Senior Design / BS Project
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Humo : Fake Information Detector

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SENIOR DESIGN EXPO

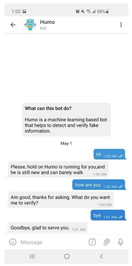
Abstract

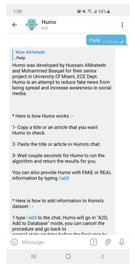
Due to the massive growth of news and information online, it is becoming almost impossible to distinguish the true from the false. Thus, this leads to the problem of fake news. This project gives a new solution to fight fake news focusing on the social media as the social media is the epicenter for those kind of information, the project is done using Machine Learning and a bot on Telegram.

Introduction

We live in an era where modern technology and social media are our main source of information, the tool that is being used to access such information is usually , smartphones , tablets, computers , and etc. We now have access to all kinds of news from political news all the way to scientific articles that are published over the internet. Fake news has been one of the most hotly-debated socio-political topics of recent years. Websites which deliberately published frauds and misleading information emerged across the internet and were often shared on social media to increase their reach.

As a result, people in the united states became wary of the information that they read online, with over a quarter only stating that they rarely trusted the news that they read on social media. Humo has the ability to notify users immediately whether an information is fake or real and this in return will ,significantly, reduce The spread of false information resulting in enhanced public awareness.

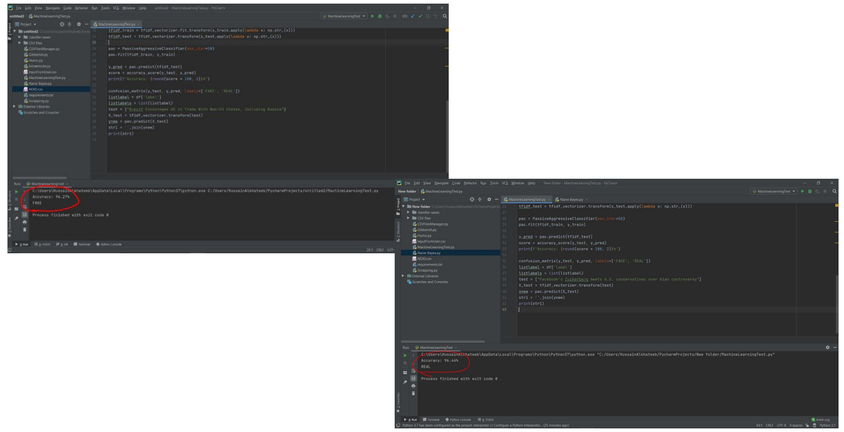




Methods | Design | Analysis

We used python to write the machine learning aspect of the project , using sklearn library, and implemented the algorithm after creating a bot on Telegram.

- No need to go outside the application to search for the information.
- Updated database using crowdsourcing.



Results

Conclusion

the concept of deception detection in social media is particularly recent and there is continuing research in hopes that scholars can find more accurate ways to detect false information in this booming, we designed a chat-bot that satisfies our requirements which provide a proof concept as to detecting fake news in social media is possible , all the process of verifying a piece of information is done within social media. It is easy to use and available 24/7 for the users.

Having a bot inside a text messages applications will satisfy our requirements as mentioned earlier, the user will not have to do research to determine whether information is real or fake and we can use crowdsourcing to expand database as there are millions of smartphone users who use text messaging apps.

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References

Manzoor, S. I., Singla, J., & Nikita. (2019). Fake News Detection Using Machine Learning approaches: A systematic Review. 2019 3rd International Conference on Trends in Electronics and Informatics (ICOEI). doi: 10.1109/icoei.2019.8862770