Abstract

Twitter is one of the biggest platforms where a lot of short messages (tweets) are published every day. Users tend to express their opinions and thought freely through Twitter that Twitter becomes an ideal source of capturing public opinion on certain topics such as brand, product or character. One feature that is found on the twitter is hashtag. Hashtag marked with symbol fence (#). It is placed in front of the topic or phrase. Very commonly, people use hashtag in a tweet to express the topic of a tweet roughly.

This final project using the properties of the co-occurence between topics and other hashtag's neighbors which is represented in a graph model, positive and negative value of each tweet and Loopy Belief Propagation algorithm to determine the polarity of sentiments of a topic within a certain time period, wether the topic is positive or negative. The polarity probability of each tweet obtained by converting the value of the score s from the classification results using SVM.

Key Word : *Sentiment Analysis* , *Hashtag*, *Graph-based Classification, Loopy Belief Propagation*