Topic of Interest

Fake News Detection

Research Papers:

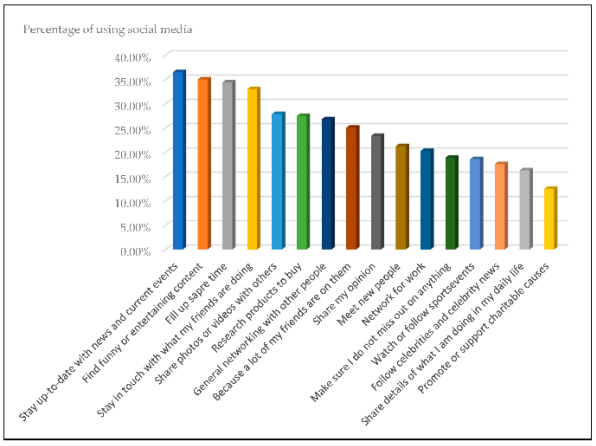
1. **Fake News Detection Model on Social Media by Leveraging Sentiment Analysis of News Content and Emotion Analysis of Users' Comments**
   This research focuses on combating the spread of fake news on social media by leveraging sentiment and emotion analysis. The proposed bidirectional long short-term memory (Bi-LSTM) model integrates sentiment and emotion features extracted from news articles and user comments, achieving a high detection accuracy of 96.77% on the Fakeddit dataset, outperforming existing approaches. The study highlights the significance of analyzing emotions in news comments and sentiment in headlines to enhance the effectiveness of fake news detection models.
2. **FAKE NEWS DETECTION USING MACHINE LEARNING: AN EXHAUSTIVE REVIEW**
   This text discusses using machine learning, specifically the decision tree algorithm, to combat fake news by analyzing data, extracting features, training models, and evaluating their performance. The author highlights the importance of incorporating various parameters and datasets to improve accuracy in detecting fake news.
3. **Detecting Fake News using Machine Learning: A Systematic Literature Review**
   This research discusses the growing issue of fake news spread through online platforms and the need for machine learning classifiers to automatically detect such false information. The review focuses on the importance of using machine learning, especially in the context of detecting fake news, and highlights various methodologies, research questions, and selection criteria used for the literature review. The systematic approach is employed to assess the quality of papers and gather relevant information for analysis and discussion.
4. **Detecting COVID-19-Related Fake News Using Feature Extraction**
   The research paper focuses on detecting fake news related to COVID-19 using a dataset sourced from various media platforms. It employs preprocessing, tokenization, and feature extraction, achieving an 88.50% accuracy with the random forest classifier.
5. **An Empirical Comparison of Fake News Detection using different Machine Learning Algorithms**
   The paper focuses on detecting fake news on social media using machine learning algorithms including Naïve Bayes, random forest, neural network, and decision trees. It utilizes a public dataset, LIAR, and evaluates classifier performance, with Naïve Bayes standing out as the most effective method for fake news detection.
6. **Thai Fake News Detection Based on Information Retrieval, Natural Language Processing and Machine Learning**
   This research proposes a framework for robust Thai fake news detection, involving information retrieval, natural language processing, and machine learning. The framework aims to automatically detect and classify fake news in online sources, contributing to addressing the challenges of fake news propagation.
7. **Fake News Detection Using Machine Learning**

This research paper focuses on the growing influence of social media, especially in sharing information and news. It proposes the use of Machine Learning, including TF-IDF vectorization and Passive Aggressive Classifier, to detect fake news. Additionally, sentiment analysis is employed to gauge the positivity of news content. The paper aims to empower users with the ability to classify news as "fake" or "real" based on these techniques.

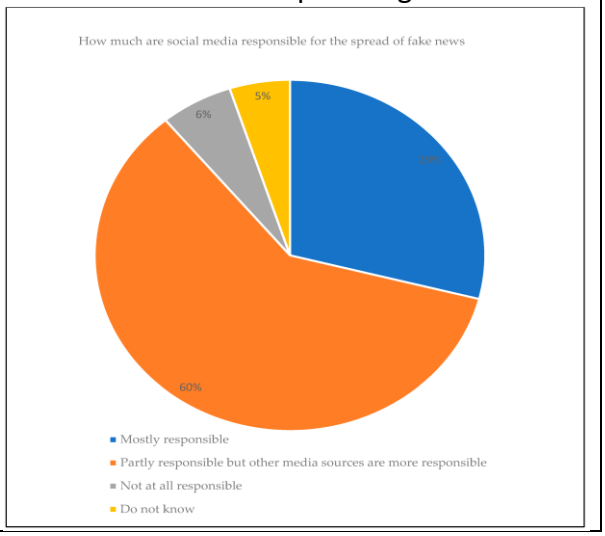
8. **FAKE NEWS DETECTION USING MACHINE LEARNING**
   This research paper explores the challenge of identifying fake news, which can deceive and mislead readers, especially on social media. The paper applies Natural Language Processing (NLP) techniques, including logistic regression, naive Bayes classifier, and SVM, to distinguish between real and fake news articles. The goal is to create a model that can accurately predict the likelihood of an article being fake, considering linguistic properties and linguistic features.
9. **Fake News Detection Using Machine Learning Ensemble Methods**
   The paper proposes a machine learning ensemble approach to classify news articles as misinformation or disinformation, considering various textual properties. It explores different algorithms, including logistic regression, SVM, MLP, and KNN, and evaluates their performance on real-world datasets. The proposed ensemble approach outperforms individual learners and is compared with benchmark algorithms like linear SVM and CNN.
10. **Fake news detection in social media**
    The research paper discusses the problem of detecting fake news on social media due to the growth of false information. It explores various methods, including Linguistic Cue and Network Analysis approaches, and proposes a three-part method using Naïve Bayes Classifier, Support Vector Machines, and Semantic Analysis for accurate fake news detection. The paper emphasizes the challenges of misinformation, the significance of social media, and the role of humans and automated entities in spreading fake news.

Visualizations:

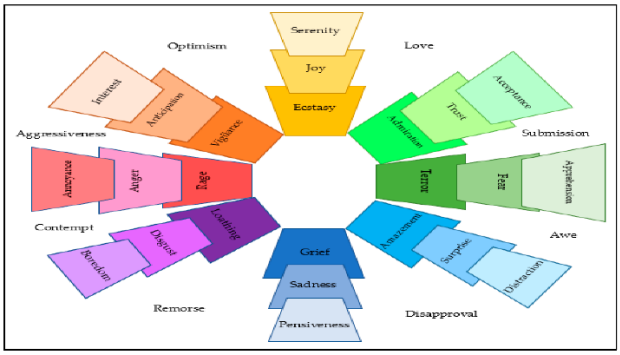
The reasons for using social media according to the Digital 2021 Global Digital Overview report



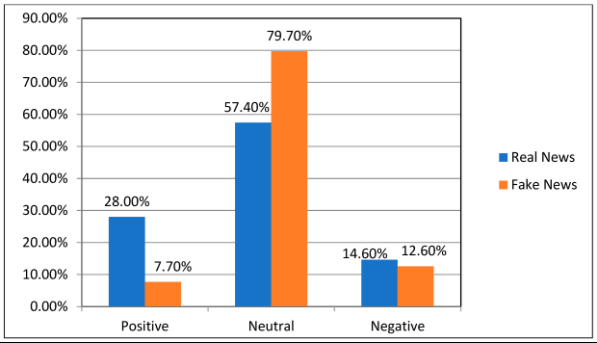
Social media's role in spreading fake news



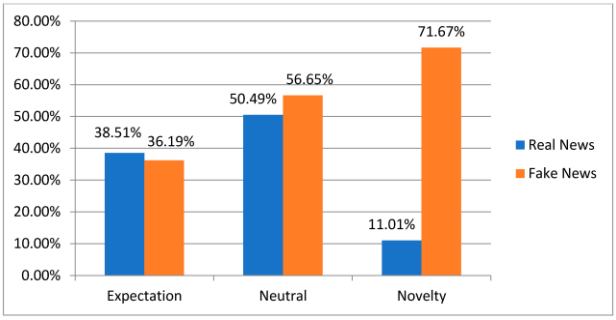
The Plutchik wheel of emotion



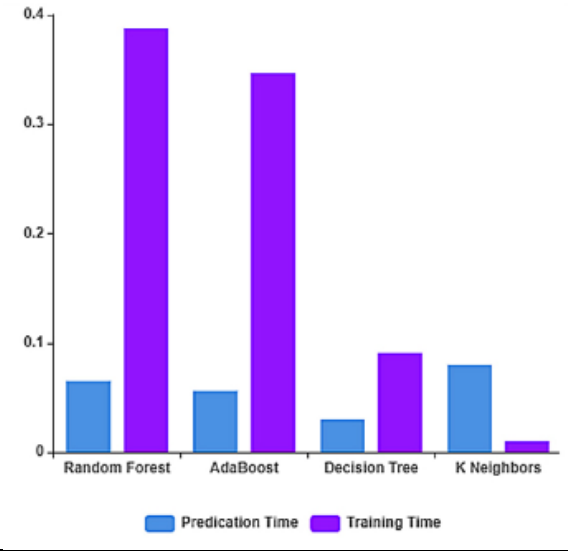
The polarity of sentiment analysis of news titles in the Fakeddit dataset.



The groups of emotion analysis of comments in the Fakeddit dataset.



Training and testing time rate before feature extraction.



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