

Decision Tree:

A Decision tree is the denotative representation of a decision making process.

They are used to arrive at conclusions based on the data available from decisions made in past.

These conclusions are assigned values, deployed to predict the course of action likely to be taken in the future.

Decision trees are statistical, algorithmic models of machine learning that interpret and learn responses from various problems and their possible consequences.

As a result, decision trees know the rules of decision-making in specific contents based on the available data.

As name suggests, the decision tree algorithm is in a form of a tree-like structure. Yet it is inverted.

A decision tree starts from root or a top ~~off~~ decision node that classifies datasets based on the values of carefully selected attribute.

The root node represents the entire dataset. This is where the first step in the algorithm selects the best predictor variable.

Decision trees are simple and natural learning models.

They are used to develop learning machines by teaching them how to determine success and failure.

Decision tree learning uses a decision tree (as a predictive model) to go from observations about an item (represented as the branches) to conclusions about the item's target value (represented as the leaves).

It is one of the predictive modeling approaches used in statistics, data mining and machine learning.

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