

Detection Model for Fake News in Bengali Language Using SVM and Random Forest.

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Abstract

In the era of digital communication, fake news poses a critical challenge with significant real-world implications. In this study, the issue of Bangla fake news is addressed by developing and evaluating two machine learning models: random forest and support vector machine (SVM). The study begins by delving into the distinctive linguistic and cultural traits of Bangla fake news and curating a comprehensive dataset comprising both genuine and fake news articles. By implementing the random forest and SVM models, this study achieves detection accuracies of 97.2 and 96.21%, respectively, showcasing the effectiveness of these approaches in identifying Bangla fake news. Rigorous experimentation and evaluation metrics validate the models' reliability and adaptability. Furthermore, a comparative study is carried out to better understand the merits and limitations of each model, providing valuable insights to researchers and practitioners in choosing the most suitable method.

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