

Machine Learning – WS'12

Exercise-1

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Problem-1:

Simple Linear Regression through WEKA API:

Write a Java Program that uses Weka API to perform Linear Regression on the 'Housing' data provided with the exercise. Load the train and test files using an appropriate Loader class. Use Linear Regression as a classifier function class. Use its constructor and methods summary to train regression function on train file and then this model to evaluate using test file.

Attached: housing-train.arff , housing-test.arff

[Hint] To learn more about using Weka API in your Java source code, try to search in:

<http://weka.wikispaces.com/>

Problem-2:

Warm up with Octave:

A restaurant chain wants to predict profit given the population of the city, in which they want to open a new franchise. Attached is the restaurant data set with two columns, Population of the city and second column is Profit earned in that city.

To visualize this data, you are required to load this data (as vectors or matrices) in Octave variables. Then plot this data by putting "Profits in 10,000s" as label of Profit on y-axis and "Population of city in 10,000s" as label of Population on x-axis. Use different options for 'plot' command to change color and size of data point markers on the plot.