

**Shivnagar Vidya Prasark Mandal's**

**College  of Engineering**

**Project Report On**

**"Fake News Detection"**

**For the course**

**Software Development Lab**

**Submitted By**

**Team Gravity-**

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**Submitted to**

**Department of Computer Engineering**

**MINI-PROJECT**

**Title: FAKE NEWS DETECTION**

**AIM:-**The aim of this **Fake news detection** project is to help users to expose varieties of fabricated **news** , and allow users to tackle such problems using **Data Science**, along with MACHINE LEARNING.We can decide whether the **news** is solid or forged based on formerly witnessed **fake** or real **news**.

**PURPOSE:-**

* Since **fake news** attempts to spread **false** claims in **news** content, the most straightforward means of **detecting** it is to check the truthfulness of major claims in a **news** article to decide the **news** veracity.
* Fake news on social media has been occurring for several years; however, there is no agreed upon definition of the term “fake news”. To better guide the future directions of fake news detection research, appropriate clarifications are necessary.
* Social media has proved to be a powerful source for fake news dissemination. There are some emerging patterns that can be utilized for fake news detection in social media. A review on existing fake news detection methods under various social media scenarios can provide a basic understanding on the state-of-the-art fake news detection methods.
* Fake news detection on social media is still in the early age of development, and there are still many challenging issues that need further investigations. It is necessary to discuss potential research directions that canimprove fake news detection and mitigation capabili-ties.

**INTRODUCTION:-**

Recent political events have lead to an increase in the popularity and spread of fake news. As demonstrated by the widespread effects of the large onset of fake news, humans are inconsistent if not outright poor detectors of fake news. With this, efforts have been made to automate the process of fake news detection. The most popular of such attempts include “blacklists” of sources and authors that are unreliable. While these tools are useful, in order to create a more complete end to

end solution, we need to account for more difficult cases where reliable sources and authors release fake news. As such, the goal of this project was to create a tool for detecting the language patterns that characterize fake and real news through the use of machine learning and natural language processing techniques. The results of this project demonstrate the ability for machine learning to be useful in this task.

We have built a model that catches many intuitive indications of real and.fake news as well as an application that aids in the visualization of the classification decision.

**ADVANTAGES:-**

* The very nature of this project allows for multiple algorithm to be integrated together as modules and their results can be combined to increase the accuracy of the finale result.
* It has big advantage over typical fake news detection which was done by manually. It has automated fact checking .
* It deals with misinformation, rumours, disinformation, hoax, misbehaviour and gives quick result on news is fake or real.
* Saves time of user on reading fake articles, news ,social media posts and the algorithms used are also useful for spam mail checking .

**FUNCTIONAL REQUIRMENTS :-** Functional Requirements of our project are explained below:

* Artificial intelligence, Machine learning algorithms, Natural language Processing (NLP) , training models are required.
* Training models like passive aggressive algorithm, Multinomial Naive Bayes are required.
* Data filtering is required.

**SOFTWARE TOOLS:-**

**• GitHub –** Upload and make changes in the source code.

**•**  **Microsoft Office-** Microsoft word and excel.

**•** **Development Tools-** Jupiter notebook(anaconda 3),

Google Colab (<https://colab.research.google.com>)

**•** **Programming Language-** Python

**DEPLOYMENT:-**

**Operating System Server:-** Window 10

**HARDWARE SPECIFICATION :-**

**• Processor:-** Intel Core i3

**• RAM:-** 4 GB

**• Hard Disk:-** 1 TB