

Abstract

Along with technological development, the use of computerized systems in various fields be it in business transactions, as well as for government and social circles, has produced data that are very large. For that, we need a way of reducing the data without losing important information contained in it, with the main problem that occurs is the high dimension of the data itself. Therefore, the selection must be done against some of the attributes that have great influence among other attributes of feature selection.

Feature selection has the ability to reduce the dimensionality of a data so that it can increase the effectiveness of the classifier. There are several approaches for feature selection techniques of implementation. In the present study, to be used in searching the scientific method, namely simulated annealing artificial intelligence to develop the entropic measure, based on information gain approach used ID3 to construct the tree.

In a previous study using a variety of methods that KBANN, BACKPROP, PEBLS, PERCEPTRON, ID3, COBWEB, and Near. Neighbor with the same dataset. Then be compared to the results in this thesis, carried out feature selection in the selection of the most influential attributes by using the simulated annealing search method. After the selected attributes will be formed pattern classification rules from training data that will be applied to the data testing. So will result in the classification accuracy and its attributes are selected, the greater the resulting accuracy will represent the influential attributes.

Keyword : feature selection, artificial intelligence, simulated annealing