

PATTERN RECOGNITION ASSIGNMENT-1

REPORT

GROUP -3

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in the guidance of

Dr. A.D Dileep
(Asst. Professor)

School of Computing and Electrical Engineering
September 2016

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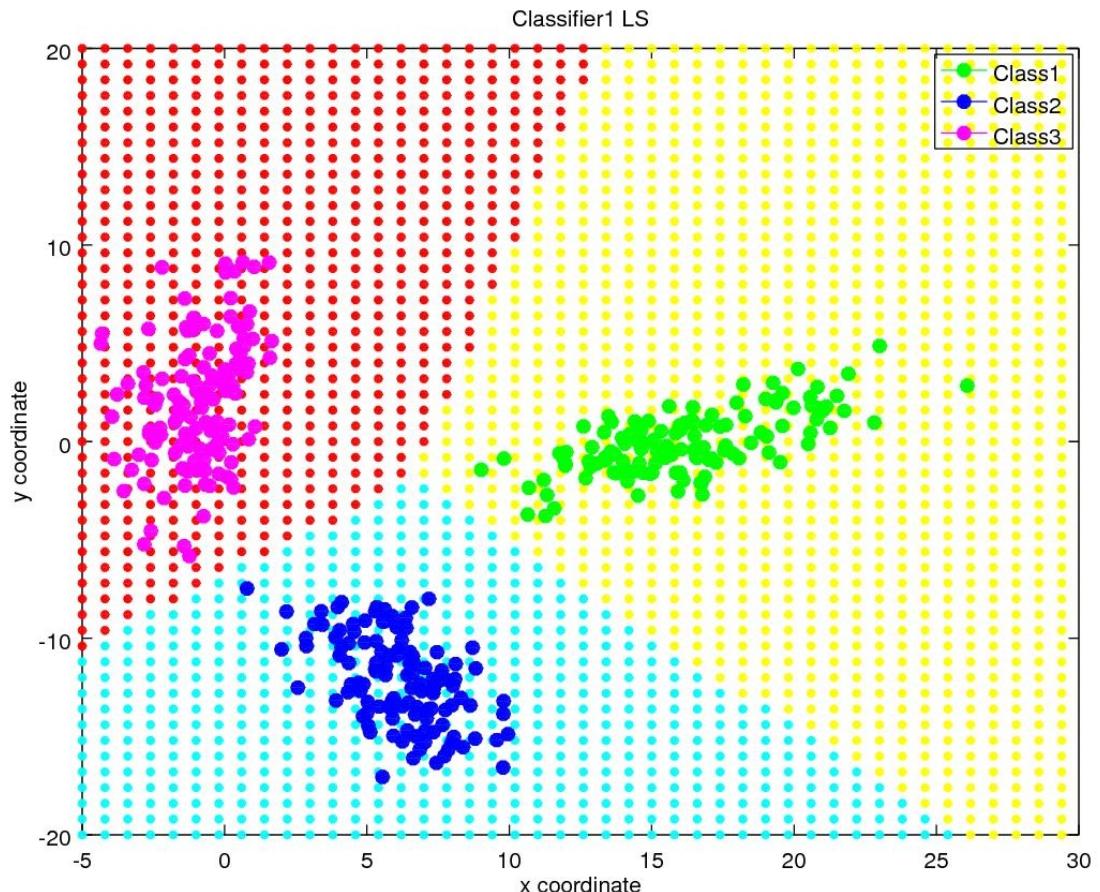
AIM

EXPERIMENTAL OBSERVATIONS

Bayes Classifier

Dataset 1(a) : Linearly Separable data: (LS_Group3)

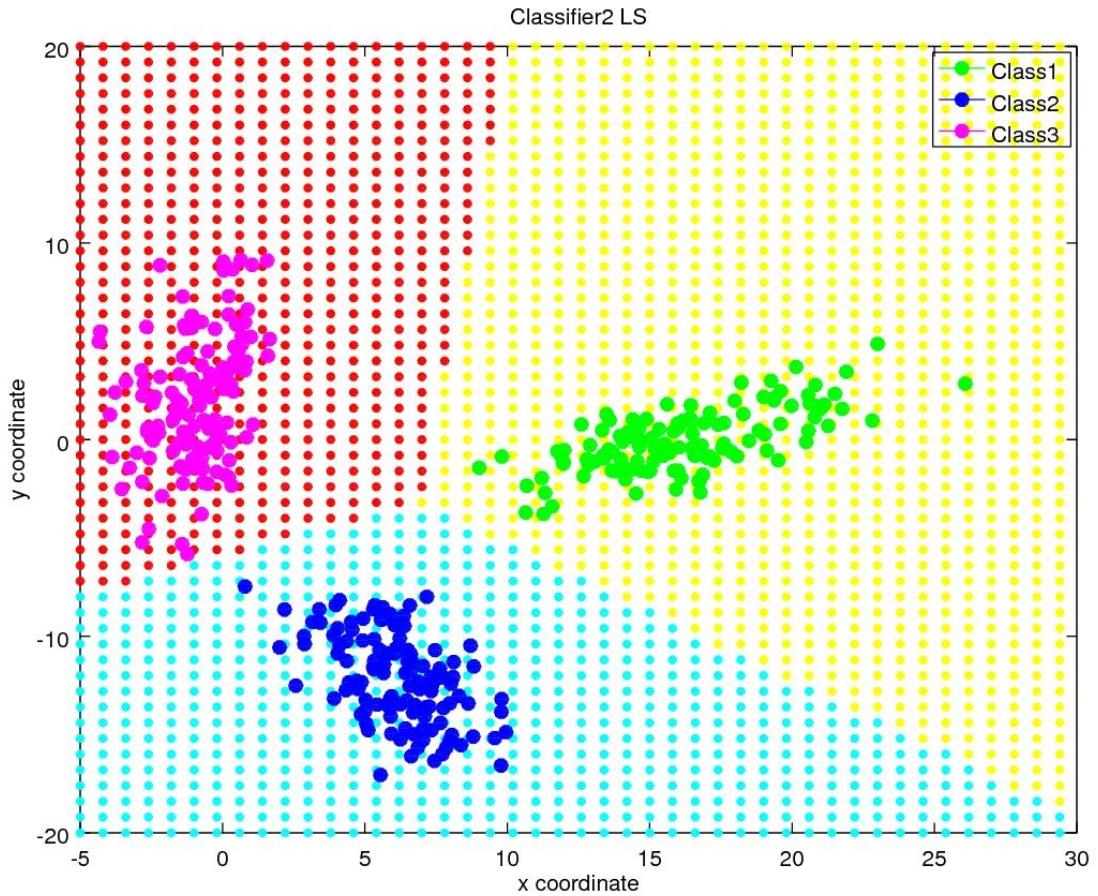
Classifier 1:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Classifier 2:



Classification Accuracy

Precision for Class1

Precision for Class2

Precision for Class3

Mean Precision

Recall for Class1

Recall for Class2

Recall for Class3

Mean Recall

F-measure for Class1

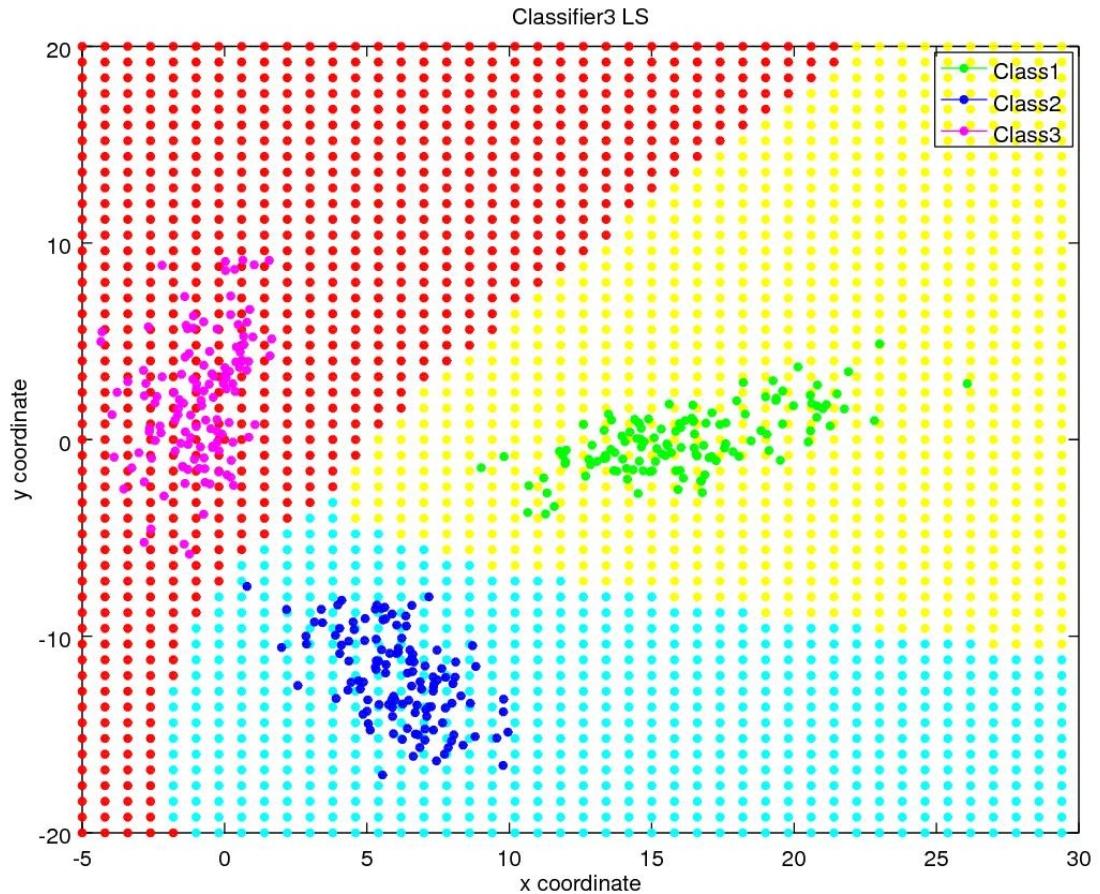
F-measure for Class2

F-measure for Class3

Mean F-measure

Confusion Matrix:

Classifier 3:

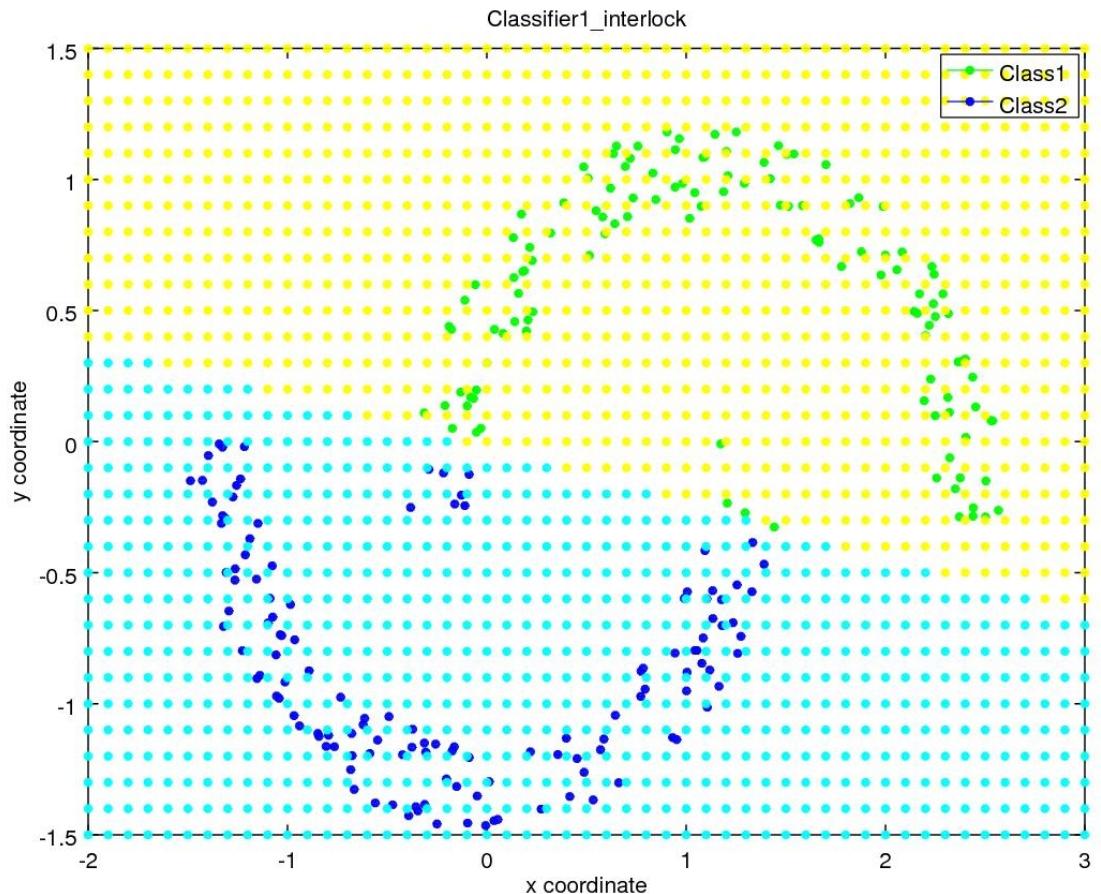


Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Dataset 1(b) : Interlock

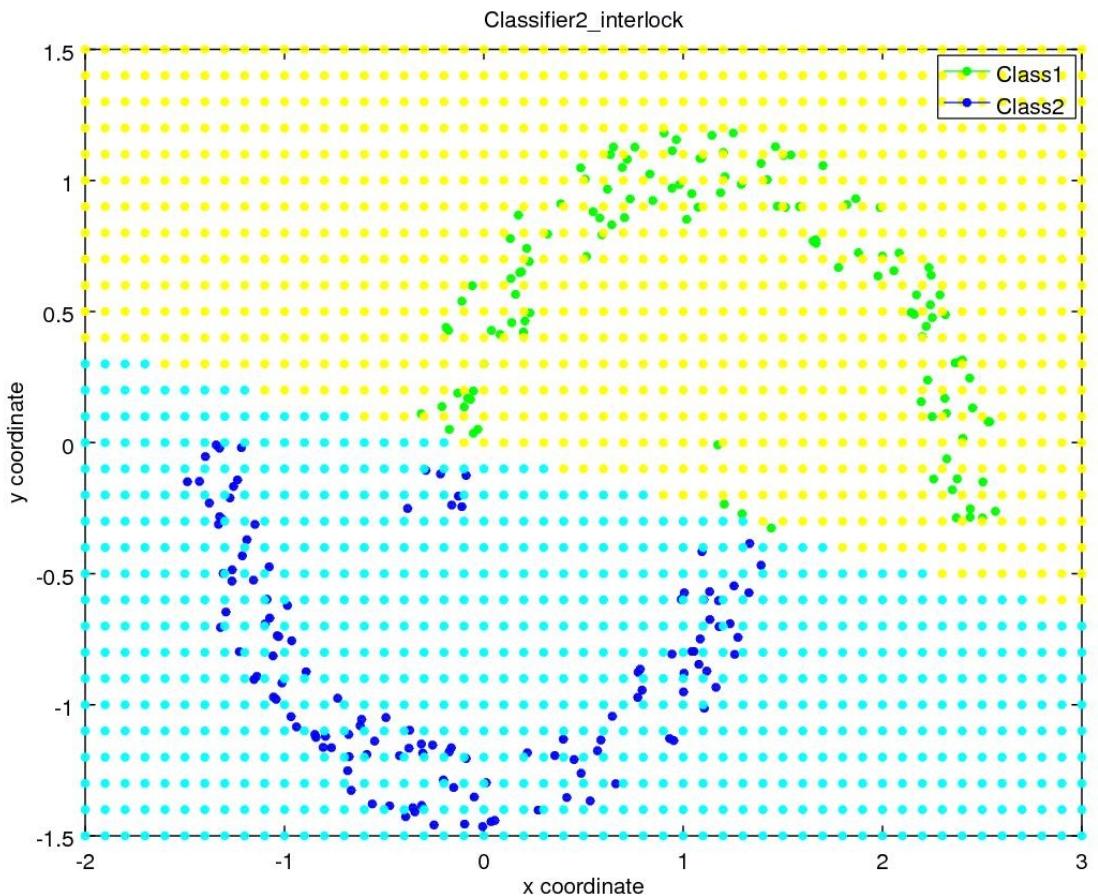
Classifier 1:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

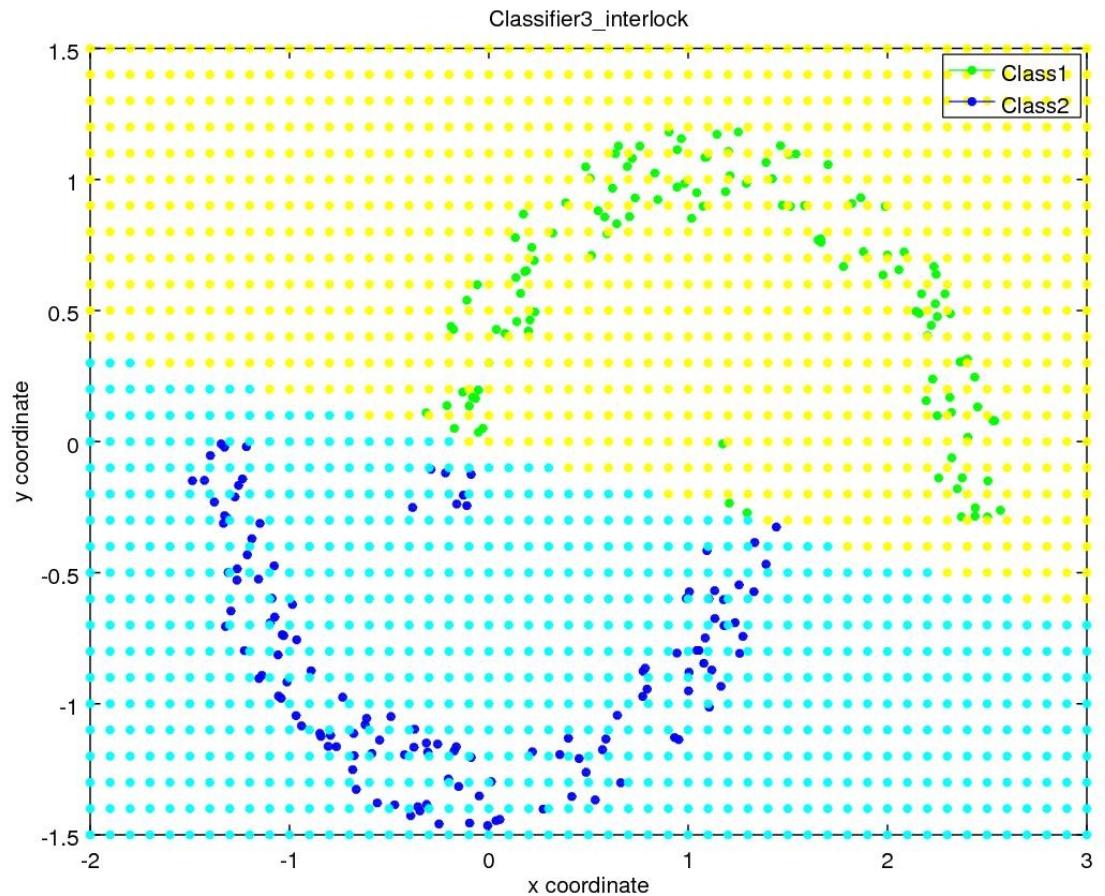
Classifier 2:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Classifier 3:

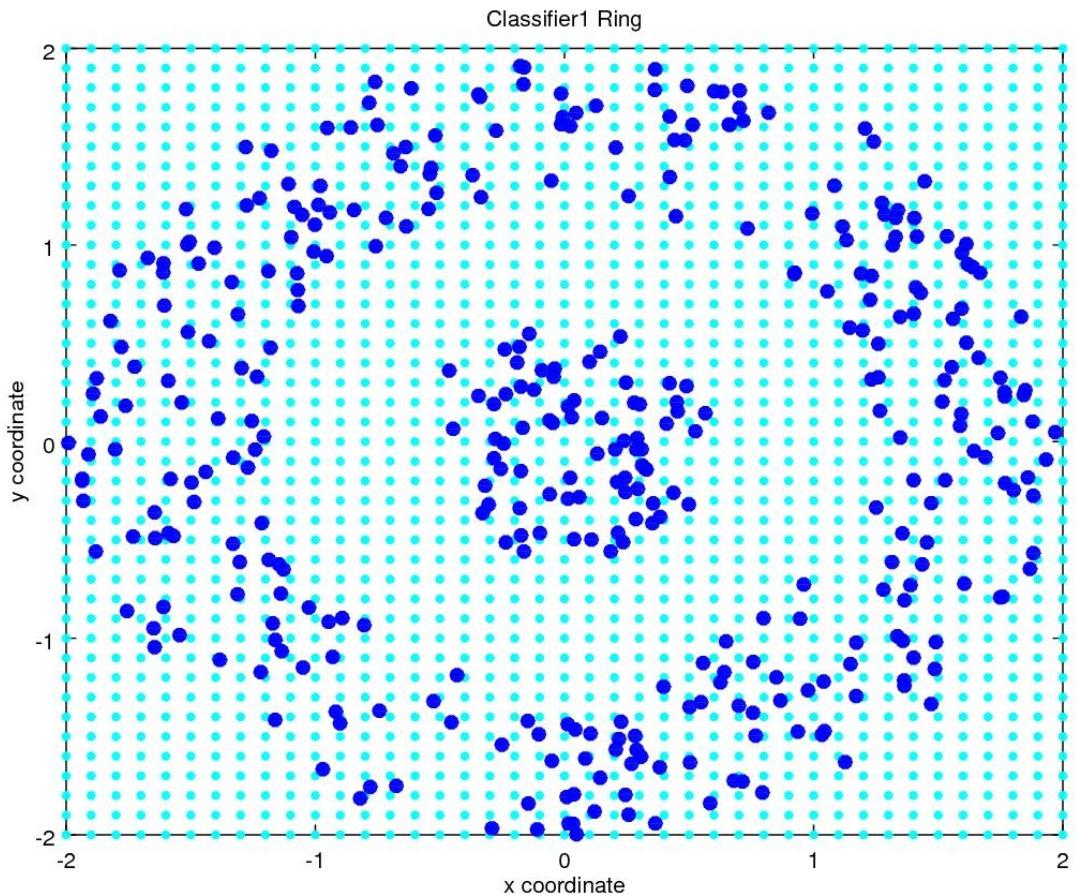


Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Dataset 1(b) : Ring

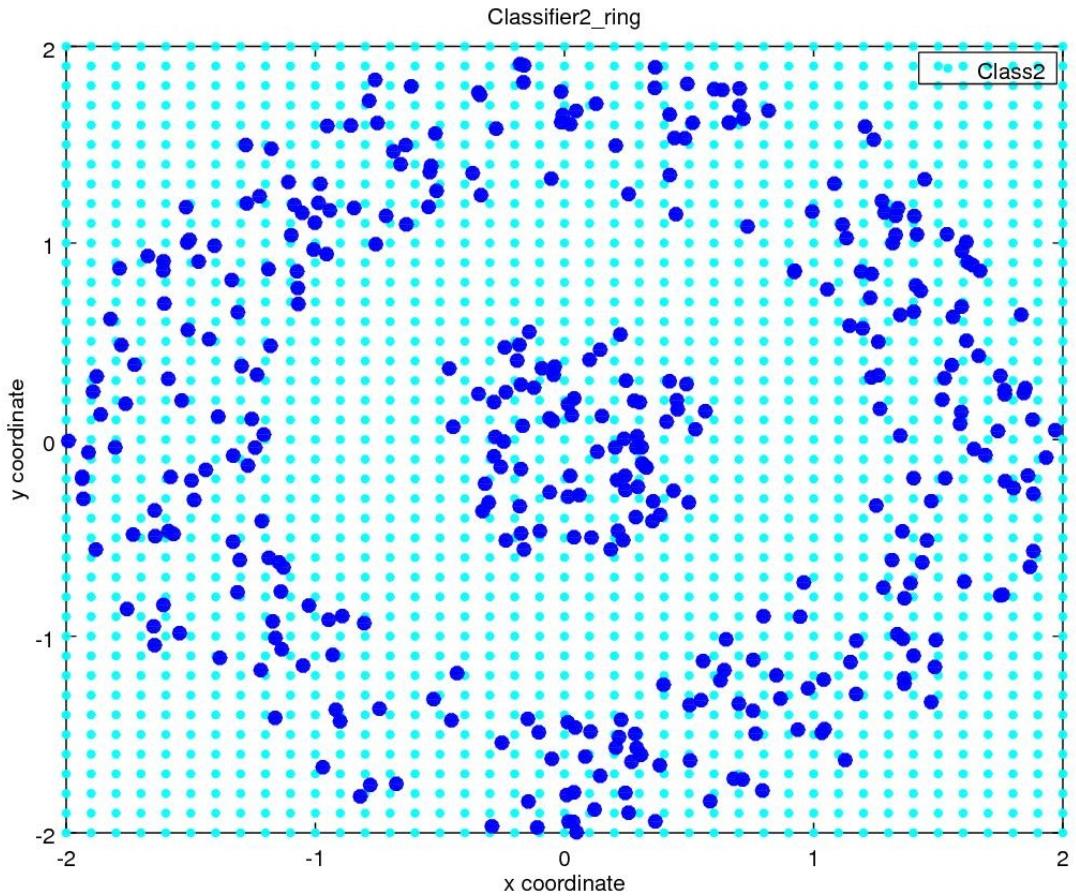
Classifier 1:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

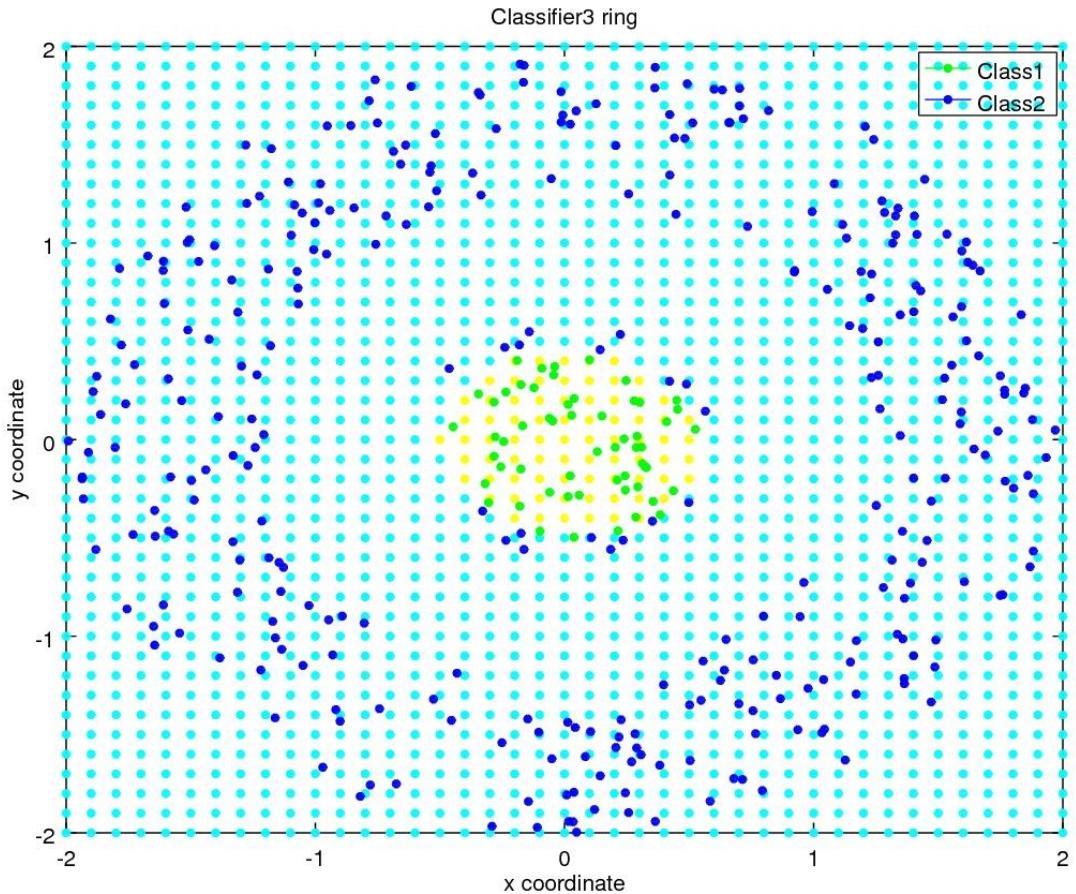
Classifier 2:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Classifier 3:

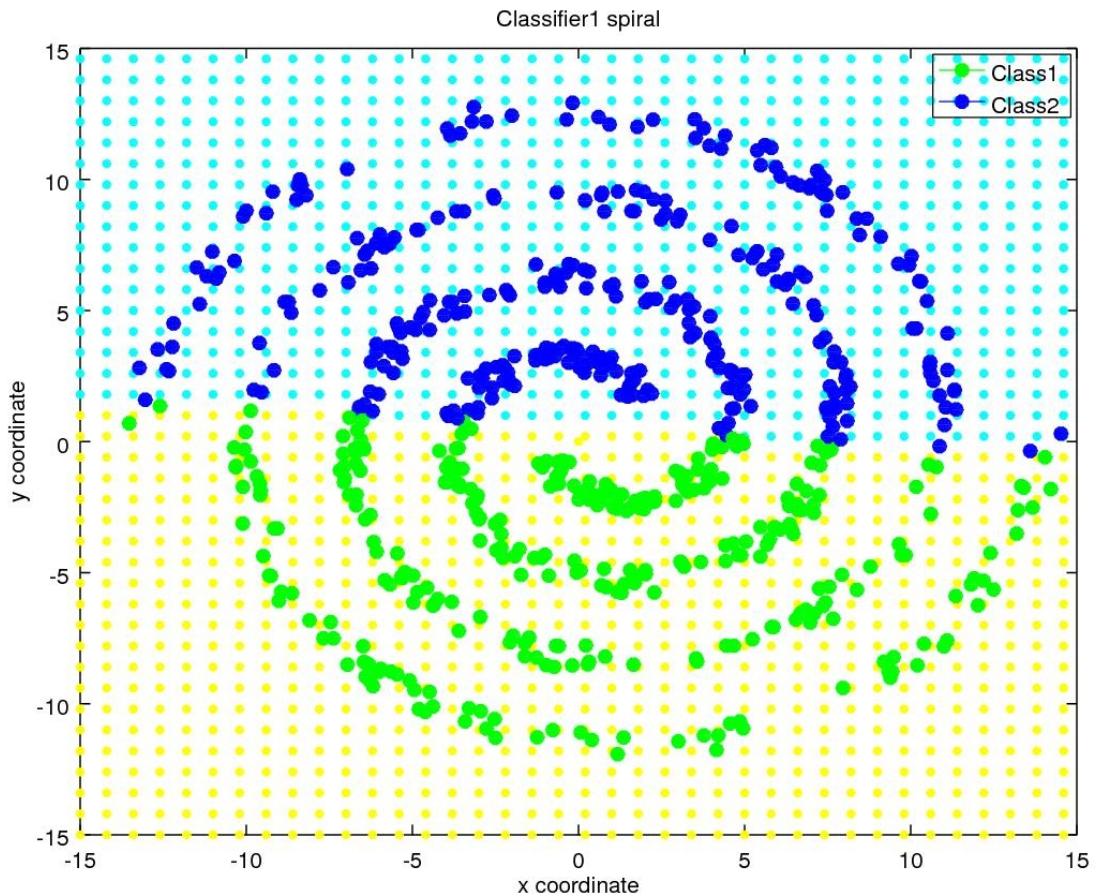


Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Dataset 1(b) : Spiral

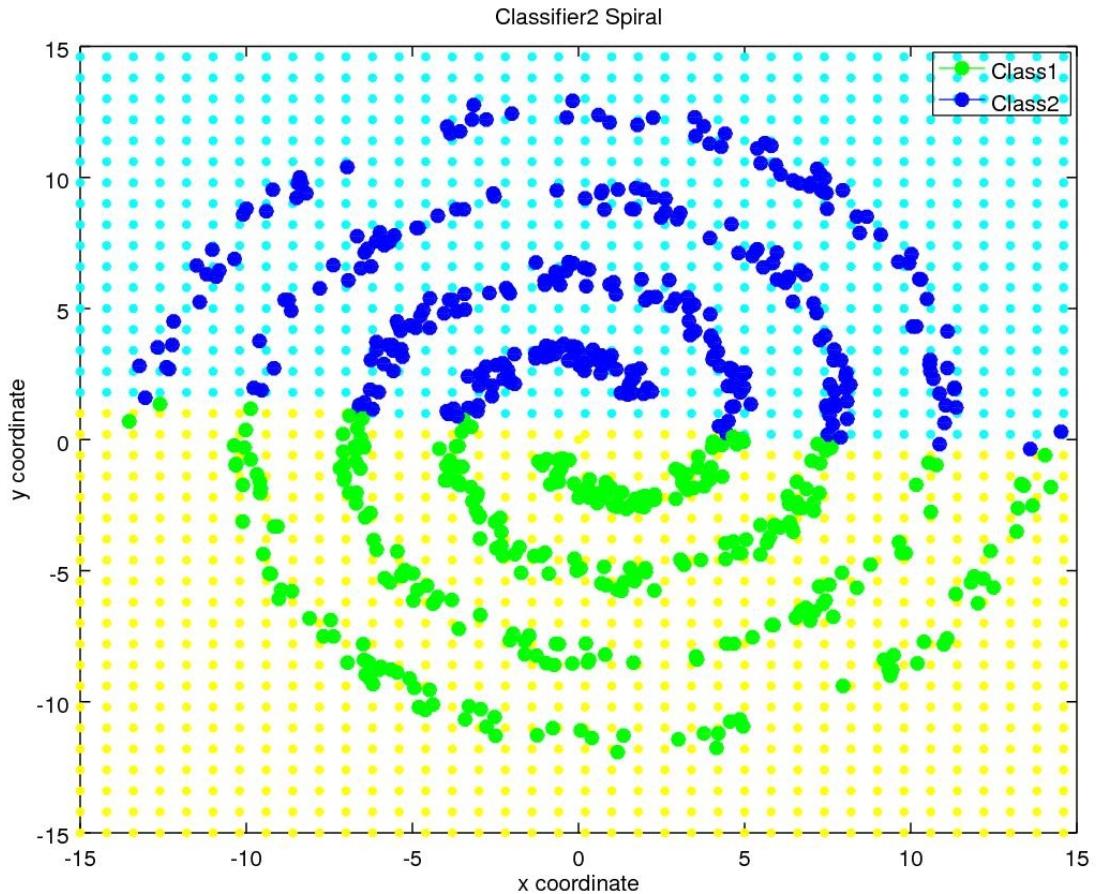
Classifier 1:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

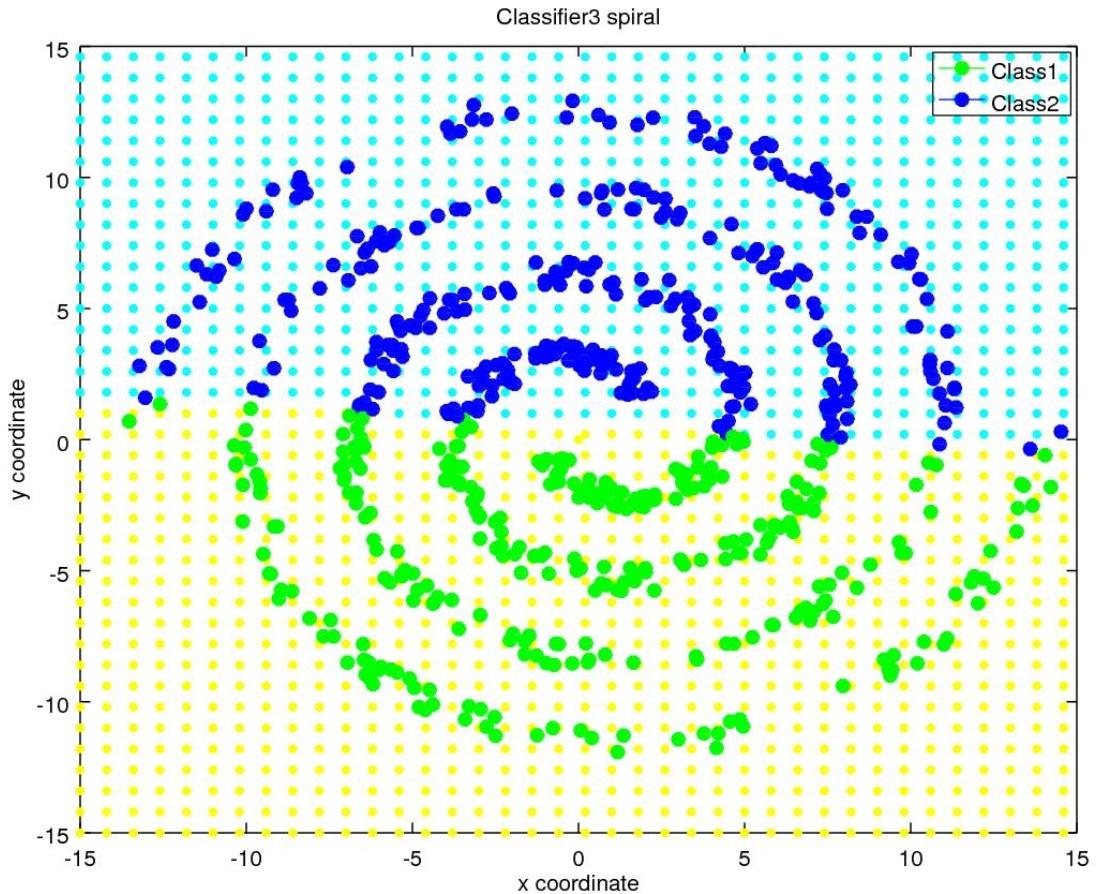
Classifier 2:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Classifier 3:

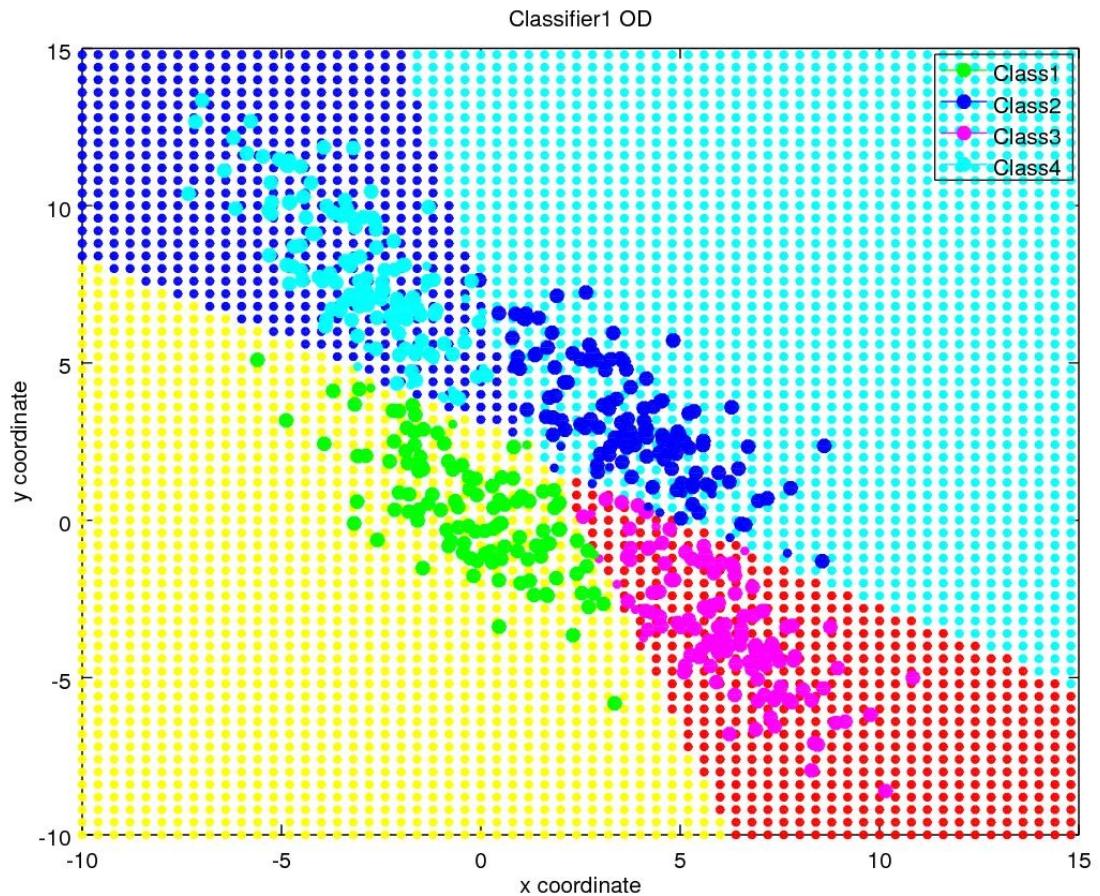


Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Dataset 1(c) : Overlapping Data Set

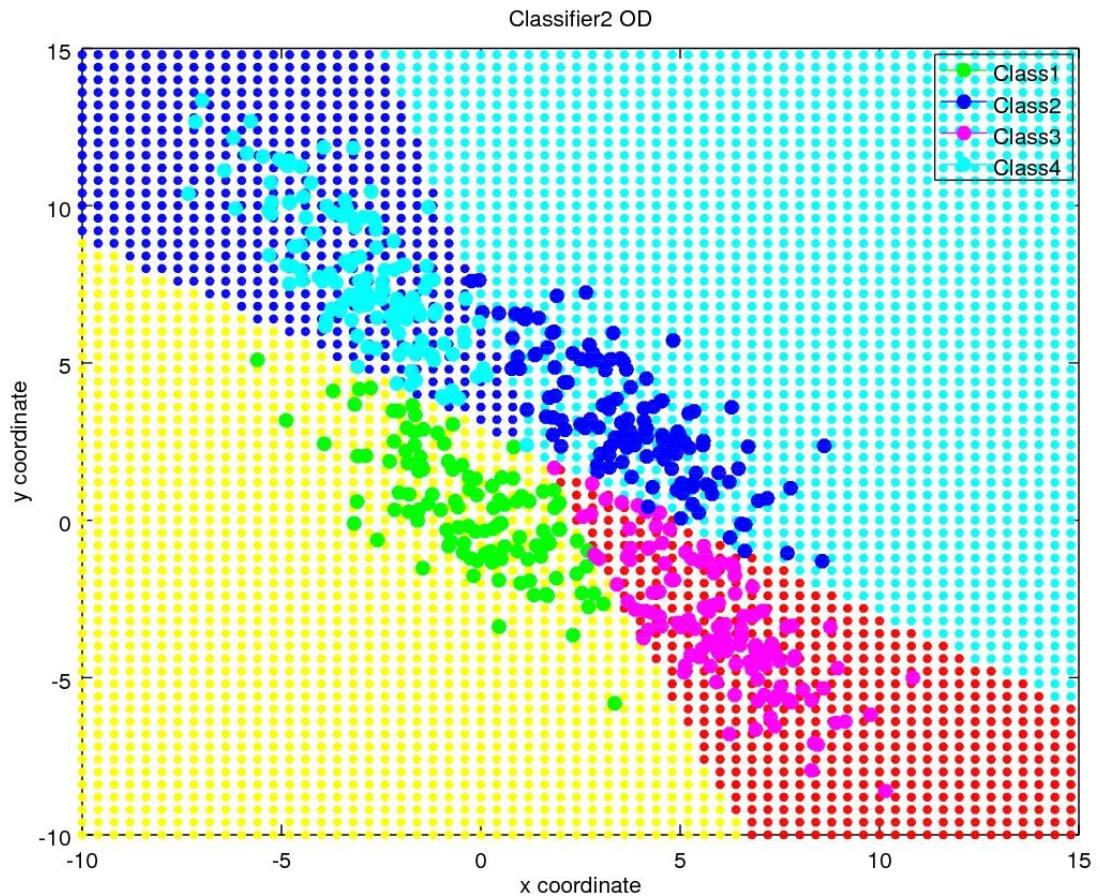
Classifier 1:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

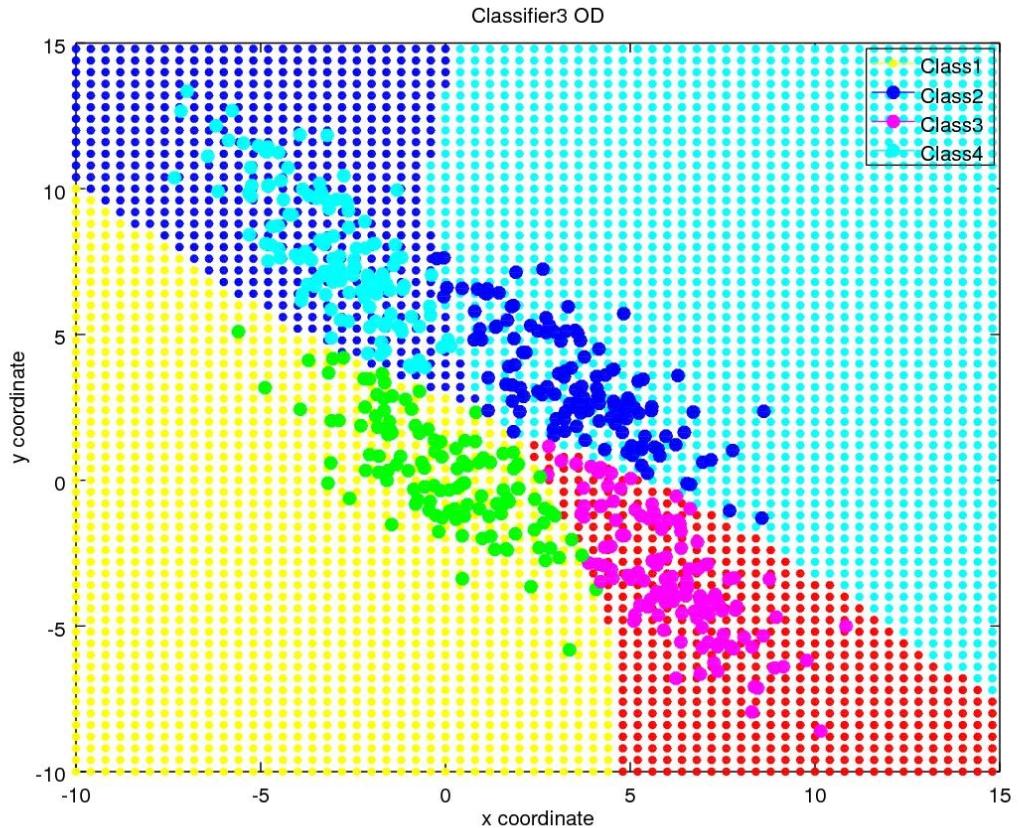
Classifier 2:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Classifier 3:

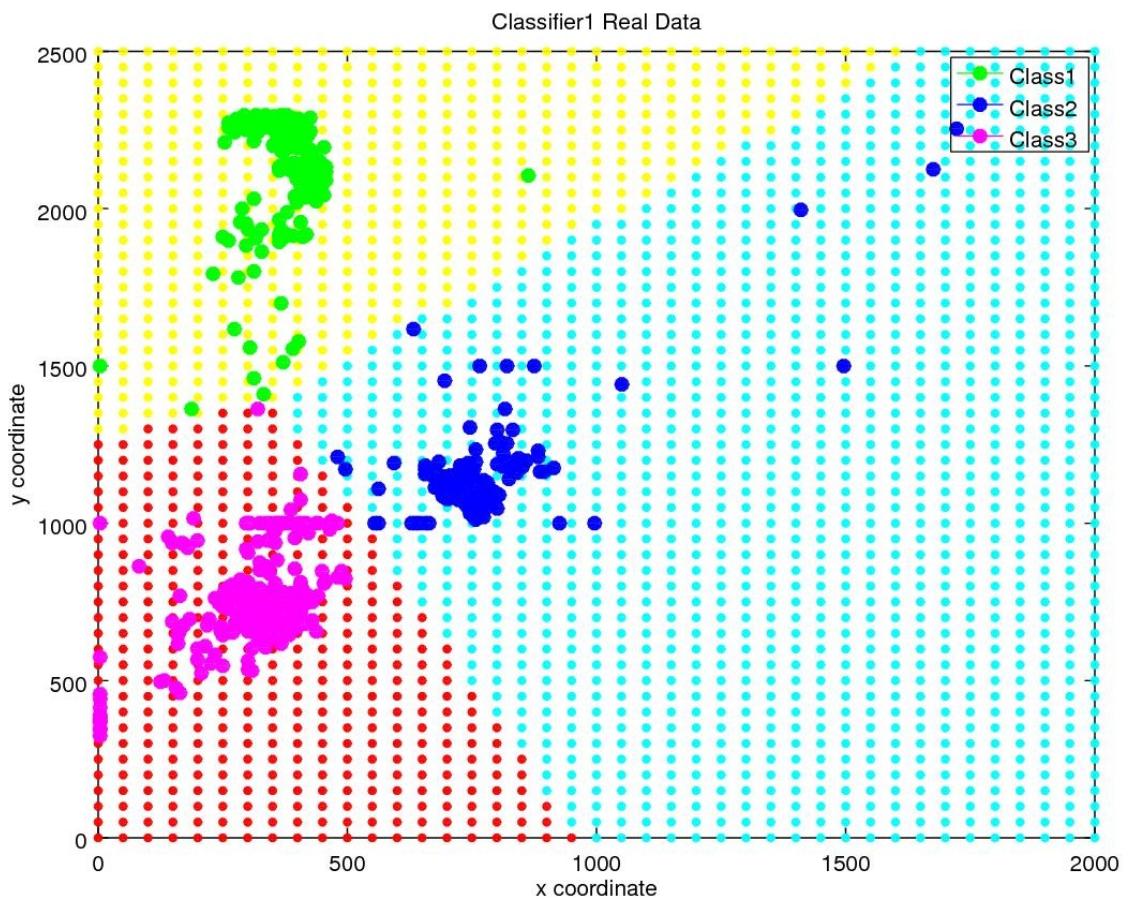


Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Dataset 2 : Real Data Set

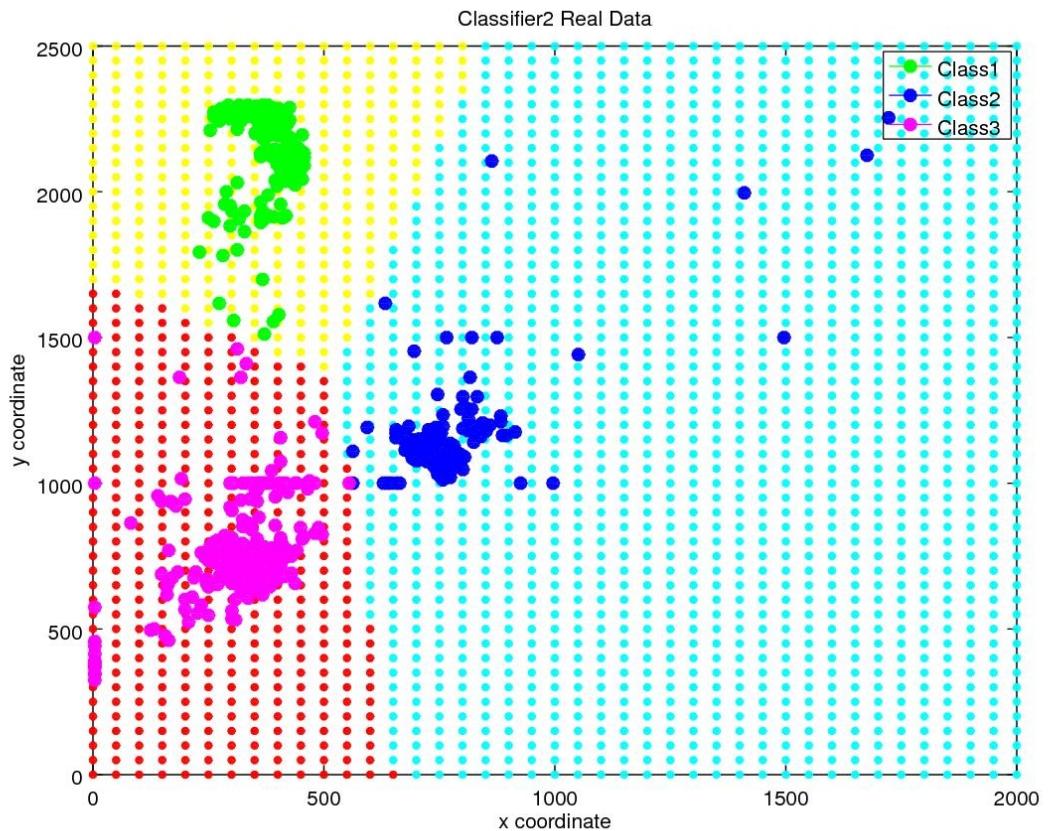
Classifier 1:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

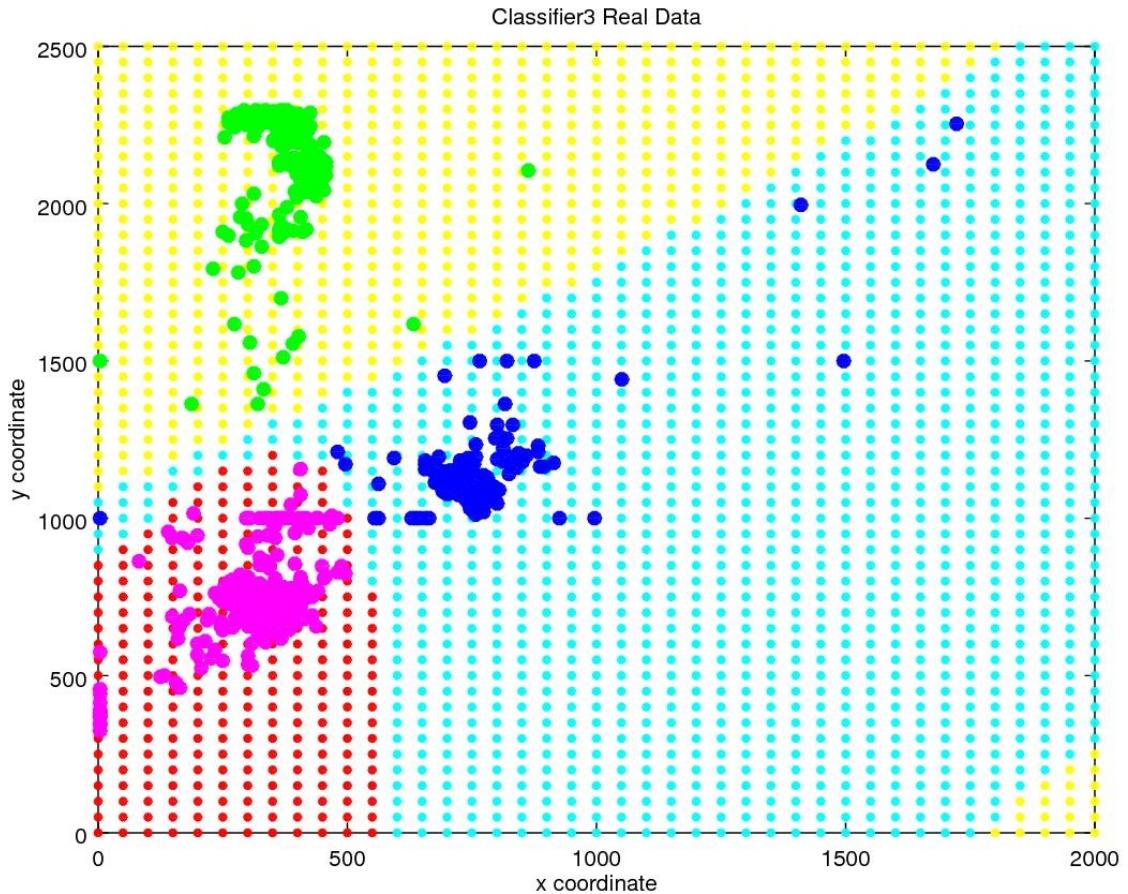
Classifier 2:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

Classifier 3:



Classification Accuracy	
Precision for Class1	
Precision for Class2	
Precision for Class3	
Mean Precision	
Recall for Class1	
Recall for Class2	
Recall for Class3	
Mean Recall	
F-measure for Class1	
F-measure for Class2	
F-measure for Class3	
Mean F-measure	

Confusion Matrix :

