

## Tai-Naki, A Simple Fake News Detection tool that works within the area of API

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### ABSTRACT

Abstract: “Tai-Naki” is a open source fake news detection tool. In this century when internet is widely available for almost everyone, the rate of spreading false information has risen up at it’s maximum pace. The world has suffered some major drawback because of these “Fake News”. Giant company like “Google. Facebook. Tweeter etc” has struggle most to deal with this problem. They invented a technique widely known as “Fake News Detection tools”. Where they use “TfidfVectorizer” as term frequency-inverse document frequency. It follows reverse word search and all the work done by ML or Machine Learning. We are proposing a fully Natural Language Processing unit that will be found as an “extension” for any web browser. Moreover, we are also working on Mobile Application. We are developing the extension for back-to-back or door to door API based communication. System will take input such as URL, Text, Keywords or even image and give a result of the accuracy of the news. However, to train the model only for API communication, we are taking help of “TfidfVectorizer” just to let the model knows, what is fake news even. After that with the help of NLP as fig 01 our system can easily define a news with its optimal solution. We are also using “Google’s Reverse Image Technique” just to ensure optimal results.

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Allcott, H., and Gentzkow, M. 2017. Social media and fakenews in the 2016 election. Journal of Economic , National Chung Cheng University,  
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### 1. INTRODUCTION

“Tai-Naki” is a web-based extension to detect fake news. It has been created by the help of NLP. “Tai-Naki” will read the whole URL and search for keywords it has been fined before. Then it will use Three major algorithms to check weather the news is true or false. It can also do a reverse image search and drop perfect statement. A user can tap on the extension, search on it’s webpage or even upload a image to find it’s origin source. The motto of tai-Naki is to establish the concept of API-API communication. This technique is totally new. However, because of privacy concerned protocol, we are going for TfidfVectorizer. “Tai-Naki” has been designed and developed by four researchers from

Daffodil International university Literature review that has been done author used in the chapter "Introduction" to explain the difference of the manuscript with other papers, that it is innovative, it is used in the chapter "Research Method" to describe the step of research and used in the chapter "Results and Discussion" to support the analysis of the results [2]. If the manuscript was written really have high originality, which proposed a new method or algorithm, the additional chapter after the "Introduction" chapter and before the "Research Method" chapter can be added to explain briefly the theory and/or the proposed method/algorithm.

## 2. RESEARCH METHOD

After working with "TfidfVectorizer", we will implement three major Algorithms for "Tai-Naki"

At first we will work with "Logistic Regression". Where we will train our model with NLP, where we will map

ans shape the dataset. In this case the system however work an NAND gate where reserved LR score will store as positive value.

Afterwards when we will have our shaped dataset, we will be using Decision Tree Classification to enlarge the outcome for other hidden dataset.

With this the NLP will be able to detect any void coefficient in the syetem.

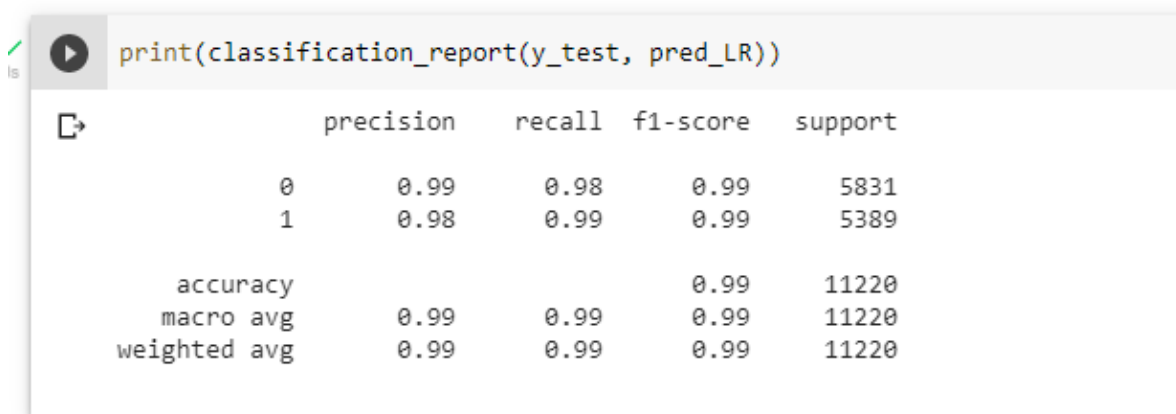
At this stage we will marge all true and fake news together bu=y using "Gradient Boosting Classifier"

All it will do is basically find all the Zero and One and combined them into a direct channel.

For reverse image we are implementing "Random Forest Classifier", where the system can easily detect any unknown data and prove it with exitance NLP model.

## 3. RESULTS AND DISCUSSIONS

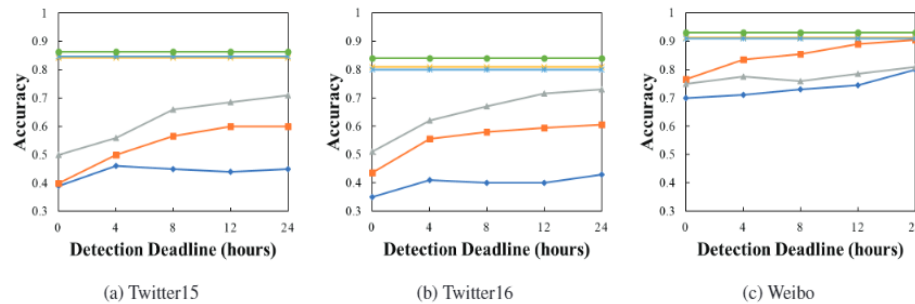
By searching for articles and incorporating fact-checked information into social media posts, we can warn users about fake news and discourage them from spreading misinformation. Our model will give result to primary division as like this one and letter it will concert as single output. Though there are no retweets and quotes, it is hard to completely ensure all queries 's content are unique. However, our settings are applied to all models for fair comparisons. Most of the cases we achieve almost perfect Precision, Recall and F1. But the results of Precision, Recall, and F1-Score of fake class vary in experiments to experiments. In our dataset for experiments, the number of authentic news is 37.47 times higher than the number of fake news which could be the reason be-hind such variance in results of the overall and fake class. To evaluate the performance of different models we will use the precision, recall, F1-Score of the fake class in the rest of the section.



	precision	recall	f1-score	support
0	0.99	0.98	0.99	5831
1	0.98	0.99	0.99	5389
accuracy			0.99	11220
macro avg	0.99	0.99	0.99	11220
weighted avg	0.99	0.99	0.99	11220

#### 4. CONCLUSION

In this paper we propose a novel model for early detection of fake news on social media through classifying news propagation paths with both recurrent and convolutional network.



both effectiveness and efficiency. Since our model only re-lies on common user characteristics which are more avail-able, reliable and robust than complex features such as linguistic or structural features that are widely-used in state-of-the-art baseline approaches, it can detect fake news significantly faster than state-of-the-art baselines, e.g., in five minutes after the fake news starts to spread. Since we have found that user characteristics are discriminate indicators of the truthfulness of news stories, in the future, we plan to investigate whether user characteristics can help us identifying users who are easy to believe and spread fake news, and which features affect users' tendency to spread fake news most significantly, which are important problems in the prevention and debunking of fake news.

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