

## Abstract

Data Mining is a solution that can find pattern and rule from large data. From bussiness aspect, data mining have a potential information. Data mining can discover hidden information.

C&RT (Classification and Regression *Tree*) is a method or algorithm from one of the data exploration technique that is decision *tree*. Decision *tree* is a interesting classification method because easy to understand by people, constructed more fast, and have good accuration on the classification result.

If it compared with other classification method, C&RT is need long time in *tree* construction. Because the accuration of C&RT is good for data classification, on this final poject will do a research to optimize *tree* construction on C&RT. Sampling the data is used to accelerate splitting root of *tree* in *tree* construction.

**Keywords:** data mining, classification, decision *tree*, C&RT