
Abstract

Social interaction on media is a daily activity. In addition, various information can be quickly obtained on social media. However, not all information conveyed on social media is in accordance with factual conditions so it can mislead readers. Therefore, we need a system that can detect news that contains disinformation. Machine learning and deep learning can be used to detect and classify news containing disinformation. In this study, Hybrid classification is used on Twitter datasets related to political news in Indonesia, namely Convolutional Neural Network (CNN) and Long-Short Term Memory (LSTM), with Support Vector Machine (SVM). With pre-trained Word2Vec that changes words into numerical vectors, the hybrid model will extract and learn the features. The hybrid model is compared with the individual LSTM or CNN to see the best outcome given by those methods. The comparison is based on the SVM and Sigmoid classification results. The results of the study show that the proposed hybrid model, namely the CNN-LSTM-SVM, shows a better result than any other single model, which gives the hybrid model with 82.55% average score in 5-fold and the other hand, the LSTM-CNN-SVM model gives 82.20% average score which has a slight difference on the first hybrid model.

Keywords: Deep Learning, Twitter, Metode Hybrid, Fake News.
