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Fake News Detection Using MLP Classifier

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ABSTRACT

The project uses MLP classifier to demonstrate the ability for machine learning to be useful in Fake news detection system. We have built a model that catches indications of real and fake news in minimum time with high accuracy rate.

Key Concept: Data, Dataset, Machine Learning, MLP Classifier

1. Introduction

In this project various type of user need the fake news detection system which give high accuracy rate the user uses this system which provide high rate of accuracy and it give result fastly. Recent life has become quite suitable and the people of the world have to thank the vast contribution of the internet technology for transmission and information sharing. This is an evolution people get deceived and don't think twice before circulating such misinformative pieces to the far end of the world. Various social media sites that play a major role in supplying news include Facebook, Twitter, Whatsapp etc. Fake news detection play vital role in detecting that news is fake or real or how much percent it is accurate, etc.

2. Problem Definition

This strategy utilizes MLP Classification model to anticipate whether a news will be named as REAL or FAKE. We propose in this project, a news location model that utilization MLP strategies that provide high efficiency, high accuracy rate and result within less time.

3. Requirement

These are requirements of project-

Required library :

- Sklearn: It's a machine-learning library for Python. It's used in this project for the classification_report, accuracy_score, confusion_matrix, and train_test_split tasks.
- PIL: It's used to deal with the images in this project
- joblib: joblib. dump() and joblib. load() replaces fix to work efficiently on Python objects consisting large amount of data, specially large numpy arrays
- textblob: It's used to reuse textual data as we give input as text in this project
- nltk: It's used in this project for removing stopwords
- pickle: It's used in this project
- Required hardware interface:
 - Hardware : intel core
 - Speed : 2.80 GHz
 - RAM : 8GB

- Hard Disk : 40 GB
- Key Board: Standard Windows Keyboard
- Required software interface:
 - Operating System: Windows 10
 - IDE: Annaconda (spider)
 - Programming Language : Python

3. Specification

We perform a detailed analysis and performance evaluation of the below data-

- High accuracy
- Required less time
- Increase efficiency

4. Application

- Detecting and identifying false news on social media.
- Detecting frauds and description in writing styles online.
- Rumour identification, spammer and bot detection, and truth discovery.
- Big false news data and lowering featurevector size are important subjects.

5. Existing system

There present a large body of research on the topic of machine learning methods for fake detection, most of it has been engaging on classifying online reviews and publicly available social media posts. specially since late 2016 during the American Presidential election, the question of determining 'fake news' has also been the subject of particular attention within the literature.

6. Proposed system

In this paper a model is build based on the count vectorizer word tallies relatives to how often they are used in other articles in your dataset) can help. The actual goal is in developing a model which was the text transformation PBL Report Fake News Detection System 25 (count vectorizer vs tfidf vectorizer) and choosing which type of text to use (headlines vs full text). Now the next step is to extract the most optimal features for countvectorizer vectorizer, this is done by using a n-number of the most used words, and/or phrases, lower casing or not, mainly removing the stop words which are common words such as "the", "when", and "there" and only using those words that appear at least a given number of times in a given text dataset.

7. Conclusion

Fake news detection is an emerging research area with few public data-sets. In this project, we have introduced a system model for news utilizing MLP analysis in machine learning. The proposed model accomplishes its most elevated exactness. Counterfeit news discovery is a developing exploration zone with couple of open data-sets.

High accuracy

Required less time

Increase efficiency

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