

Abstract

Currently, dissemination of information is very easy through social media, one of them is Twitter. Twitter is a social media for sharing information in the form of short messages, where users can receive and share short messages easily and quickly. The dissemination of information in the form of rumor news can cause unrest in the community, so efforts are needed to overcome the spread of rumors on Twitter. In this research, we develop a model for detecting rumor information on Twitter based on the category of rumors and non-rumors using the Multilayer Perceptron. Multilayer Perceptron is an artificial neural network consisting of several layers that are connected by connecting weights to process any incoming information. Multilayer Perceptron is able to solve a problem that cannot be solved by using the single layer neural network method. This study uses a dataset containing tweets from crawling using the API on Twitter. The data is taken based on keywords and hashtags. Weighting uses the Term Frequency-Inverse Document Frequency (TF-IDF) method with Unigram, Bigram, and Trigram tokenizer.. The dataset are divided into training data and test data with ratio of 90:10, 80:20 and 50:50. The results showed the highest accuracy of 78.27% was obtained with the TF-IDF Unigram tokenizer.