## **Abstract**

Data mining is one kind of science that useful to obtain pattern, model, or information into another interesting and newest form from a lot of datas. The growth of data mining has increased because in world of business it is needed to get important information.

Classification is one kind of data mining technique. Classification is very helpful to solve any troubles on data mining. Classification is useful to build simply model about distribution of class label that related in prediction of next value. Classification method that usually used is decision tree.

BOAT (*Bootstrapped Optimistic Algorithm for Tree Construction*) is one kind of classification algorithm that using decision tree. BOAT is decision tree algorithm which builds decision tree using combination some trees from some of bootstraps that have chosed before.

Classification BOAT algorithm is used for this research to solve any troubles of classification. For the result, with 10% of bootstraps, this algorithm needs elapsed time faster than WEKA (*Waikato Environment for Knowledge Analysis*).

Keywords: Data mining, classification, decision tree, BOAT