

Abstract

Movie lovers are increasing now. Therefore, movie reviews can also be used or used by film lovers to decide what movies to watch. For this reason, sentiment analysis on film reviews is very interesting to be the object of research. The manual labeling process carried out by humans does produce accurate results. However, it will be an obstacle if the amount of data that must be labeled is very large. Therefore, automatic labeling is needed that can categorize English film reviews into two sentiment categories, positive and negative using the Support Vector Machines method. The best accuracy obtained from this test is 88 in RBF and Polynomial kernel using a C value of 1. In addition, agreeing the data also increases the level of accuracy. It can be seen from the one test that started using 2400 data trains, polynomials and RBF kernel that got verification above 82%. When using 3000 data of 2400 previous data trains and 600 test data that have been labeled, so the accuracy increases significantly.

Keywords: Automatic Labeling, *Support Vector Machine*, kernel, review, movie.