

Abstract

The use of social media is very influential for the community. Users can easily post various activities in the form of text, photos, and videos in social media. Information on social media contains fake news and hoaxes that will have an impact on society. One of the most social media used is Twitter. This study aims to detect fake news found on the Tweets using the Convolutional Neural Network (CNN) method by comparing the weighting features used of the Term Frequency Inverse Document Frequency (TF-IDF) and the Term Frequency-Relevance Frequency (TF-RF). The highest accuracy was obtained in the Term Frequency-Relevance Frequency (TF-RF) weighting feature with an accuracy of 84.11%, while in the Term Frequency Inverse Document Frequency (TF-IDF) weighting feature with an accuracy of 80.29%.

Keywords: social media, hoax, Twitter, convolutional neural network, tf-idf, tf-rf