ABSTRACT

COMPARISON OF NAVE BAYES METHODS CLASSIFIER AND SUPPORT VECTOR MACHINE FOR CLASSIFICATION OF CASE RESPONSE SENTIMENTS BULLYING ON TWITTER

By

Firda Millennianita

18102229

One of the uses of technology is the dissemination of information related to the development of the K-Pop world which has become very fast and easy to obtain from social media. Things related to K-Pop sometimes become the most sought-after issues until they become headlines which then become public conversations on social media such as Twitter. One example of a controversial case that is being discussed on Twitter is the rumor of a bullying case carried out by LE SSERAFIM group member Kim Garam. Based on twitter tweet data, the researcher wants to find out how the opinion or response of the Indonesian people regarding the bullying case that befell Kim Garam by sentiment analysis. Sentiment analysis is one solution to overcome the problem of grouping opinions or reviews into positive or negative opinions. To be able to process data in the form of text, text mining methods are used and one of the techniques in text mining is classification. Naive Bayes Classifier Algorithm and Support Vector Machine are algorithms that are often used in text mining classification. The Naive Bayes Classifier has the advantages of being simple, fast and has high accuracy. While the Support Vector Machine is able to identify separate hyperplanes that maximize the margin between the two different classes. Sentiment classification results in this study consist of two class labels, namely positive and negative. Comparison of the Naive Bayes Classifier and Support Vector Machine methods for classifying responses to cases of bullying by Kim Garam on Twitter yielded high accuracy values of 96% for the naive Bayes classifier and 98% for the support vector machine. When viewed from the accuracy value obtained, it states that the Support Vector Machine algorithm is better than the Naive Bayes Classifier algorithm because it has a higher accuracy value.

Keywords: Bullying, Sentiment Analysis, Naive Bayes Classifier, Support Vector Machine, Twitter.