

## ABSTRACT

Exchange of information during natural disasters on social media, especially twitter has become a habit of users in Indonesia especially during critical situations. This situation can be used to process the data of these information into relevant natural disaster information.

In this case, not all tweets related to natural disasters have valid information, so the purpose of this research is to create a system that will map natural disaster tweets that are happening automatically based on the location of the tweet user. Text classification method is used to be able to sort out data that has information about natural disasters that are happening from tweet data that is obtained in real-time.

This research will crawl data from twitter to be analyzed using the Support Vector Machine (SVM) algorithm as a classifier and POS TF-IDF as feature extraction, obtained the value of F1- score 83.56%, Precision 91.44%, Recall 85.42%, and accuracy 91.5% with SVM model with parameter  $C = 0.7$  and  $(\text{gamma}) = 2$ .

**Keywords:** natural disaster, text classification, twitter.