

Abstract

We can find a lot of information about opinions, judgments, sight on the Internet. One of them is a movie review that contains an audience's opinion of a film. All responses from viewers who review a film cannot be considered as a sentiment, so it needs a technique to analyze the review so it provides valuable information. Sentiment analysis is a subject that aims to extract subjective information from textual reviews. Machine learning Support Vector Machine (SVM) method is often used to perform sentiment analysis. However, a large number of unnecessary words, repeated words, and too many attributes causes the classification performance provide a low level of accuracy. By applying a significance level of 0.05, 0.1, and 0.15 which reduces approximately 91% of the existing features, it can provide performance results that are not too much different, which is 1% lower on accuracy compared to models without feature selection, but less time required for testing. Testing on the model using the RBF kernel gives better performance results with an accuracy value of 85.6% compared to the linear kernel, and polynomials which have values of 84.6% and 83.8%.

Keywords: *sentiment analysis, movie review, chi square, support vector machine, kernel*