

ABSTRACT

The development of information technology very rapidly causing a very rapid data growth. From the collection of such data can be extracted or added value of knowledge through data mining process, one through the classification process. One of the classification algorithm is an algorithm Averaged One-Dependence Estimator (AODE). AODE classifier is a probability-based methods and Bayesian theorem where each attribute depends on the class and other single attribute. AODE algorithm reduces the loss in accuracy results from use of the assumption of independent attributes on Naive Bayes. However, AODE algorithm can only handle discrete data type. In this thesis, carried out the implementation of continuous classification data type on AODE to perform preprocessing discretization and calculation with a Gaussian probability density function. Testing will be done by comparing the processing performance with the discretization of continuous attributes in the AODE or combining discretization and Gaussian Density Function in the AODE (Hybrid AODE). The parameters analyzed were the f-measure accuracy and classification time. AODE showed better accuracy on data that are not normally distributed, while the Hybrid AODE showed better accuracy in the data normally distributed. Classification time required by Hybrid AODE tends to be lower than the AODE.

Keywords : *AODE, averaged one-dependence estimator, bayes, classifier, discretization, gaussian density function, hybrid AODE, classification, probability.*