Sentiment Analysis of English Hotel Reviews Using Support Vector Machine

ALEXANDER ROMIAN SIMARMATA

Informatics Study Program, Faculty of Science & Technology University of Technology Yogyakarta Jl. Ringroad Utara Jombor Sleman Yogyakarta E-mail : romian37@gmail.com

ABSTRACT

With the rapid emergence of technology in this decade, hotels can now receive hundreds or even thousands of reviews regarding their hotels. Of course, this is a task that takes a lot of time and energy if these reviews are read one by one. On the other hand, hotel reviews are very important for hotels in evaluating their performance in running the hotel business. In this research, an application will be created that uses sentiment analysis techniques, a text classification model to overcome this problem. The algorithm used in the research is Vector Machine (SVM). The hotel review data used as training data and test data for the model created will be downloaded via the Kaggle.com site. After that, the data will go through a preprocessing process which includes standardization, lemmatization, and creating labels on the data. After that the data will be divided into a ratio according to the user's wishes. The data that has been shared earlier will be implemented by the Support Vector Machine algorithm. This application was created in the Python programming language with the help of the SKLearn and Tkinter libraries. The result of this research is an application that can create a classification model using the SVM algorithm, and can manually classify hotel reviews in English and classify large numbers of hotel reviews in the form of .csv files.

Keywords: Application, Sentiment Analysis, Hotel Reviews, Support Vector Machine