

## Abstract

Depression is a mental disorder that can lead to death. More than 300 million people or 4.4% are expected to suffer from depression. Therefore, it takes a useful technology to detect depression with high accuracy so that depression can be detected early. Social Media has become a lifestyle of modern society. One of the most popular social media is the Reddit forum. On the user Reddit forum can express his opinion in a post without any restrictions. So it can be analyzed by text classification of new methods to know a person depressed or not. The classification of text used in this research is the method of Support Vector Machine, the author performs the right kernel selection and parameters, so as to provide the best performance, and assisted with the selection of Chi-square features to reduce some of the less relevant features of the *DataSet*. The result of classifying SVM with feature selection indicates that the use of a feature selection with SVM can increase the accuracy value, wherein when not using Chi-square only gets an accuracy of 97.94%, whereas if the use of chi-squared accuracy increases to 98.45%. Then when compared with several trials of *datasets* that did not preprocessing by using the selection of features has the highest accuracy value of 98.45%. This research can be concluded for the detection of depression *datasets* that are not preprocessing and assisted by the selection of features can produce the best performance.

**Keywords:** Reddit, Post, Feature Selection, Depression Detection, Chi-square, Support Vector Machine