EchoTruth

Unveiling the Veracity of News

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Problem Statement

In today's fast-paced digital world, the rapid spread of misinformation poses significant challenges to public information integrity. EchoTruth addresses this issue by deploying machine learning algorithms to detect and classify news authenticity.

Project Objectives

Our main goal is to develop an accessible, effective system to help users distinguish between true and false news articles, supporting broader media integrity.

System Overview

EchoTruth integrates a user-friendly interface that allows users to input news articles for authenticity verification. The backend, powered by our AI model, analyzes and returns an authenticity score based on learned patterns of misinformation.

Methodology

Data Collection and Preparation

Gather a comprehensive dataset of news articles with labels for true or fake news.

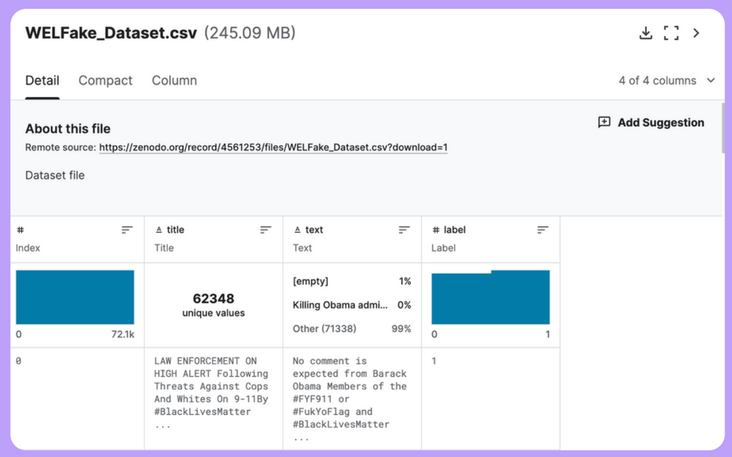
Model Development

Utilize natural language processing (NLP) to create a classification model

Testing and Validation

Implement rigorous testing to ensure accuracy and reliability

Dataset



(WELFake) is a dataset of 72,134 news articles with 35,028 real and 37,106 fake news.

There are 78098 data entries in csv file out of which only 72134 entries are accessed as per the data frame.

Technologies Used

Python, scikit-learn, NLTK, spaCy, Pandas, Matplotlib

Results and Impact

The implemented system has shown high precision and accuracy in preliminary tests, significantly reducing the spread of fake news by providing users with reliable news verification tools

Future Work

Plans to expand EchoTruth include refining the AI model with more complex algorithms, incorporating a larger dataset, and enhancing the user interface for greater accessibility

In an increasingly digital world, distinguishing true from false news is vital. EchoTruth leverages AI to classify news content swiftly and accurately, aiming to improve media integrity and public knowledge.