

Abstract

Product review data is very important for the consumer who want to buy a product and for the producer who want to see the reaction form the consumer. Too many review data make harder to filtering the information, so it's needed a automated program that can detect the review data, whether it's positive or negative reviews. In the Sentiment Analysis research that have been done before, specifically in the classification part, still has a improvement potency with adding more features that could make more classifier information generated. In the previous research, there is still there is no sematic traits feature which can add product feature information who has semantic and still some negation traits feature information that can change the value of product feature from negative to positive or vice versa.

In this final project offers solution to handle the problem described above that is by using Semantic role labeling and Negation handling method. After researching the use of semantic role labeling and negation handling method can be concluded on the use of semantic role labeling as one of the features take effect when using Nikon Coolpix and Apex Dvd Player dataset, because on Nikon Coolpix has variation of data characteristic which is almost similar to Apex Dvd Player, Has no effect when using Canon G3 datasets, Nokia 6610 and Zen Mp3 Player which have data characteristics with not good data variations for combination with semantic role labeling features. Then the effect of accuracy depends on the data characteristics of the semantic role labeling features as described in table L - 0 - 12 and table L - 0 - 13. The use of negation as one of features the consistent can improve the accuracy of each dataset having different characteristics, an average increase of 1.07%.

Key word: *Classification , Negation handling, Semantic role labeling, Random Forest*