ABSTRACT

Social media allows users to connect with each other in any part of the word not limited to space and time. With social media, an information can spread quickly and easily. But social media also has a negative impact if there is abuse, for example is cyberbullying. Based on statistical data obtained, 41-51% Indonesian teenagers aged 13-15 years old have been victims of cyberbullying. Even though the impact caused by cyberbullying is more painful than physical bullying. Instagram is one of the most popular social media for sharing images, photos, and videos which currently do not provide features to detect cyberbullying. This research aims to build a classification system of Instagram user comments into cyberbullying and not cyberbullying classes. The algorithms used for classification is SVM and NBC with TF and TF-IDF feature extractions. With stemming able to improve the accuracy but impact on decreasing of performance. From the test results with stemming, known that accuracy of SVM is better than NBC. Best accuracy in SVM is obtained with combination of SVM and TF as big as 85,2 %. While in NBC was 83,2 % with combination of NBC and TF-IDF. In further research it can be done by adding more datasets, try to use other feature extractions such as unigram or convert negation, and using another classification algorithms such as K-NN, decision tree, or neural network to get the best classification results.

Keywords : *classification, cyberbullying,* instagram, nbc, svm.