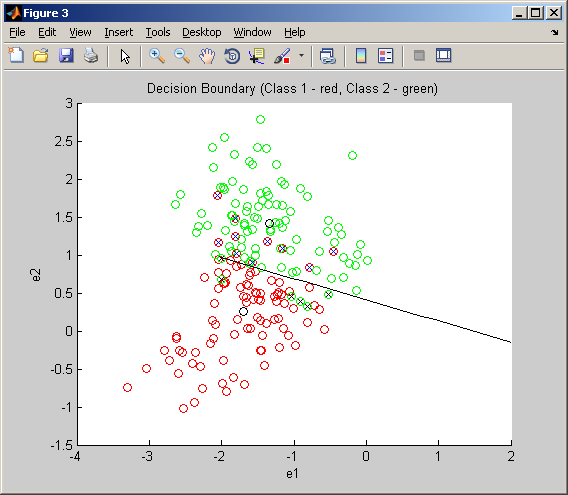
# Linear Classification 2D (MDA projection)

UsePCA\_MDAFeatureReduction = 1 % 0=PCA, 1=MDA

UseClassificationMethod = 0 % 0=2D, 1=3D, 2 = ANN2D, 3 = ANN3D



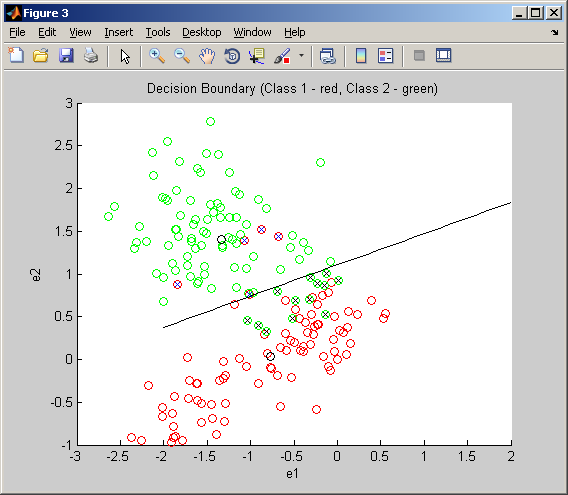
Confusion matrix on training set (16 errors)

Ctrain =

83 6

10 87

***err\_train = 0.0860***



Confusion matrix on test set (18 errors)

Ctest =

88 13

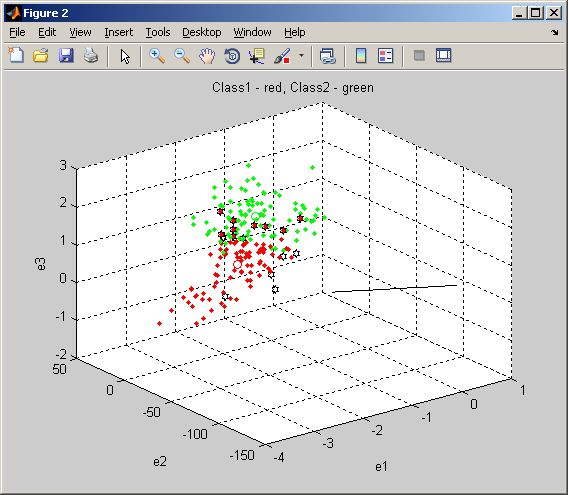
5 80

***err\_test = 0.0968***

# Linear Classification 3D (MDA projection)

UsePCA\_MDAFeatureReduction = 1 % 0=PCA, 1=MDA

UseClassificationMethod = 1 % 0=2D, 1=3D, 2 = ANN2D, 3 = ANN3D



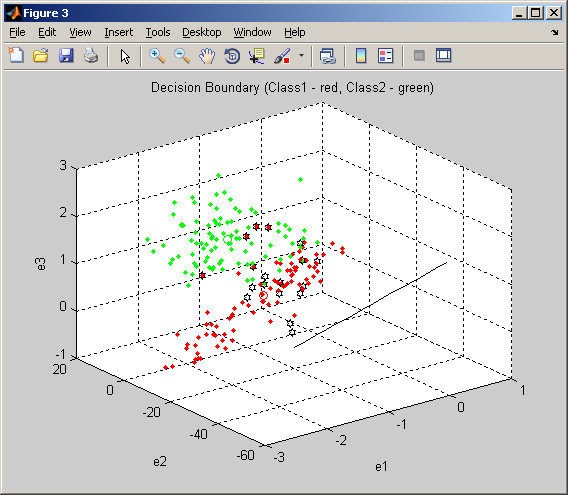
Confusion matrix on training set (16 errors)

Ctrain =

83 6

10 87

***err\_train = 0.0860***



Confusion matrix on test set (18 errors)

Ctest =

88 13

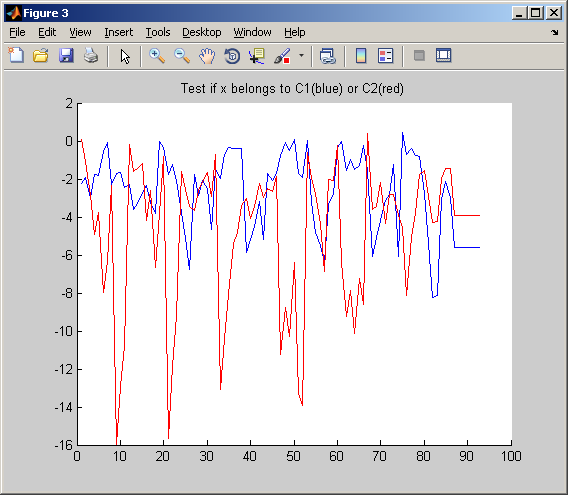
5 80

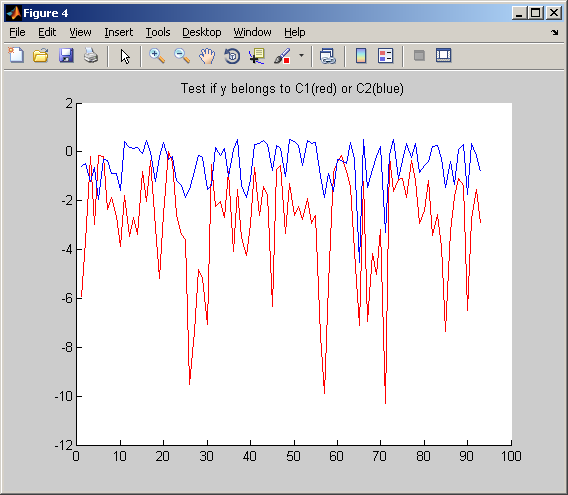
***err\_test = 0.0968***

# Bayesian Decision Theory (MDA projection)

UsePCA\_MDAFeatureReduction = 1 % 0=PCA, 1=MDA

UseClassificationMethod= 4 % 0=2D, 1=3D, 2 = ANN2D, 3 = ANN3D, 4 = Bayesian





Ctest =

47 8

46 85

***err\_test = 0.2903***

# ANN Classification 2D (MDA projection)

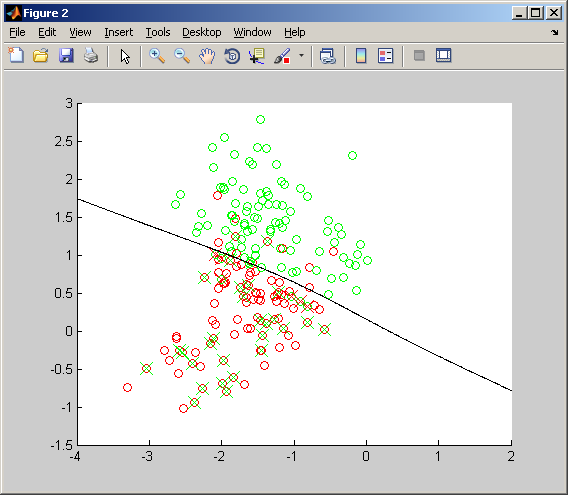
UsePCA\_MDAFeatureReduction = 1 % 0=PCA, 1=MDA

UseClassificationMethod = 2 % 0=2D, 1=3D, 2 = ANN2D, 3 = ANN3D

nhidden = 5; % Number of hidden units.

alpha = 0.2; % Coefficient of weight-decay prior.

opt = 50; % Number of training cycles.



Ctrain =

82 11

6 87

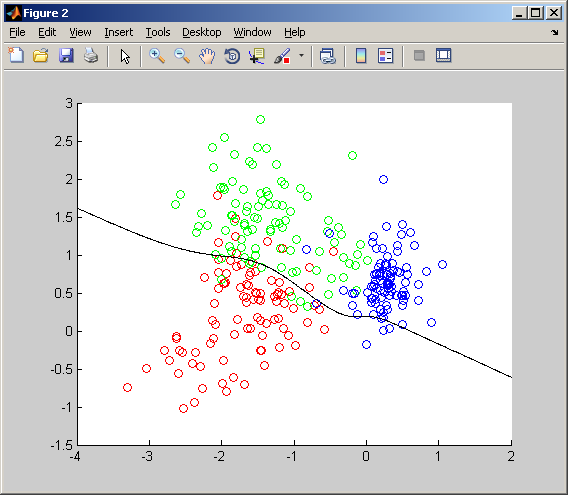
err\_train = 0.0914

Ctest =

65 28

6 87

err\_test = 0.1828



Ctrain =

83 10 0

8 83 2

1 3 89

**err\_train = 0.0860**

Ctest =

49 14 30

8 83 2

1 3 89

**err\_test = 0.2079**

# ANN Classification 3D (MDA projection)

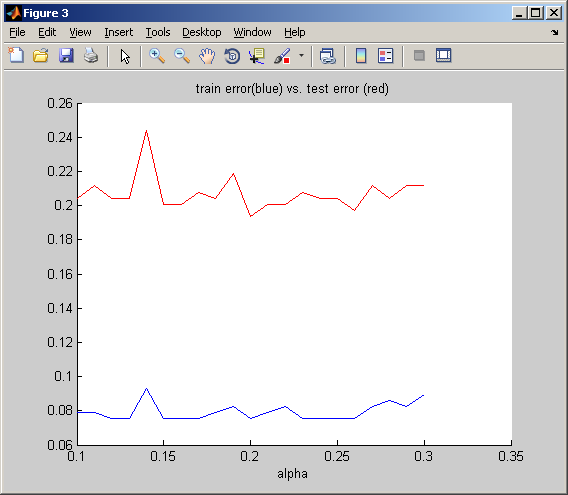
UsePCA\_MDAFeatureReduction = 1 % 0=PCA, 1=MDA

UseClassificationMethod = 3 % 0=2D, 1=3D, 2 = ANN2D, 3 = ANN3D

nhidden = 5; % Number of hidden units.

alpha = 0.25; % Coefficient of weight-decay prior.

opt = 50; % Number of training cycles.



Ctrain =

83 10 0

6 86 1

1 4 88

**err\_train = 0.0789**

Ctest =

48 10 35

6 86 1

1 4 88

**err\_test = 0.2043**