**LITERATURE SURVEY**

**1)Title**: Fake Information and News Detections using Deep Learning.

**Author name** : ABHISHEKVERMA, VANSHIKAMITTAL, Sum Dawn Department of CSE/IT, Jaypee Institute Information Technology , Noida, India.

**Year :** Volume 8, 2019.

**Methodology:**

Recurrent Neural Network and Long Short-Term Memories and Grated Recurrent Units to test for classification in this work we have successfully used it. Sensor board is used for implementation of the proposed framework and provide visualizations for the neural network. Confusion matrix and classification reports show that accuracy score of up to 94 percent can be achieved using LSTM model. The trade off is the increased time requirement. Since the fake news can be established based on the learning model, a good training set is mandatory. The results show that the proposed framework is able to adequately present accurate result. Their future work is to use hybrid machine learning techniques for prediction.

**Merits:**

 Prediction stability high.

 Good training data set.

**Demerits:**

 Efficiency is low when the dataset increased.

 Result doesn’t give 100% accuracy.

**2)** **Title:** A Novel Stacking Approach for Accurate Detection Of News Tracker

**Author name** : TAOJIANG1, JIANPING LI 1, AMINUL HAQ1ABDUS, SABOOR1, ANDAMJADALI.

**Year:** Volume 9, 2021.

**Methodology :**

In this paper, we evaluated the performance of five machine learning models and three deep learning models on two fake and real news datasets of different size with hold out cross validation. We also used term frequency, term frequency-inverse document frequency and embedding techniques to obtain text representation for machine learning and deep learning models respectively. To evaluate models’ performance, we used accuracy, precision, recall and F1-score as the evaluation metrics and a corrected version of Mc Nemar test to determine if models’ performance is significantly different. In future, we will perform more experiments on other data sets in different languages. We will also try to use more different machine learning and deep learning models for fake news detection. We will also collect more fake and real news data in different language to detect fake news in different countries.

**Merits:**

 Achieved testing accuracy of 96.05 % respectively.

 Collection of different languages of fake news and real news.

**Demerits:**

 Model not stable.

 Need more time for training.

**3)Title**: Un supervised Fake News Detection Based on AutoEncoder.

**Author name** : DUN LI, HAIMEIGUO, ZHENFEIWANG, AND ZHIYUN ZHENG.

**Year** : Volume 9, 2021.

**Methodology :**

This paper firstly considers some forms of news in social networks, integrates the text content, images, propagation, and user information of publishing news to improve the performance of fake news detection. Next, to obtain the hidden information and internal relationship between features, Bidirectional GRU (Bi-GRU) layer and Self-Attention layer are added into the auto encoder, and then reconstruct residual to detect fake news. The experimental results compared with the existence of other four methods, on two real-world datasets, show that UFNDA obtains the more positive results. Current news are not completely fake or completely true, and more detailed classification needs to be considered. These are the next research plans of our work.

**Merits:**

 The experimental results compared with the existence of other four methods, on two real-world datasets, show that UFNDA obtained.

 The more positive results.

**Demerits:**

 Training dataset low.

**4)Title:** Fake Media Detection Based on Natural Language Processing and Block chain Approaches.

**Author name** : ZEINAB SHAHBAZI AND YUNG-CHEOLBYUN.

**Year** : Volume9, 2021.

**Methodology :**

We have proposed an integrated system for various aspects of block chain and natural language processing NLP) to apply machine learning techniques to detect fake news and better predict fake user accounts and posts. The Reinforcement Learning technique is applied for this process. To improve this platform in terms of security, the decentralized block chain framework applied, which provides the outline of digital contents authority proof. More specifically, the concept of this system is developing a secure platform to predict and identify fake news in social media networks. Their future work is to implement it in various platforms.

**Merits:**

 Used block chain network.

 It maintain security.

**Demerits:**

 High cost.