and twitter feed and considers article body, retweets and engagements as the features for binary classification of news article. LSTM with two layers consisting of 100 cells has been employed as their base technique to train the model and testing has been done with other Machine Learning algorithms like Support Vector Machine, Logistic Regression and Naïve Bayes Classifier. While Support Vector Machine and Logistic Regression obtained relatively close accuracies at 68.4% and 68.3 respectively, Naïve Bayes returned 62% accuracy. Also, retweets were not considered for both training and testing. [8]

Veronica Perez-Rosas et al, the research aims at creating an automatic fake news detector. Their dataset is diverse, such that it covers seven different domains. FakeNewsAMT and Celebrity datasets have been employed for their research. Their feature set consists of n-grams, punctuations, psycholinguistic features, readability, and syntax. [9]

3. PROBLEM IDENTIFICATION

Identifying fake news has become a major issue. Increasing usage of social media has led to an increase in the number of people who can be influenced, thus the spread of fake news can potentially impact important events. Fake news has become a major social problems and a technical issue for social media companies to identify and has led many to extreme measures, such as WhatsApp deleting two million of its users every month to prevent the spread of fake news. The current problem of fake news is rooted in the historical problem of disinformation, which is false information intentionally.

Our work identifies the problem of analyzing fake news by

- (i) Detecting and analyzing fake news issues
- (ii) Identifying the textual and social, cultural and fake news issues.

4. METHODOLOGY

Real and fake news detector system will simply detect a news whether it is correct or not using AI Chatbot. Here, we will be using a verified Chatbot and it will be available in the

e-ISSN: 2395-0056

p-ISSN: 2395-0072

social media platforms through that we can be a verified user or we can be a verified Chatbot.

Usually, we all know that many websites have many Chatbot which always creates a mess between a verified Chatbot and a scam or somehow that kinds of Chatbot which are fraud. A user is not able to understand or differentiate between a verified and fraudulent Chatbot. So, we will be trying to detect the real news and fake news through being a verified Chatbot. It's a detector system of that features through which we can spread a positive vibe in the society and creating awareness in the surrounding.

5. CONCLUSIONS

In this project, we have introduced a real and fake news detector system which can identify the fake news and will tell the real news. It will be further connected with the AI Chatbot through that it will also detect the fake news. We all know that many websites have many Chatbot which always creates a mess between a verified Chatbot and a scam or somehow that kinds of Chatbot which are fraud. A user is not able to understand or differentiate between a verified and fraudulent Chatbot. So, we will be trying to detect the real news and fake news through being a verified Chatbot.

It is just an introduction to our research project, further we will implement this ideas using ML and NLP as our future work.

REFERENCES

- [1] A. Douglas, "News Consumption and the new electronic media, "The International Journal of Press/Politics, vol.11, no. 1, pp.29-52,2006.
- [2] Ahmed, H., Traore, I., & Saad, S. (2017, October). Detection of online fake news using Ngram analysis and machine learning techniques. In International Conference on Intelligent, Secure, and Dependable Systems in Distributed and Cloud Environments (pp. 127-138). Springer, Cham.
- [3] Faustini, P., & Covões, T. F. (2019, October). Fake News Detection Using One-Class Classification. In 2019 8th Brazilian Conference on Intelligent Systems (BRACIS) (pp. 592-597). IEEE.
- [4] Ozbay, F. A., & Alatas, B. (2019). A Novel Approach for Detection of Fake News on Social Media Using Metaheuristic Optimization Algorithms. Elektronika ir Elektrotechnika, 25(4), 62-67.
- [5] Kaur, S., Kumar, P., & Kumaraguru, P. (2019). Automating fake news detection system using multi-level voting model. Soft Computing, 1-21.
- [6] Pérez-Rosas, V., Kleinberg, B., Lefevre, A., & Mihalcea, R. (2017). Automatic detection of fake news. arXiv preprint arXiv:1708.07104.

- [7] Waikhom, L., & Goswami, R. S. (2019). Fake News Detection Using Machine Learning. Available at SSRN 3462938.
- [8] Kai Shu, Deepak Mahudeswaran, Huan Liu, "FakeNewsTracker: a tool for fake news collection, detection, and visualization", Computational & Mathematical Organization Theory, vol. 25 issue 1, pp. 60-71.
- [9] V. Perez-Rosas, B. Kleinberg, A. Lefevre, and R. Mihalcea, "Automatic detection of fake news," arXiv preprint arXiv:1708.07104, 2017.