Abstract

Social media is a popular network through which user can share their reviews about various topics, news, products etc. People use internet to access or update reviews so it is necessary to express opinion. Sentiment analysis is to classify these reviews based on its opinion as either positive or negative category. First we have preprocessed the dataset to convert unstructured reviews into structured form. Then we have used lexicon based approach to convert structured review into numerical score value. In lexicon based approach we have preprocessed dataset using feature selection and semantic analysis. Stop word removal, stemming, POS tagging and calculating sentiment score with help of SentiWordNet dictionary have been done in preprocessing part. Then we have applied classification algorithm to classify opinion as either positive or negative. Support vector machine algorithm is used to classify reviews where RBF kernel SVM is modified by its hyper parameters which are soft margin constant $C$, Gamma $\gamma$. So optimized SVM gives good result than SVM and naïve bayes. At last we have compared performance of all classifier with respect to accuracy.
References


Index Terms

Computer Science Information Sciences

Keywords

Sentiment analysis, Text mining, SentiWordNet, SVM, Naïve Bayes, RBF kernel SVM