

#### Parshvanath Charitable Trust's

#### A. P. SHAH INSTITUTE OF TECHNOLOGY, THANE

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**Department of Information Technology** 



# A Web Framework to Predict Fake News Using ML

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#### 1. Introduction

- Fake News Prediction using ML.
- Problem Identified:
  - The easy access and exponential growth of the information available on social media networks has made it intricate to distinguish between false and true information.
  - The easy dissemination of information by way of sharing has added to exponential growth of its falsification.
- Solution Proposed:
  - With the help of ML Algorithms, and the data sets we would try to eliminate the fake news which is being spread and trying to alter the emotions of people reading news.

#### 2. Literature Review

Sr. No.	Authors	Paper Tittle	Methodologies	Findings
1	Ahmed et al	Detection of online fake news using n-gram analysis and machine learning technique	ML models like KNN, SVM, ST, etc.	ML models including K- nearest neighbor (KNN), support vector machine (SVM), logistic regression (LR), linear support vector machine (LSVM), decision tree (DT), and stochastic gradient descent (SGD), achieving the highest accuracy (92%) with SVM and logistic regression.
2	Shu et al	Fake news detection on social media	Calculating n grams using Textual features like TFID vectorizer and ML algorithm	Achieved better accuracies with different models by combining textual features with auxiliary information such as user social engagements on social media

## 3. Objectives

- 1. To achieve accuracy in predicting true and reliable news, show the news relevance and analysis.
- 2. To work in this project proposes a stacked model which fine-tunes the informational insight gained from the data at each step and then tries to make a prediction.
- 3. To make evident success in the prediction of fake news and posts using a various Machine learning approach.
- 4. To eliminate news that is misleading the users reading them being spread through social media.
- 5. To be able to provide more and great accuracy of the News displayed.

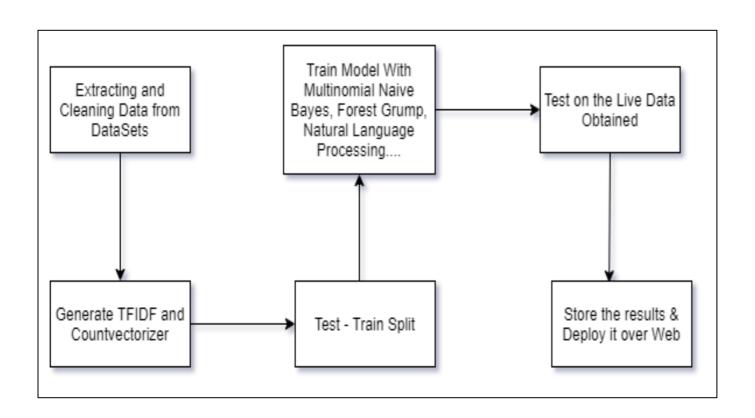
## 4. Scope

- 1. The fake news challenge is perilous and is spreading rapidly like a wildfire as it becomes easier for information to reach the mass in various flavors.
- 2. Fake news can have a huge impact in politics and thereafter on the people like a domino effect. With the help of Machine Learning & Artificial Intelligence, we can control and limit the spread of such misinformation more quickly and efficiently as compared to manual efforts.
- 3. There are various Up's and Down's on the market or in people's lives after they read the news that was Falsely claimed to be True. This project will assure them, that the news is True or False, this approach will Solve many problems like riots.

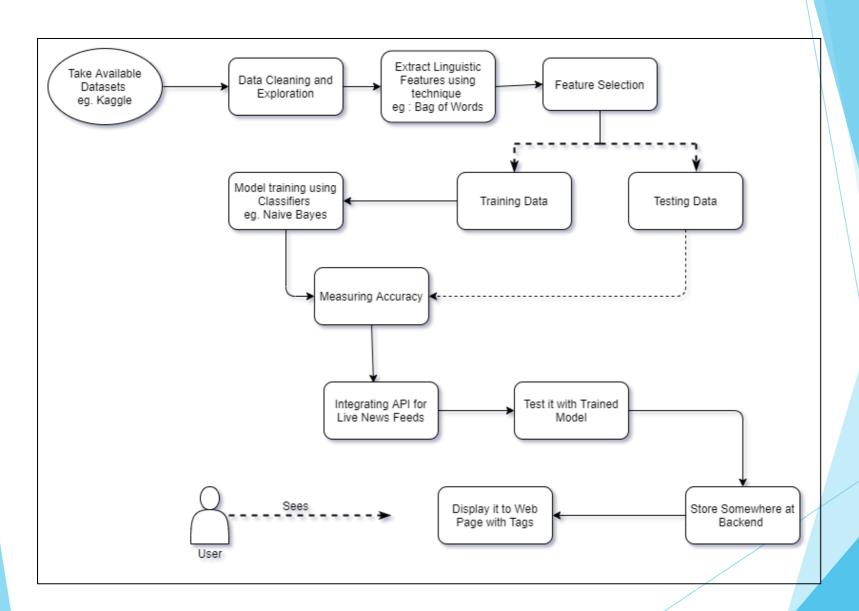
## 5. Technology Stack

- Software Requirements:
  - Python libraries
  - ReactJS
  - Bootstrap
  - Framework: Flask
  - PostgreSQL and for monitoring: PG Admin
  - Machine-Learning Classification models
  - OS Requirements: Windows XP or above
  - JavaScript supported browsers
- Hardware Requirements:
  - Minimum 2GB Ram
  - Pentium / Intel i3 Processors or above

## 6. Block Diagram to propose Project Idea



# 7. Flow Diagram



#### 8. References

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Thank You...!!