

Abstract

The use of social media in Indonesia continues to increase, providing easier access to news but also leading to the widespread dissemination of hoax information. Detecting hoax news is crucial to prevent the spread of misleading information and protect news credibility. This study focuses on detecting hoax news in Indonesian-language news media on Twitter using a Long Short-Term Memory (LSTM) model with Word2Vec word embedding features. Additionally, it compares model performance by varying the window parameter in Word2Vec to determine the optimal configuration. Word2Vec was chosen for its ability to represent word vectors effectively and capture semantic relationships between words better than other methods. The results show that LSTM with Word2Vec outperforms other approaches in detecting hoax news, achieving an average accuracy of 96%, compared to LSTM with TF-IDF, which only reached 93%. These findings indicate that the combination of LSTM and Word2Vec enhances the effectiveness of hoax news detection on social media.

Keywords: *Hoax*, LSTM, Word2Vec, Twitter