ABSTRACT

Microblogging site such as Twitter has an important role in the spreading information related to natural disasters. The volume and speed of Tweets that sent in an emergency situation tend to be high so that it makes respondent of disaster difficult to response the information quickly. The information that obtained from tweet data is variative so that it is necessary to filter messages that can contribute to generating information that related with disaster. After filter the informative Tweet message, it is needed to classify the type of disaster and get the information related to disaster that occur in the tweet message based on the ontology that has been designed. The ontology method is chosen because it can handle classification into several classes of natural disasters based on connectivity between classes. The results from this classification is the trend of most talked about natural disasters, then we will get important information related to natural disasters in real time based on geolocation of all village in Indonesia. Based on the results of the test, the use of ontology in the classification of Tweet on natural disasters has a good performance and accuracy by using the filtering process can achieve 85.79% for F1-measure and 91% for accuracy from 100 Tweets with comparison of disasterrelated: non-nature disaster datasets is 50:50.

Keywords: Natural Disaster, Ontologi, Classification.