

Assignment 4: Decision tree learning for car evaluation

In this assignment, you will implement a decision-tree algorithm and apply it to car evaluation (please see the supplied dataset).

1. Implement the decision tree learning algorithm. You may program in C/C++, Java. Use the information gain criteria (as described in class and in your textbook) for attribute selection at each node.
2. Divide the data set randomly between training (80%) and testing (20%) sets. Use your algorithm to train a decision tree classifier from the training data and apply it on the test data. Run this experiment 20 times. Then calculate average test accuracy. **Report the mean accuracy and standard deviation of accuracy.**