**DECISION TREE**

**COMSATS University Islamabad**

Sahiwal Campus



**Usama Sarwar**

FA17-BS(CS)-090-B

**Dr. Mazhar Sadiq**

CSC354 | Machine Learning

April 17, 2020

DECISION TREE

Decision tree learning is one of the predictive modeling approaches used in statistics, data mining and machine learning. It uses a decision tree (as a predictive model) to go from observations about an item (represented in the branches) to conclusions about the item's target value (represented in the leaves). Tree models where the target variable can take a discrete set of values are called classification trees; in these tree structures, leaves represent class labels and branches represent conjunctions of features that lead to those class labels. Decision trees where the target variable can take continuous values (typically real numbers) are called regression trees.

In decision analysis, a decision tree can be used to visually and explicitly represent decisions and decision making. In data mining, a decision tree describes data (but the resulting classification tree can be an input for decision making). This page deals with decision trees in data mining.



