## **Abstract**

Data mining is an extraction of potential information implicitly from a database. One of many tasks in data mining that would be the subject of this final project is classification, especially Bayesian Belief Networks (BBN).

Bayesian Belief Networks (BBN) is a directed acyclic graph whose nodes represent variables and arcs represent statistical dependence relations among the variables and local probability distributions for each variable given values of its parents.

This final project analyzes the performance of Naïve Bayes classifier and Tree Augmented Naïve Bayes classifier as classification technique of BBN which use restricted structure learning and implement these classifiers to solve classification problems in data mining.

As the result, it had been proved that TAN classifier performance better than Naïve Bayes classifier in accuracy although for construct classification model need longer time.

**Keywords**: Bayesian Belief Networks, TAN, Naive Bayes, classifier, classification, data mining.