ABSTRACT

Indonesia is one of the countries that has many social media users, high social media consumption without being accompanied by a critical attitude in filtering the information obtained makes hoax news easier to spread. Hoax is news that is spread with the aim that the public believes in things that are not known to be true. Hoaxes can cause anxiety and hatred for those who are affected. In this final project research, a hoax news classification system on twitter is built using the multinomial naive bayes method combined with TF-IDF weighting and the use of information gain feature selection. The final test results show that the use of information gain in hoax classification can reduce the overfitting value of accuracy. The best accuracy result obtained from this research is 79.87% by using Multinomial Naive Bayes classification, TD-IDF weighting, and without the use of Information Gain feature selection.

***Keywords**: hoax, twitter, TF-IDF, information gain, multinomial naive bayes*