

ABSTRACT

Data mining is a mining important information process from a large database. One of data mining implementations is classification. Classification can be implemented using artificial neural network (ANN). But ANN itself is a black box that we can't know classification procedure inside. Therefore, it's needed a representation formed as conjunctive rule (*if then* with one/more conditions in antecedent) to describe classification procedures in ANN so it's easier to understand.

Combination of pruning and search based method is an approach that can be used to extract rules and it's able to obtain general rules that can represent ANN's classification procedures. Pruning will eliminate not needed links or node. And search based method will search a rule for each class from pruning's result.

In this final task we will develop an implementation of rule extraction from ANN using pruning and search based method in data classification.

Keywords : *Data mining, artificial neural network, search based method, pruning, rule extraction*