

MATLAB for PCA and MDA on Iris Dataset

The Classification Toolbox of MATLAB has codes for various machine learning functions that are covered in our textbook. In this assignment we shall use the PCA and MDA functions for feature dimension reduction.

MATLAB:

1. The Classification Toolbox is installed in the Engineering Windows labs in EBE 1219, 1243, 1244, and 1245. On logging into the system, you will see a shortcut in the Start Menu named "Matlab Classification Toolbox" that will point to the folder "C:\CS\Classification_toolbox" where you will see the Matlab files.
2. Once you have started MATLAB, add the path of the classification toolbox by using the the following command in the Command Window:

```
addpath 'C:\CS\ClassificationToolbox';
```

PCA:

Perform PCA by choosing the function **PCA** from the Classification toolbox.

MDA:

Perform MDA by choosing **MultipleDiscriminantAnalysis** from the Classification toolbox.