

Fake Review Detection using AI

This project focuses on identifying fake product reviews on online shopping platforms using machine learning techniques.

Objective

The main goal is to help detect fake reviews that can mislead customers into buying poor-quality products. We use AI to identify which reviews are real and which are fake.

Dataset Used

We used a labeled dataset of reviews marked as real or fake. This text data was preprocessed and converted into a format suitable for machine learning.

Machine Learning Model

We trained a Logistic Regression model on TF-IDF vectorized data. This model predicts whether a given review is real or fake.

Evaluation & Results

Model Accuracy: 87.25%

The model performed well in detecting real reviews but had some difficulty with fake reviews. This was evident in the confusion matrix.

Conclusion

Our AI model can effectively filter out fake reviews. In the future, trying other advanced models like Random Forest or Neural Networks could improve performance.