

# Comparative Study of Decision Tree Algorithms: ID3 and CART

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## Abstract

*Classification of data objects based on a predefined knowledge of the objects is a data mining and knowledge management techniques used grouping similar data objects together. It can be defined as supervised learning algorithms as it assigns class labels to data objects based on the relationship between the data items with a predefined class label. Classification algorithms have a wide range of applications like fraud detection, artificial intelligence, and credit card rating etc. Also there are many classification algorithms available in literature but decision trees is the most commonly used because of its ease of implementation and easier to understand compared to other classification algorithms. In this study, decision tree algorithm: Iterative Dichotomiser (ID3) and Classification and Regression Tree (CART) algorithms are implemented and compared experimental results from both training and testing phase to evaluate the performance of two algorithms using Stalog (German Credit), Mushroom and Stalog (Heart) datasets.*