

Abstract

Hotel is one of the supporting factors of the tourism sector, therefore it is very important to consider both in terms of rating, facilities, services or travel distance. In this globalization era, it can be said that many tourist websites provide facilities for tourists to write their opinions or reviews and their personal experiences online. Sentiment analysis is one solution to overcome problems for the classification of opinions or reviews that are as varied as more likely to be positive or negative. The method used in this study is the Support Vector Machine. By doing a comparison of the features of Particle Swarm Optimization and Genetic Algorithm. Evaluation is done by using 10 fold cross-validation as a benchmark to find the best testing model for sentiment analysis cases in hotel reviews. Based on the experiments that have been carried out, the best accuracy values reached an average of 96.19% for the use of Particle Swarm Optimization feature selection and 96.59% for the use of Genetic Algorithm feature selection. From the results of experiments that have been carried out shows that the selection approach of the Genetic Algorithm feature can provide a good solution to the problem of sentiment analysis in increasing the value of accuracy.

Keywords: sentiment analysis, review, particle swarm optimization, genetic algorithm, support vector machine

