

Fake News Detection Using Classical Machine Learning Models: A Comparative Review

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Abstract: Fake news has become a major problem on social media and news websites. Detecting fake news early is important to stop the spread of false information. In this paper, we compare three classical machine learning algorithms — Support Vector Machine (SVM), Naive Bayes (NB), and Logistic Regression (LR) — for fake news detection. We use a common dataset and apply the same text processing steps like cleaning and TF-IDF vectorization. All three models are trained and tested under the same conditions. Their performance is measured using accuracy, precision. This study helps in understanding which model is more suitable for fake news detection based on different needs.

Keywords: Fake News Detection, Support Vector Machine, Naive Bayes, Logistic Regression, Accuracy, Precision, TF-IDF

