Abstract

Movie reviews are very essential to people because they can help viewers get an overview of the movie and provide feedback to the movie directors about their movies based on public sentiment. One way to determine whether the sentiment is positive or negative from an opinion can be solved by sentiment analysis. However, analyzing sentiment manually is difficult due to a large amount of data, so it is necessary to implement automation that can make this easier. In this research, we investigate a machine learning method for classifying movie review sentiment. Then Ensemble Stacking model was chosen as a classification method for this sentiment analysis case. In the classification stage, three algorithms (Naïve Bayes, K-Nearest Neighbors, and Logistic Regression) are implemented as the base-learners, then the Logistic Regression algorithm is implemented as a meta-classifier to improve the performance of the base-learners in the Ensemble Stacking model. Therefore, testing and comparison between single classification such as the base-learners with the classification method using Ensemble Stacking are the main focus of this research. The results of this research show that the accuracy of this stacking model reaches 89.40%, an increase of 0.71% from the highest accuracy on the base-learners.

Kata Kunci: movie reviews, sentiment analysis, TF-IDF, ensemble stacking