ABSTRACT

Data mining is an important information mining process from a large database. One of data mining implementations is classification. Clasification is a process to determine class of data which class hasn't been known.

Classification can be implemented with artificial neural network (ANN) to get high accuration. But ANN itself is a black box which rules are implicit, therefore, it's needed a rule extraction process from ANN. Rule extraction can be implemented with Search Based method.

In this final task, we analize three parameters of ANN, they are SSEav, Learning Rate and number of hidden node, to the accuration of rule obtained by Search Based method. Data which are used are AND, OR, XOR and Weather. From the analysist to each data, search based method can obtain rule with accuration 100 % and the obtained rule never cause missclassification.

In this final task we develop an implementation of rule extraction from ANN using search based method in data classification. Implementation use Microsoft Visual Basic 6 and Microsoft Access as DBMS.

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