Machine Learning
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1st Tutorial – Correlations and Decision Trees

Covariance and correlation

Read the text below about covariance and correlation:

http://ci.columbia.edu/ci/premba_test/c0331/s7/s7_5.html

In Matlab, load the **hospital.mat** data set and:

a. Calculate the covariance between Weight and Blood pressure in patients

b. Calculate the correlation between Age and Blood pressure in patients

A list of sample datasets available in Matlab can be found at:

https://uk.mathworks.com/help/stats/sample-data-sets.html

Decision Trees

Follow the Matlab examples of decision trees available at:

https://www.mathworks.com/help/stats/decision-trees.html

See also:

View Decision Trees at
https://uk.mathworks.com/help/stats/view-decision-tree.html

Prediction using Classification and Regression Trees at
https://uk.mathworks.com/help/stats/prediction-using-classification-and-regression-trees.html)

Cross-Validation of Decision Trees (crossval) at
https://uk.mathworks.com/help/stats/classificationtree.crossval.html?searchHighlight=CrossVal%20classification%20tree&s_tid=doc_srchtitle

Apply Matlab functions *fitctree* and *predict* to the Iris dataset available at:

https://en.wikipedia.org/wiki/Iris_flower_data_set