

## Multi-Class Text Classification Using Ensembles of Classifiers

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**Abstract :** Text Classification is the methodology to classify any given text into the respective category from a given set of categories. It is highly important and vital to use proper set of pre-processing , feature selection and classification techniques to achieve this purpose. In this paper we have used different ensemble techniques along with variance in feature selection parameters to see the change in overall accuracy of the result and also on some other individual class based features which include precision value of each individual category of the text. After subjecting our data through pre-processing and feature selection techniques , different individual classifiers were tested first and after that classifiers were combined to form ensembles to increase their accuracy. Later we also studied the impact of decreasing the classification categories on over all accuracy of data. Text classification is highly used in sentiment analysis on social media sites such as twitter for realizing people's opinions about any cause or it is also used to analyze customer's reviews about certain products or services. Opinion mining is a vital task in data mining and text categorization is a back-bone to opinion mining.

**Keywords :** Natural Language Processing, Ensemble Classifier, Bagging Classifier, AdaBoost

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