



The Great Fake News Detective Adventure!

Introduction to Fake News Detection!

Detection Using Machine Learning

Content:

The rise of fake news on social media and the web.

Importance of detecting fake news to ensure accurate information.

Overview of the machine learning approach to detect fake news.





Dataset Preparation

Content: Data source: A collection of news articles labeled as 'real news' or 'fake news'.

Key columns: text (news content), label (news type: fake or real). Data preprocessing: Clean and Mapping the 'fake news' to real news.

Data Preprocessing and Vectorization

- .Text Vectorization: Convert data into numerical representation
- .Used TF-IDF (Term Frequency-Inverse Document Frequency) Vectorizer
- .Removes stop words (common words like "the", "is") that don't add meaning.
- Splitting the Data: Dividing the data into training and testing sets.





Model Training and Evaluation

Model: Multinomial Naive Bayes, suitable for text classification tasks. Fit the model on the training data. Predict and evaluate the model using test data. Model performs with an accuracy of around 70%. Save the trained model and vectorizer for later use.

Conclusion

Fake news detection using machine learning provides an effective solution to combat misinformation. With continuous improvements, this technology can enhance the reliability of information on digital platforms.

Thanks!

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