

# DATA MINING APPLICATION ON STUDENT DATABASE

## Abstract

The amount of data maintained in electronic format is dramatically increasing and it treasures lot of hidden information which may be valuable. Data mining or Knowledge Discovery in Database (KDD) is used to uncover hidden or previously unknown information that is potentially useful. It is a collection of techniques for efficient automated discovery of previously unknown, valid, useful and understandable patterns in large databases. The patterns aid in decision making process. Data mining have been used in different disciplines to search for significant relationships among variables in large data sets. This project is an attempt to extend the application in an education environment. In this work, data mining techniques are applied to the student database to identify the possible reasons for failure. The relationship between university examination results and the students background details are established using clustering and classification techniques. In particular, K-means algorithm is used for performing the clustering, followed by finding the correlation coefficient to determine the relation. Moreover, the decision tree approach is also used for the classification problem, where a tree is constructed to model the classification process. The inferences are then drawn with the help of the output of the algorithms and are compared.

Done by

ABDUL NASAR P  
AVINASH PAUL  
KRIPA JAYARAJ  
KRISHNAKUMAR O C  
JAFIR K P