

REPORT

Lab8.Animal Classification using Decision Trees

In this lab we have learned on how to build ID3 and CART Decision Tree to classify whether an animal is Mammal or Reptile.

On this case we have to create a dataset and save it as csv file then import using pandas `pd.read_csv` and check the properties of data.

Building ID3 model by creating Decision Tree using entropy criterion then perform training and testing also print accuracy and classification report then visualize your Decision Tree model using `graphviz`.

Then create a test data to check whether our predictions are correct? For CART Decision Tree will use `criterion='gini'` then for this model we train with full data without splitting it. Predict that for test file also visualize your CART Decision Tree model using `graphviz`.

This same thing we are performing on full animal dataset at <https://archive.ics.uci.edu/ml/datasets/Zoo>