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Women In Data

5 February 2021

Decision Tree

Machine Learning Algorithms

Decision Trees are a supervised learning method used for both classification and regression tasks.

They are a flow-chart like diagram that we use to determine a course of action or show a statistical probability. Each branch of the decision tree represents a possible decision, outcome, or reaction.

They can be very useful at determining what is the most likely outcome from a large categorical data set with conditional parameters. They are also what are use to build up a Random Forrest algorithm.

Some examples of where decision trees can be used are:

* Automated telephone systems guiding you to the outcome you need, e.g. 'For option A, press 1. For option B, press 2', and so on.

* Banks using historical data to predict how likely it is that a borrower will default on their loan payments

* Business owners to decide whether the net gain from a decision is worthwhile.

You will see decision trees used commonly by service providers such as mobile phone companies and medical services to create "chat bots" for customers to receive help for FAQ and simple queries.