

Assignment 4

Computational Intelligence, SS2020

Team Members		
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1 Linear SVM

1.1 Plots

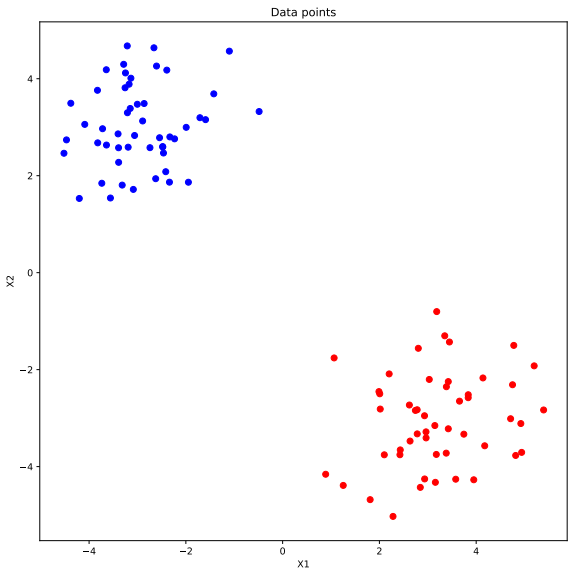
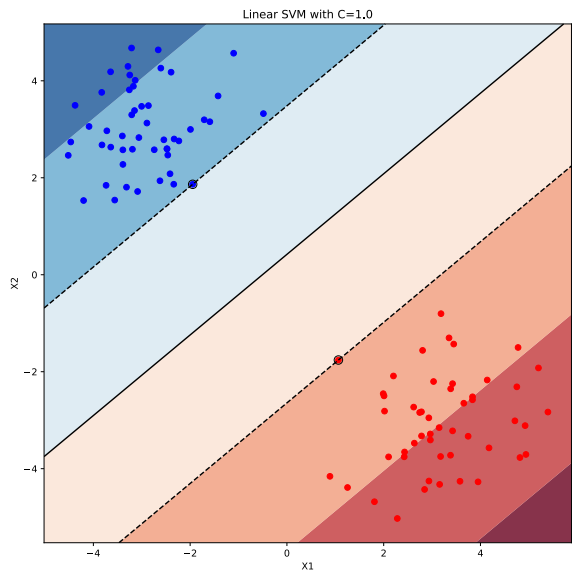
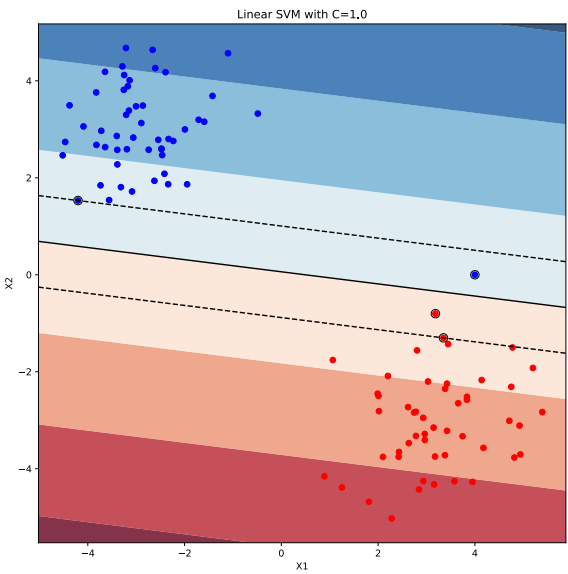


Figure 1: Dataset

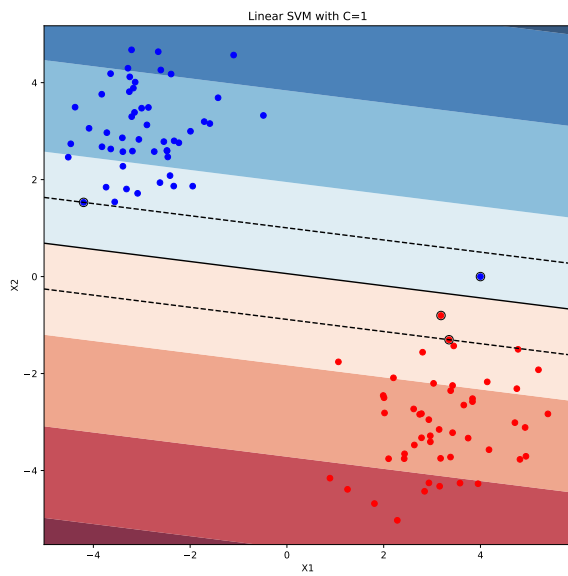


(a) Dataset

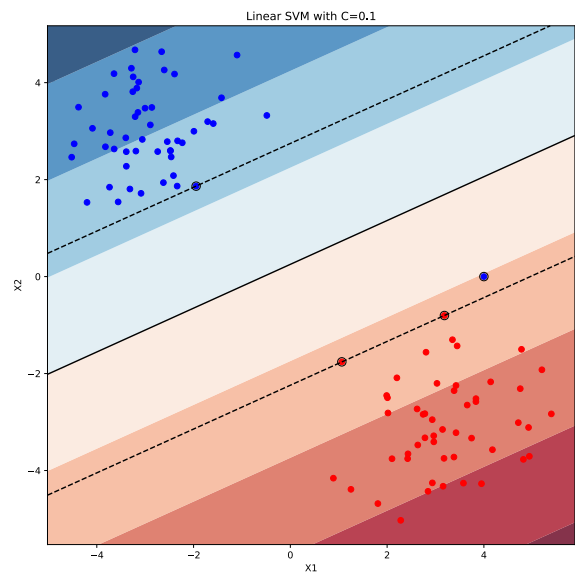


(b) Dataset with additional data point

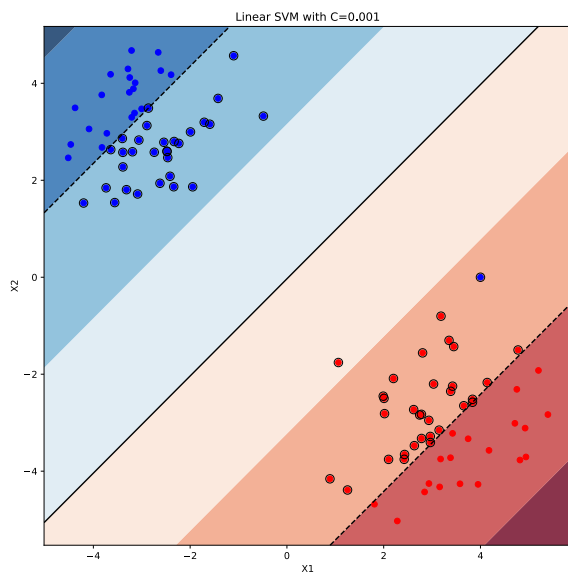
Figure 2: Classification of the dataset using SVM



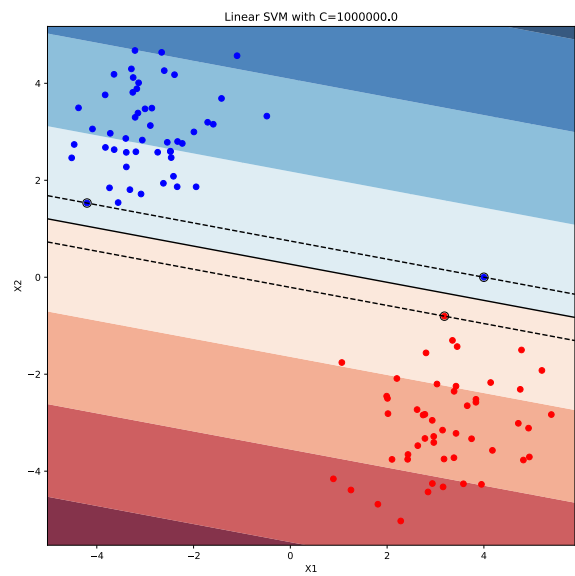
(a) Misclassified image 1



(b) Misclassified image 2



(c) Misclassified image 3



(d) Misclassified image 4

Figure 3: Misclassified items from our test set

1.2 How and why changed the decision boundary when the new point was added?

1.3 The inverse regularization parameter C

2 Nonlinear (kernel) SVM

2.1

2.2

2.3

2.4

2.5