



# CAPSTONE PROJECT

## Fake News Detection

### Final Project

Presented By

LAKSHMIKANTH S

711721244028

III BTech CSBS

KGISL Institute of  
Technology



# PROJECT TITLE

Fake News Detection Using Machine Learning (ML) is a project that aims to address the pervasive issue of misinformation and deception in online content by leveraging advanced machine learning techniques.

# AGENDA

1. Problem Statement
2. Project Overview
3. End Users
4. Solution and Value Proposition
5. The Wow Factor in Your Solution
6. Modelling
7. Results



# PROBLEM STATEMENT

- In today's digital age, the proliferation of fake news poses a significant threat to society, leading to misinformation, distrust, and social division.
- Identifying and combatting fake news is challenging due to the sheer volume of information circulating online and the sophistication of deceptive tactics employed.
- There is a pressing need for advanced technological solutions to effectively detect and mitigate the spread of fake news across digital platforms.



# PROJECT OVERVIEW

- Our project focuses on leveraging for the detection of fake news.
- A class of deep learning algorithms, excel at analyzing visual data, making them well-suited for tasks involving image and text classification.
- By harnessing the power of CNNs, we aim to develop a robust and scalable fake news detection system capable.



# WHO ARE THE END USERS?

- Social media platforms seeking to enhance content moderation and combat fake news dissemination.
- News organizations striving to maintain credibility and integrity in their reporting.
- Individual users looking to verify the authenticity of information before sharing or consuming it on digital platforms.

# YOUR SOLUTION AND ITS VALUE PROPOSITION

- Leverages Convolutional Neural Networks for multimodal analysis, detecting fake news through text and visual features.
- Seamlessly integrates with existing platforms for widespread adoption.
- Empowers users to differentiate between genuine and misleading content, facilitating informed decisions.



# THE WOW IN YOUR SOLUTION

- Multimodal analysis: Leveraging CNNs to effectively analyze both textual and visual components of news articles, enabling more comprehensive fake news detection.
- Scalability: Ability to process large volumes of data in real-time, ensuring timely identification and mitigation of fake news.
- Accuracy: High-performance CNN models trained on diverse datasets, resulting in superior detection accuracy across various types of fake news.





# MODELLING

- Data preprocessing: Cleaning and preparing textual and visual data for input into the CNN models.
- Model architecture design: Designing CNN architectures optimized for both textual and visual feature extraction.
- Evaluation: Rigorous testing and validation to assess the accuracy, precision, recall, and F1-score of the CNN models.

# RESULTS

```
news = str(input())  
manual_testing(news)
```

A backlash ensued after Donald Trump launched a sexist rant against Kirsten Gillibrand Thursday morning, saying that t would do anything for a campaign contribution. Trump was calling Gillibrand a whore.White House press secretary Sarah w denied that Trump s tweet was sexist. There is no way that is sexist at all, Sanders told reporters.Then Sanders tri p really meant (we all know what he really meant). According to Sanders, Trump was merely accusing Gillibrand of being tions, and hammering home his pledge to drain the swamp in Washington, according to The Hill. I think that the presi she said. This is the same sentiment the president has expressed many times before when he has exposed the corruption system. Sanders claims that Trump does not owe Gillibrand an apology if his words were taken as sexist. I think only if tter you would have read it that way, so no, she said.Watch:Gillibrand called on Trump to resign after Trump s accuser otlight by hosting a press conference in which they called for an investigation into his past behavior. Lightweight Sen d, a total flunky for Chuck Schumer and someone who would come to my office begging for campaign contributions not so anything for them), is now in the ring fighting against Trump. Very disloyal to Bill & Crooked-USED! Trump tweeted thi sponded to Trump s attack, saying that she won t be silenced. You cannot silence me or the millions of women who have g to speak out about the unfitness and shame you have brought to the Oval Office, she tweeted.Yeah, Trump, you called he een capture.

LR Prediction: Fake News  
DT Prediction: Fake News  
GBC Prediction: Fake News  
RFC Prediction: Fake News

+ Code

+ Markdown

# RESULTS

```
news = str(input())
manual_testing(news)
```

(In Dec. 25 story, in second paragraph, corrects name of Strong's employer to Mental Health Department, not Public Health Department.) By Bernie Woodall (Reuters) - A man claiming to be the person who delivered a gift-wrapped package of horse manure at the Los Angeles home of U.S. Treasury Secretary Steven Mnuchin said on Monday he did it to protest the federal tax overhaul signed into law last week by President Donald Trump. Robert Strong, 45, a psychologist for the Los Angeles County Mental Health Department, said by telephone he left the poop-filled parcel addressed to Mnuchin and Trump in the driveway outside Mnuchin's home in the posh Bel Air community. KNBC-TV, an NBC television affiliate in Los Angeles, reported Mnuchin was not home at the time. The package was found by Mnuchin's neighbor. "Protest really should be funny," Strong told Reuters. "People's eyes glaze over when they just see angry people in the streets." He believes the new tax law will hurt poor people. Neither the U.S. Secret Service nor the Los Angeles Police Department, both of which investigated the incident, would confirm Strong was responsible. The Secret Service interviewed an individual who admitted delivering the package, but no charges had been filed against him as of Monday afternoon. LAPD Lieutenant Rob Weise said it was possible whoever left the package did not break any criminal laws. While he is not assigned to investigate the incident, Weise said if the box did not present any danger, it would not be illegal. The LAPD bomb squad X-rayed the box before opening it on Saturday. In a photo of the card Strong posted on Twitter, he wrote "Misters Mnuchin & Trump, We're returning the 'gift' of the Christmas tax bill" and signed it "Warmest wishes, The American people." Strong said a Secret Service agent, accompanied by six police officers, showed up at his house to question him on Sunday night, and the agent chided him, asking, "'Are you ashamed of your behavior?'" The White House declined to comment on Monday and officials with the Treasury Department could not be reached.

LR Prediction: Not A Fake News  
DT Prediction: Not A Fake News  
GBC Prediction: Not A Fake News  
RFC Prediction: Not A Fake News

[+ Code](#)[+ Markdown](#)

[Demo Link](#)