



Sandhiya.M.D

Final Project



PROJECT TITLE

Fake News Detector

3/21/2024 Annual Review

AGENDA

The project's agenda encompasses defining the objectives, articulating the problem statement, and proposing a methodology. It involves leveraging the T5 model for fake news prediction, processing the dataset, and developing a robust model. Evaluation metrics will gauge the model's performance, while addressing challenges encountered along the way. Future work will focus on enhancing model efficiency and expanding its applicability. Ultimately, the project seeks to contribute to the ongoing efforts in combating misinformation through innovative machine learning solutions.



PROJECT OVERVIEW

The project overview encapsulates a comprehensive understanding of our endeavor. We aim to develop a deep learning model capable of predicting fake news with high accuracy. Leveraging the power of the T5 model, our project endeavors to address the pressing issue of misinformation plaguing online platforms.

Through meticulous data preprocessing and model training, we intend to create a robust system capable of discerning between real and fake news articles. Our approach involves fine-tuning the pre-trained T5 model on a dataset of labeled news articles. By harnessing the capabilities of state-of-the-art natural language processing techniques, we strive to achieve reliable predictions and contribute to the fight against misinformation.



PROBLEM STATEMENT

The problem statement for this project revolves around the pervasive issue of fake news dissemination and its detrimental impact on society. With the proliferation of digital platforms, misinformation spreads rapidly, leading to widespread confusion, distrust, and societal unrest. Identifying fake news accurately and efficiently has become a critical challenge in the modern information landscape.

This project aims to address the challenge of fake news detection using deep learning techniques, specifically leveraging the T5 model. The primary goal is to develop a reliable predictive model capable of discerning between real and fake news articles with high accuracy. By doing so, we aim to provide users with a tool that enhances their ability to navigate the vast sea of online information and discern credible sources from deceptive ones.



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WHO ARE THE END USERS?



The end users of this project include media platforms, news organizations, government agencies, regulatory bodies, educational institutions, researchers, and individual users. Media platforms and news organizations can enhance content moderation and foster audience trust. Government agencies benefit from monitoring and identifying misinformation. Educational institutions and researchers gain insights for media literacy education and awareness campaigns. Individual users can make informed decisions and develop critical thinking skills in navigating online information.

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YOUR SOLUTION AND ITS VALUE PROPOSITION

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THE WOW IN YOUR SOLUTION



"The Wow in Your Solution" for this project is its pioneering approach to tackling misinformation. Leveraging advanced deep learning techniques, it aims to develop a robust model to differentiate between real and fake news. Powered by the cutting-edge T5 transformer architecture, this solution promises exceptional performance in natural language processing tasks. Beyond its technical prowess, its societal impact is profound. By providing a tool to discern the authenticity of news content, it contributes significantly to the fight against misinformation. With its wow factor, this project embodies hope for a more informed and resilient society.

MODELLING

In this project, the "Model" refers to the T5 (Text-To-Text Transfer Transformer) architecture, particularly the T5-small variant. It's employed for fake news prediction, leveraging its transformer-based design to capture intricate patterns in textual data. Through fine-tuning on a dataset of labeled news articles, the T5 model learns to distinguish between genuine and fabricated content, adapting its parameters to optimize classification performance. This adaptation involves updating the model's weights using gradient descent optimization techniques and minimizing a suitable loss function. The result is an efficient mechanism for accurately classifying news articles as real or fake based on their content.

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RESULTS

why did attorney general loretta lynch plead the fifth barracuda brigade print the administration is blocking congress ional probe into cash payments to iran of course she needs to plead the th she either cant recall refuses to answer or just plain deflects the question straight up corruption at its finest \npercentfedupcom talk about covering your ass loretta lynch did just that when she plead the fifth to avoid incriminating herself over payments to irancorrupt to the core attorney general loretta lynch is declining to comply with an investigation by leading members of congress about the obama administrations secret efforts to send iran billion in cash earlier this year prompting accusations that lynch has pleaded the fifth a mendment to avoid incriminating herself over these payments according to lawmakers and communications exclusively obtained by the washington free beacon \nsen marco rubio r fla and rep mike pompeo r kan initially presented lynch in october with a series of questions about how the cash payment to iran was approved and delivered \nin an oct response assistant attorney general peter kadzik responded on lynchs behalf refusing to answer the questions and informing the lawmakers that they are bar red from publicly disclosing any details about the cash payment which was bound up in a ransom deal aimed at freeing several american hostages from iran \nthe response from the attorney generals office is unacceptable and provides evidence that lynch has chosen to essentially plead the fifth and refuse to respond to inquiries regarding herrole in providing cash to the wo rlds foremost state sponsor of terrorism rubio and pompeo wrote on friday in a followup letter to lynch more related

red state \nfox news sunday reported this morning that anthony weiner is cooperating with the fbi which has reopened y es lefties reopened the investigation into hillary clintons classified emails watch as chris wallace reports the breaking news during the panel segment near the end of the show \nand the news is breaking while were on the air our colleague bret bai er has just sent us an email saying he has two sources who say that anthony weiner who also had coownership of that laptop with his estranged wife huma abedin is cooperating with the fbi investigation had given them the laptop so therefore they did not need a warrant to get in to see the contents of said laptop pretty interesting development \ntargets of federal investigations will often cooperate hoping that they will get consideration from a judge at sentencing given weiners wellknown penchant for lying its hard to believe that a prosecutor would give weiner a deal based on an agreement to testify unless his test imony were very strongly corroborated by hard evidence but cooperation can take many forms and as wallace indicated on this mornings show one of those forms could be signing a consent form to allow the contents of devices that they could probably get a warrant for anyway well see if weiners cooperation extends beyond that more related

Name: text, dtype: object

Lens are: torch.Size([512]) torch.Size([3])

Shape of Tokenized Text: torch.Size([512])

Sanity check - Decode Text: classify: here is the problem the usa constitution states only congress can declare war yet sanctions are a declaration of war made by non other than the bankster elite that has everrything to do with profit and nothing to do with defence far too much power for banksters to have and the profits they make are huge the office of foreign assets control quotofacquot of the us department of the treasury administers and enforces economic and trade sanctions based on us for eign policy and national security goals against targeted foreign countries and regimes terrorists international narcotics traffickers those engaged in activities related to the proliferation of weapons of mass destruction and other threats to the nat ional security foreign policy or economy of the united states it is an issue no one has ever adressed anywhere so no matter who you vote for its the banksters who go to war and no one ever elects them

Sanity check - Decode Classification: Fake