Abstract

Classification is a process that classify data into their true class. In this periode, multi-label classification methods are increasingly required modern applications, such as protein function classification, gen classification, and semantic scene classification. The problem that arise is how to predict the true class from many different characteristics of multi-label data.

Method or algorithm that implemented is called by ADTBoost.MH algorithm. This algorithm came from the idea of boosting methods and decision tree methods. Using the boosting iteration, this algorithm build an Alternating Decision Tree (ADTree) as a classifier. ADTBoost.MH solving multi-label classification problem with binary classification procedure.

Experiments show that ADTBoost.MH is reliable to solve classification problem from different characteristics of multi-label data. More importantly, this algorithm shows a better performance to classify multi-label data rather than use single-label classification algorithm to classify multi-label data.

Keywords : multi-label, ADTBoost.MH, ADTree, boosting, classifier, evaluation metrics