Abstract

Depression is a mental health disorder that must be detected early. It is estimated that around 300 million people suffer from depression worldwide. In fact, the World Health Organization or commonly called the WHO, estimates that a suicide occurs every 40 seconds worldwide due to depression. Currently depression can be detected from the social media activity of its users. This detection can be done by processing data obtained from opinions uploaded on social media. Then the opinion data is processed by a method and produces sentiment analysis. From this sentiment analysis, it will be used to detect whether someone has a tendency to depression or not. The social media commonly used for sentiment analysis is Twitter because there are 19.5 million Twitter users in Indonesia and Indonesia is the fifth largest country with Twitter users worldwide. As well as the ease of getting tweet data only by using the twitter API. So this study builds a classification model for sentiment analysis that can detect a person's depression through tweets on Twitter social media using the Support Vector Machine (SVM) method. Based on testing the system model using a confusion matrix, the model is able to detect which tweets indicate depression and get an accuracy value of 87.63%.

Keywords: Depression, Detection, Support Vector Machine, Twitter