Abstract

Social media is a place to express opinions or feelings, both positive and negative. One of them is to express opinions or feelings about a topic that is currently being discussed. The number of opinions or sentiments related to a topic can be challenging to assess if it leans towards positivity or negativity. Therefore, Sentiment analysis is essential for examining the viewpoints or sentiments on the topic. In this study, 37,391 Twitter user comments on the 2024 Indonesian presidential election were tested. This research employs the RNN methodology, TF-IDF feature extraction, and FastText feature expansion utilizing an IndoNews corpus of as much as 142,545 data and using Genetic Algorithm optimization. The outcomes of this study yielded the highest accuracy when combining TF-IDF feature extraction with max 7000 features, FastText feature expansion on top 5 features, and implementing Genetic Algorithm optimization with a value of 82.72%, accuracy increased by 3.4% from the baseline.

Keywords: FastText Genetic Algorithm, RNN, Sentiment analysis, TF-IDF