

# Support Vector Machines

## EECE 580B

Lecture 12

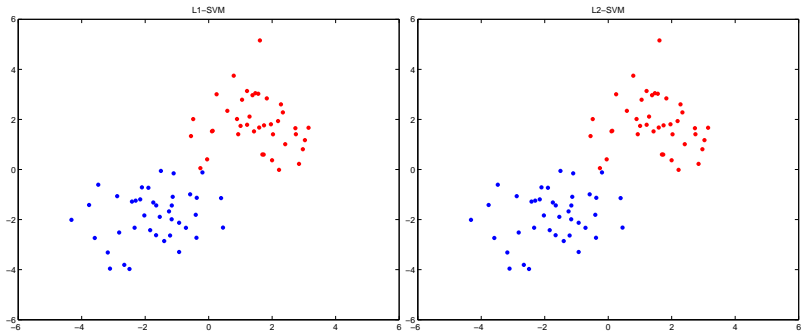
March 9, 2010

Jan Kodovský, Jessica Fridrich

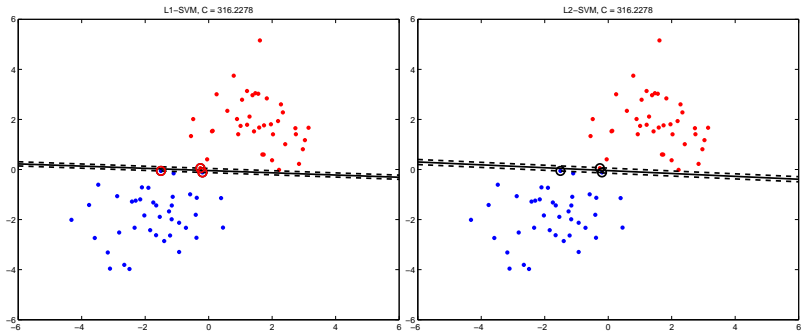


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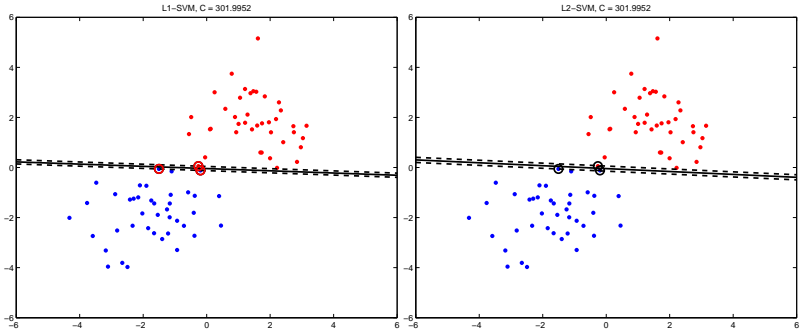
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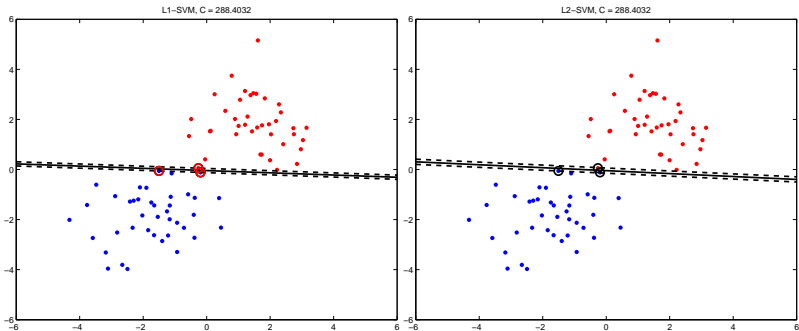
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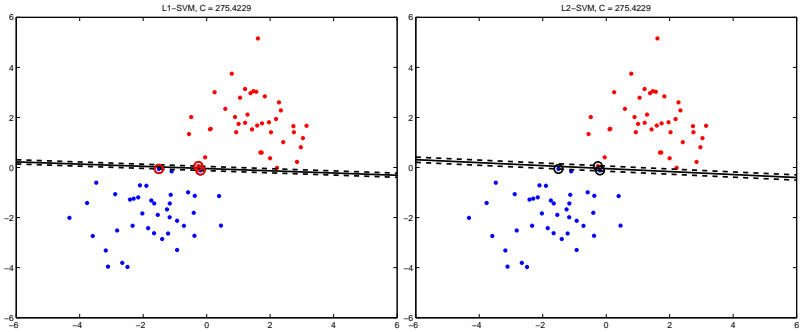
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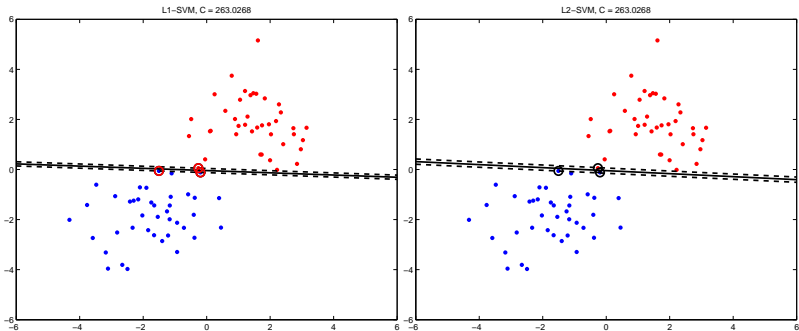
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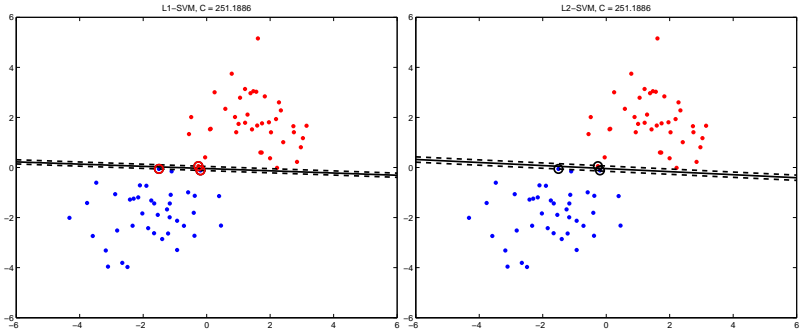
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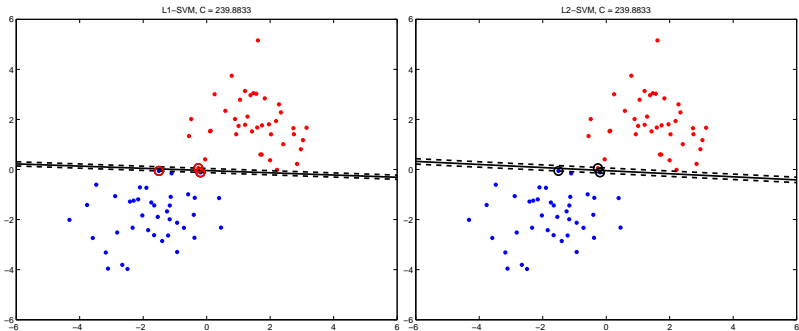


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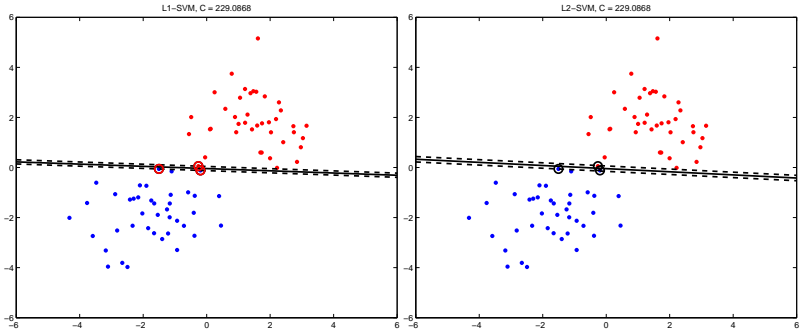




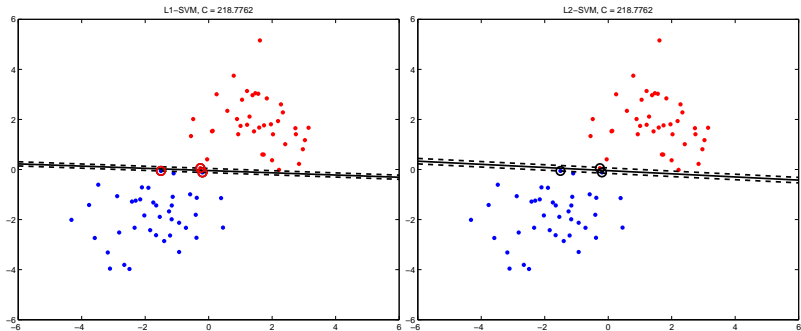
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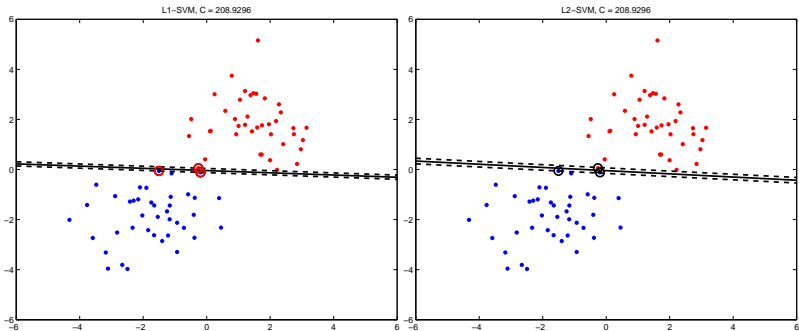
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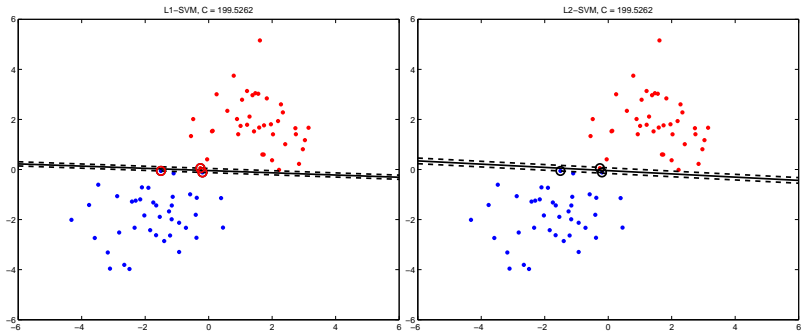
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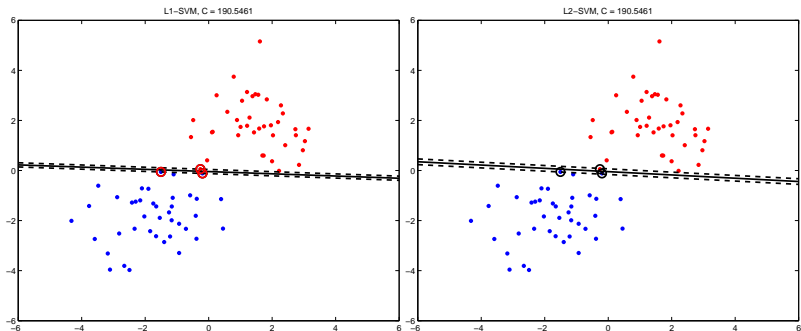
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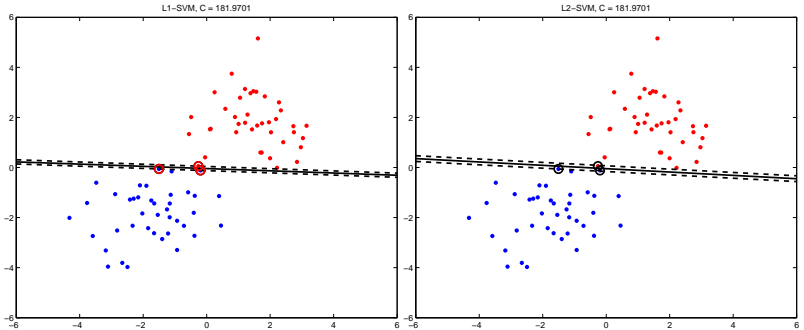
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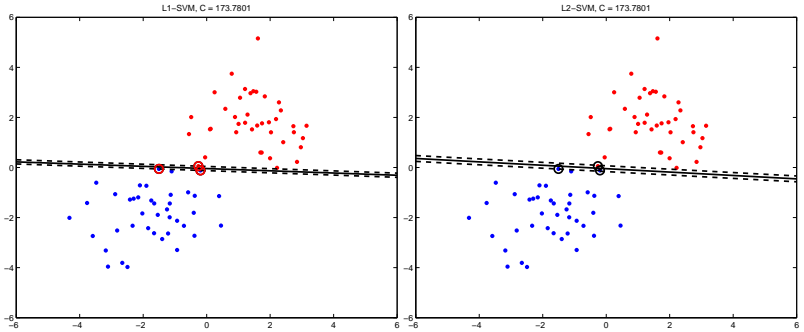
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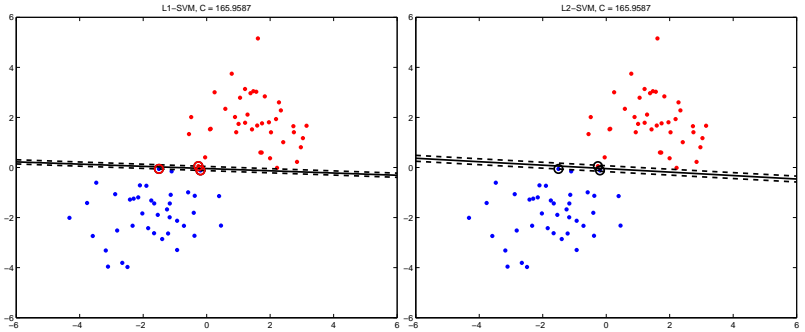


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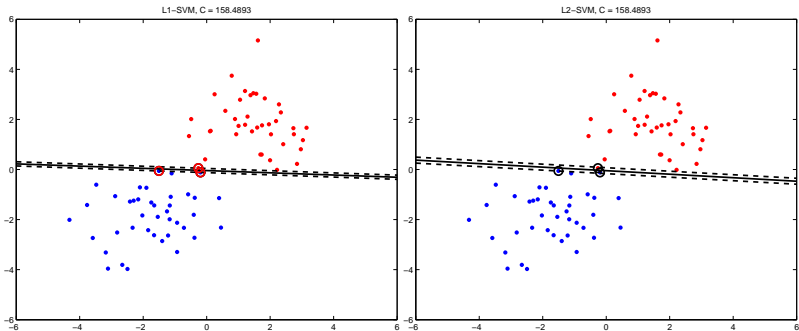




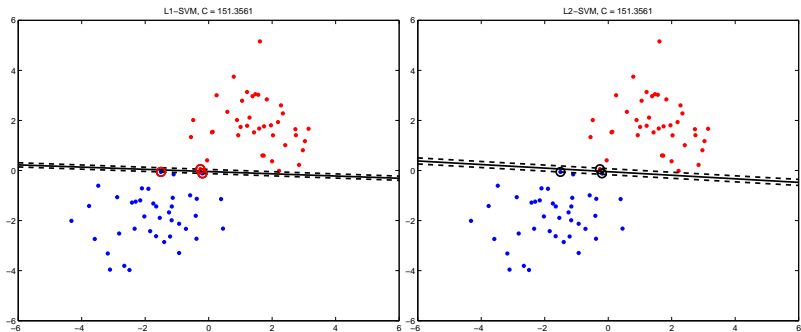
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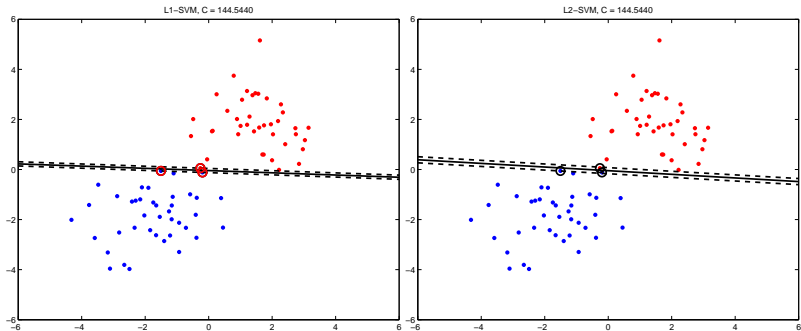
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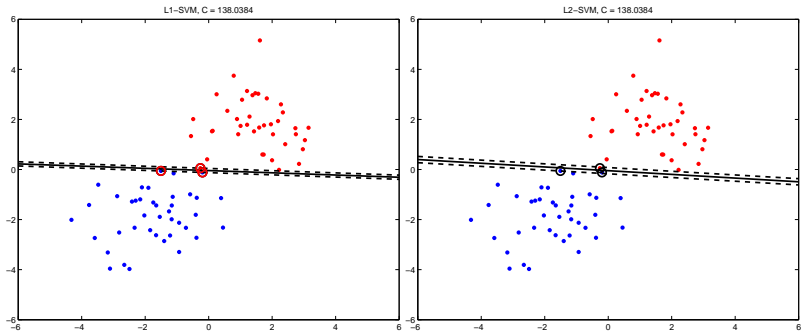
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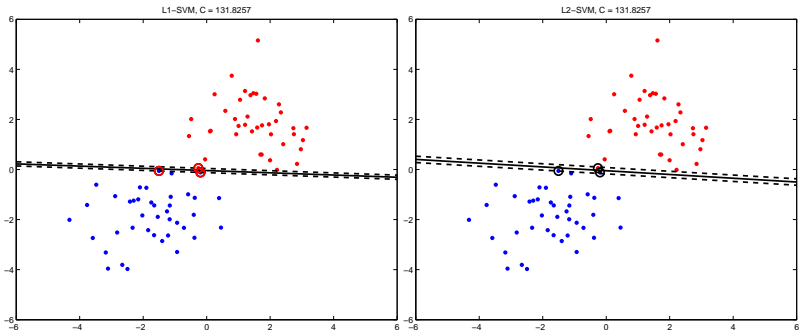
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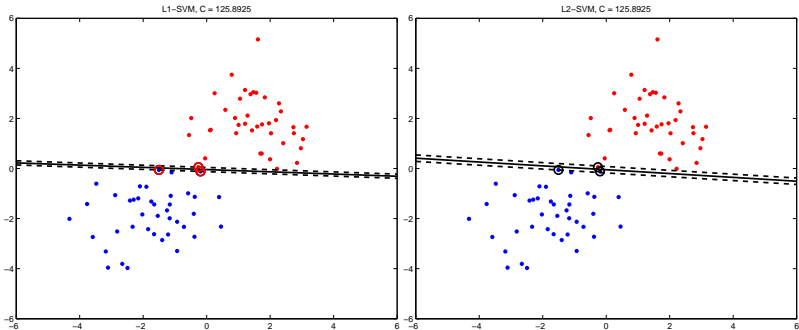
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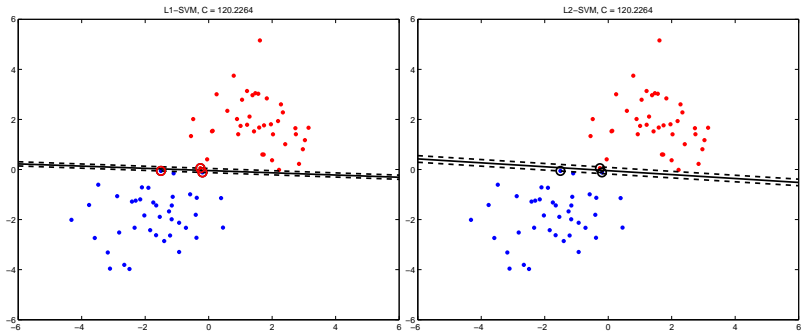
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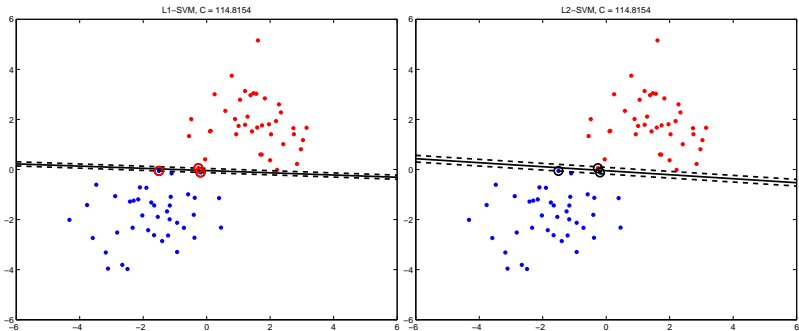


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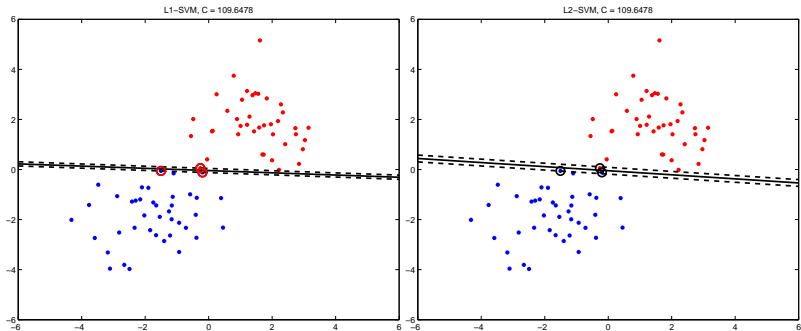




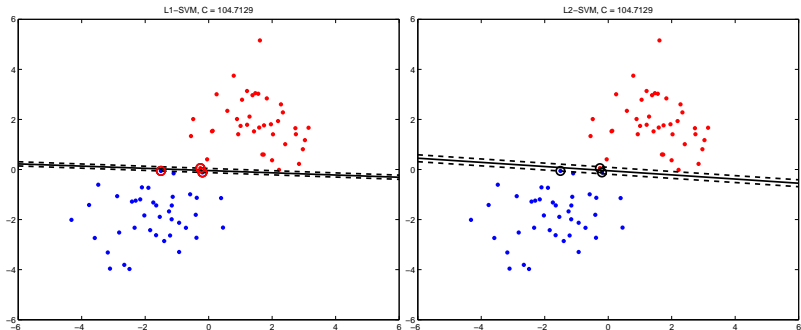
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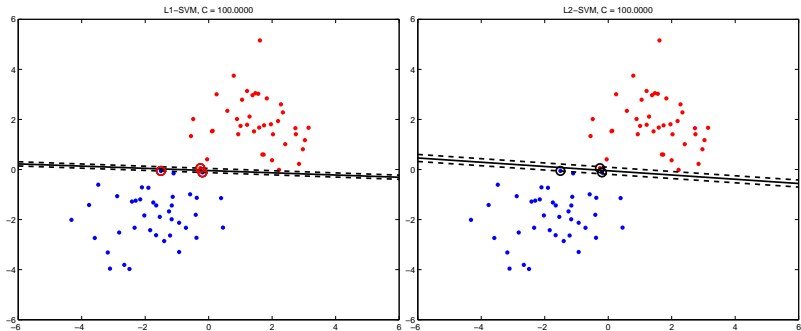
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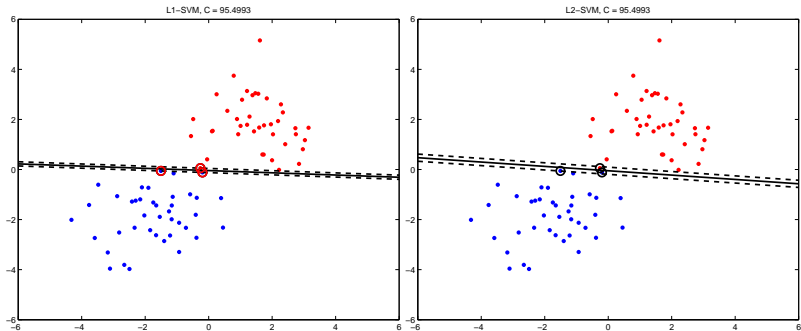
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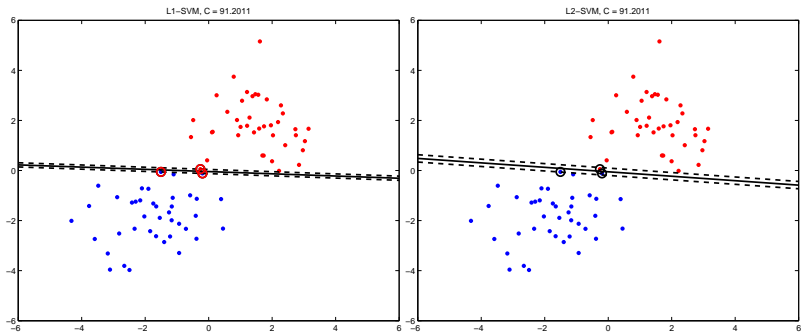
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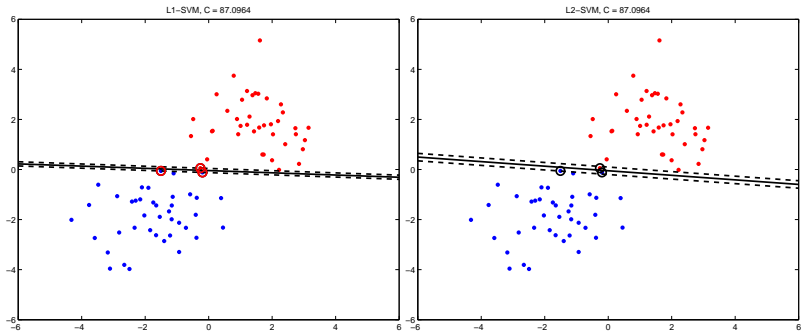
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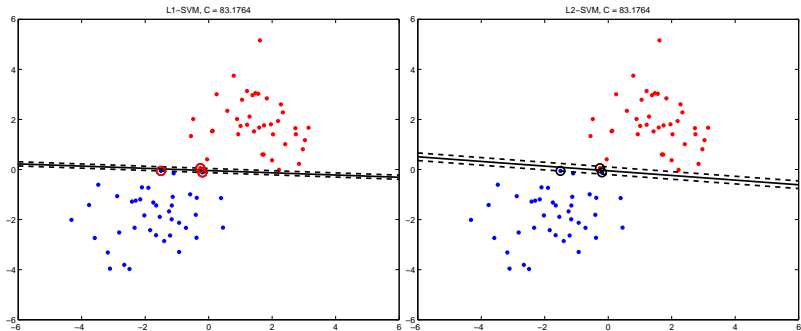
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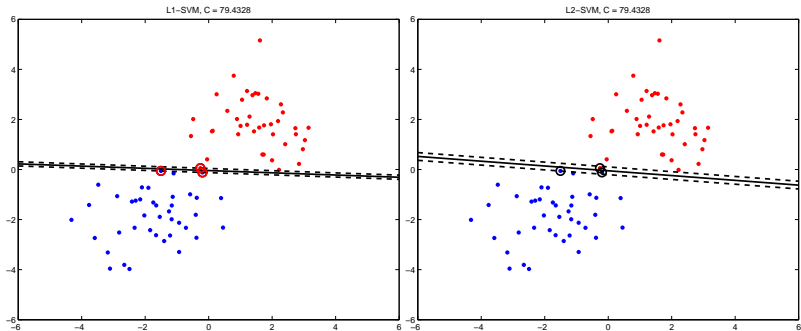


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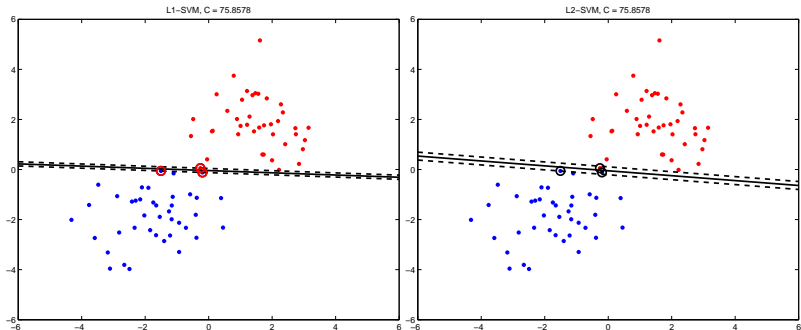




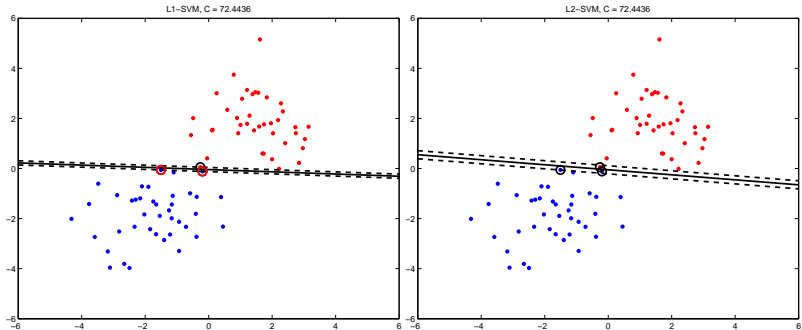
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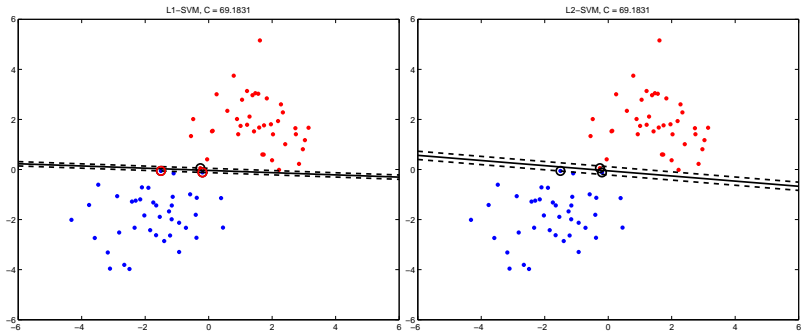
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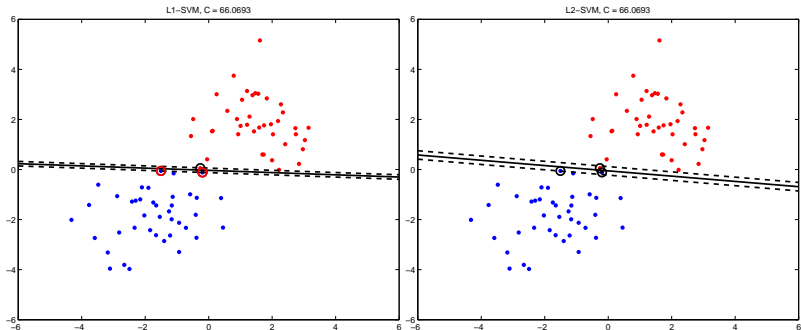
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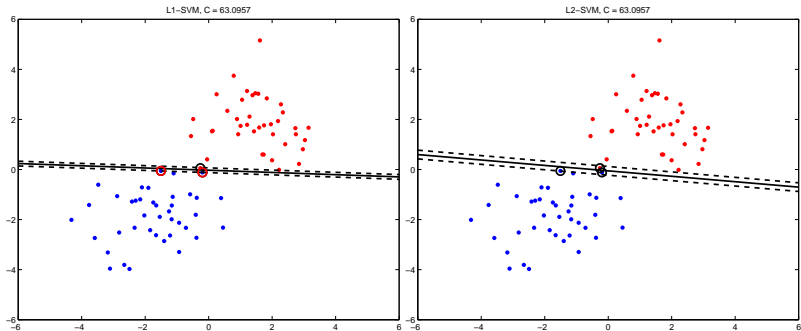
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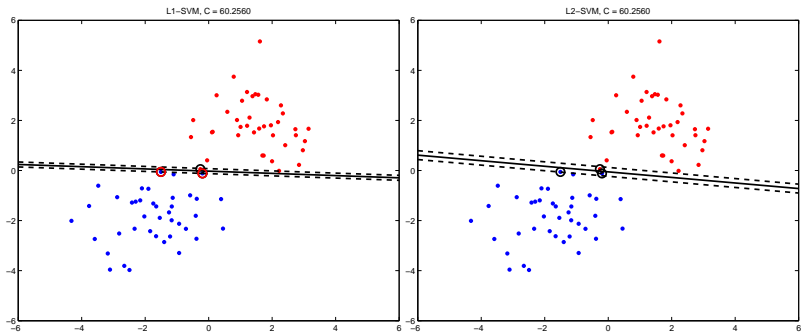
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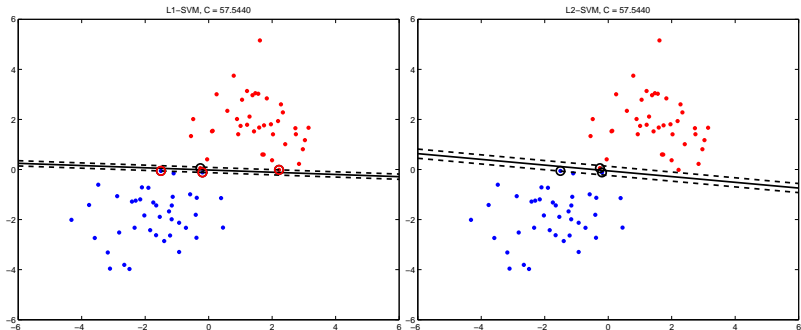
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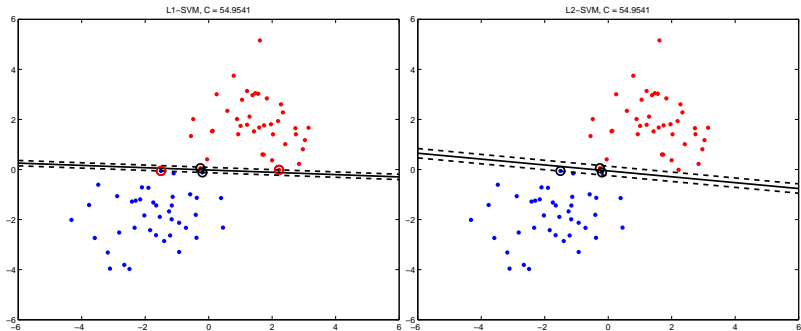


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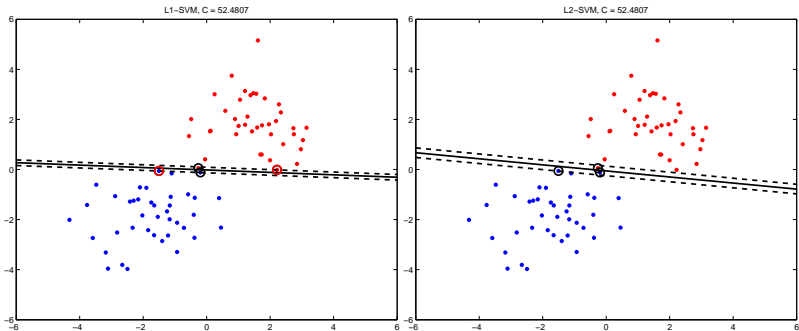




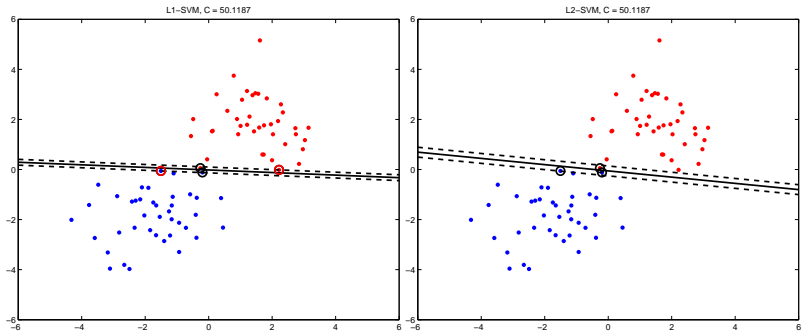
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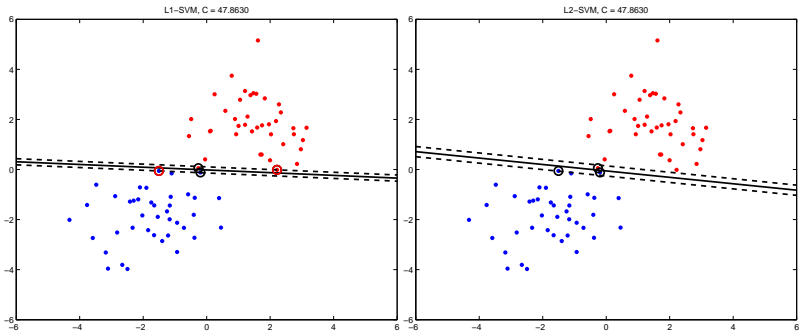
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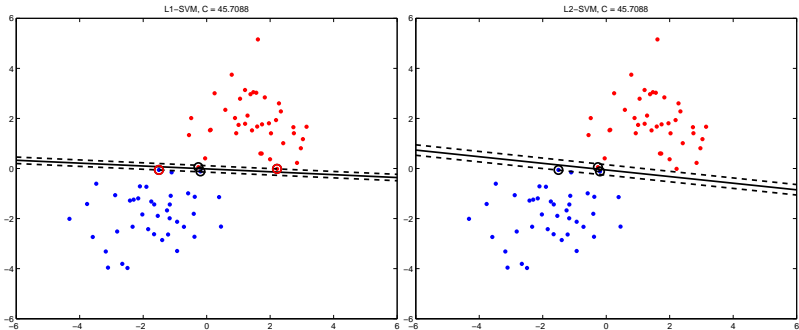
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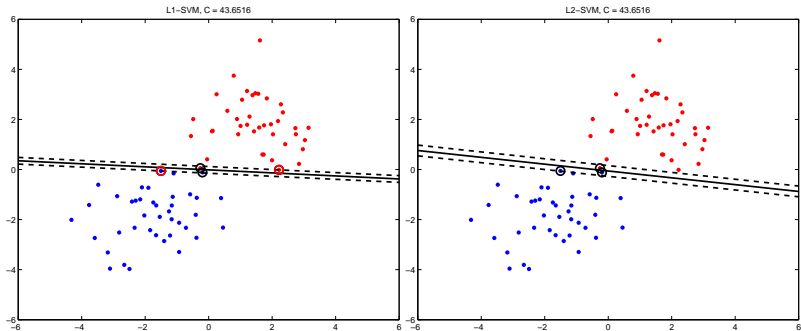
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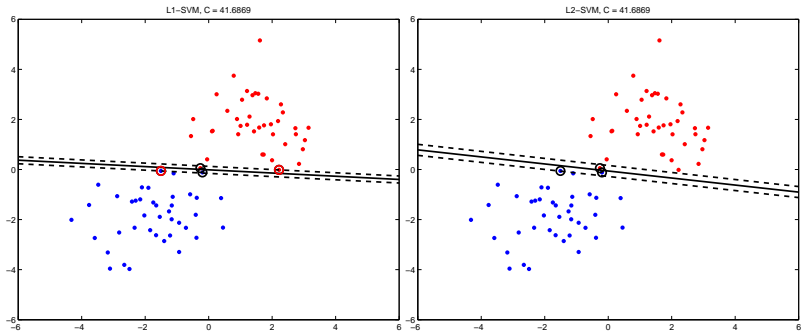
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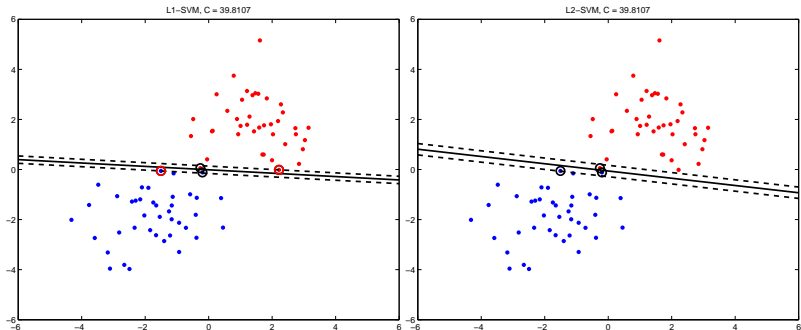
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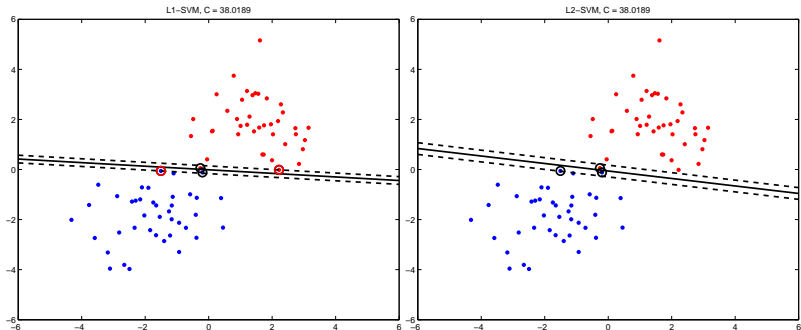


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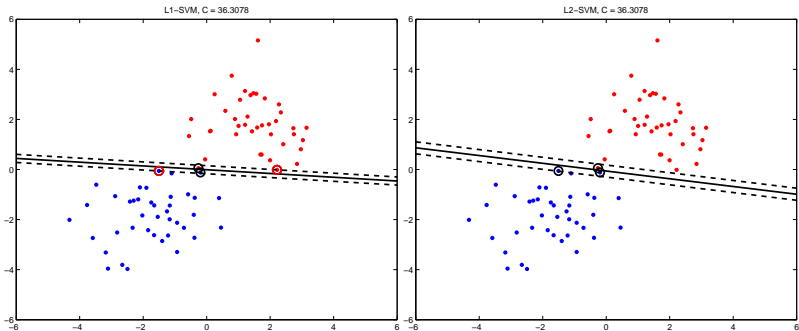




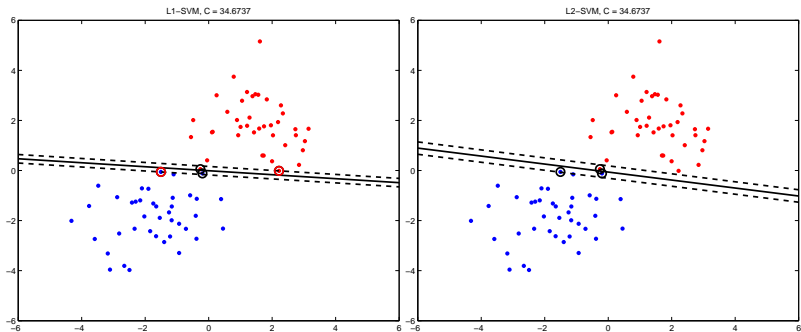
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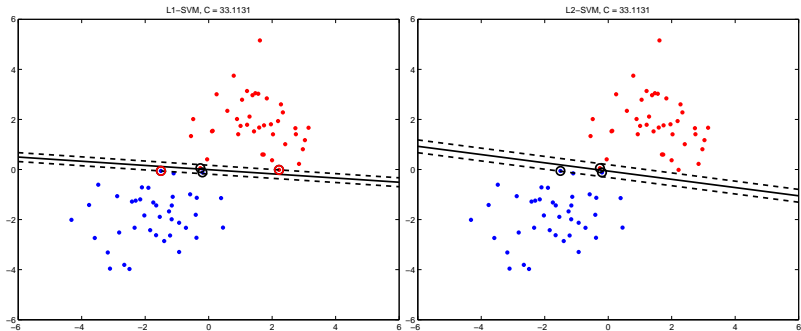
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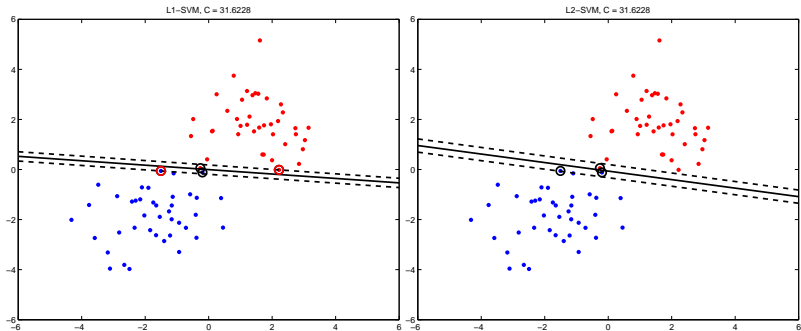
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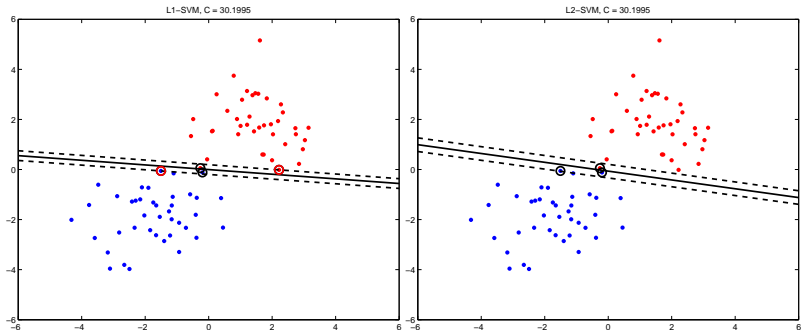
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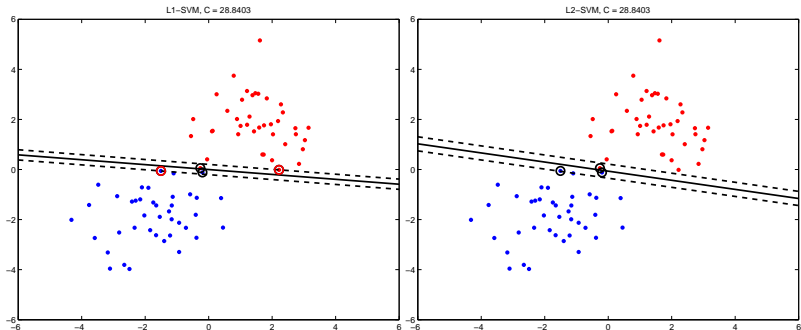
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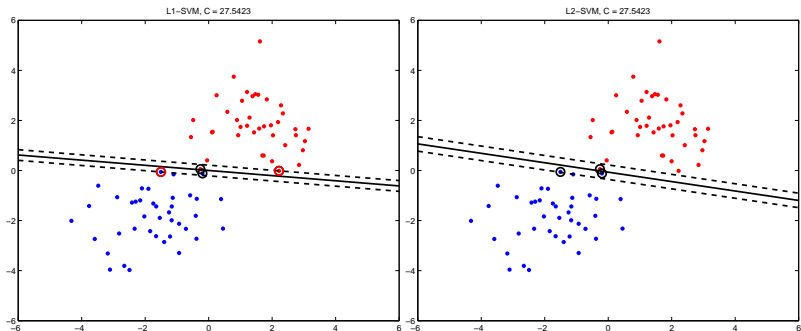
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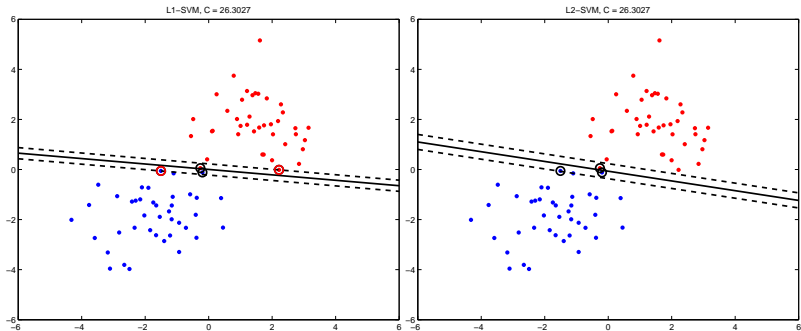


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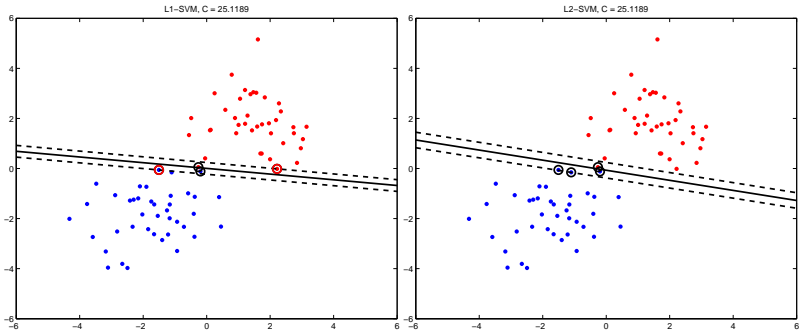




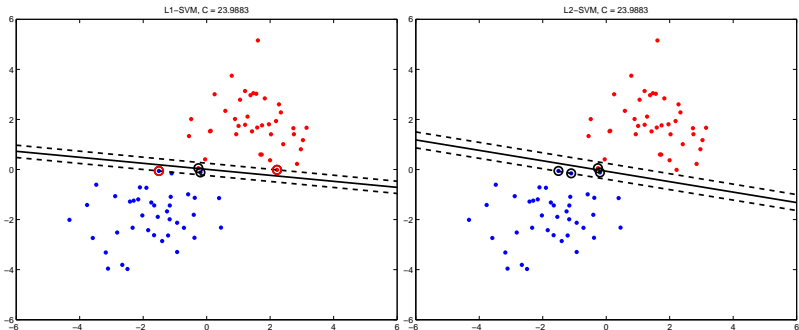
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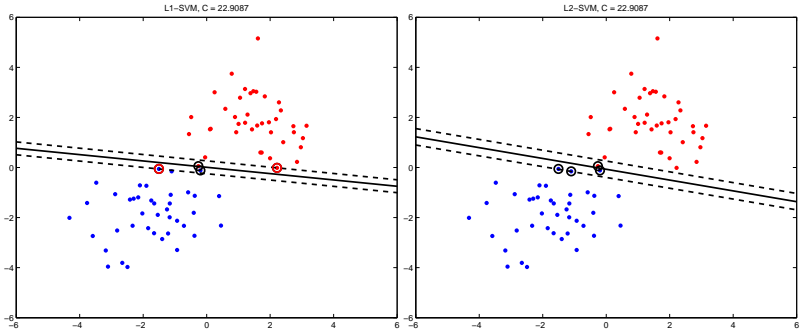
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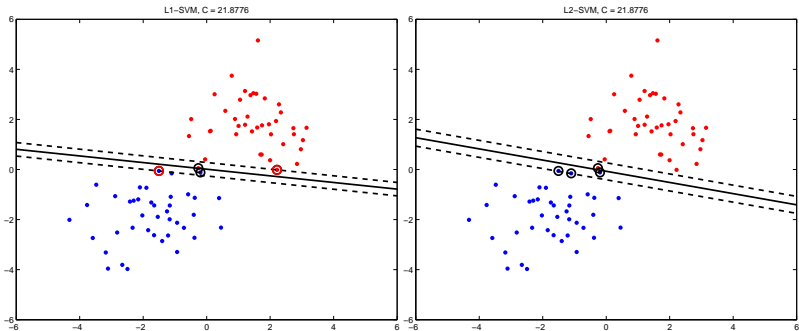
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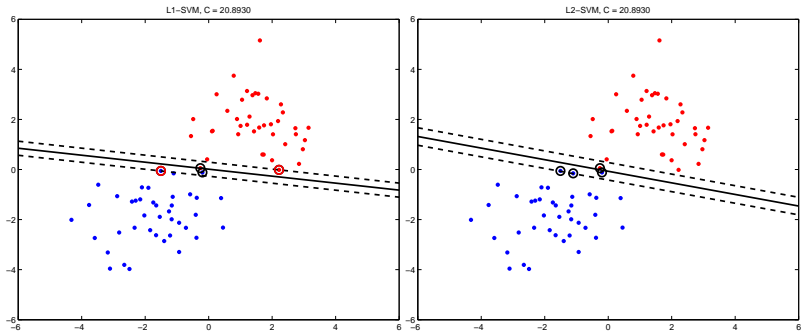
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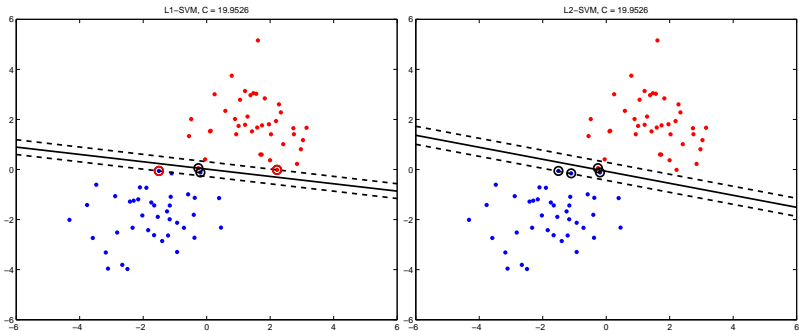
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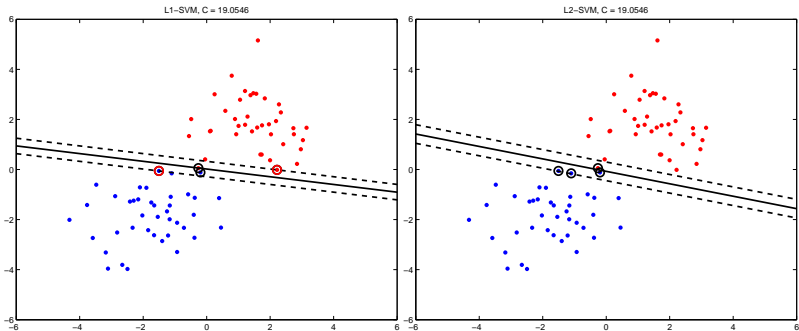
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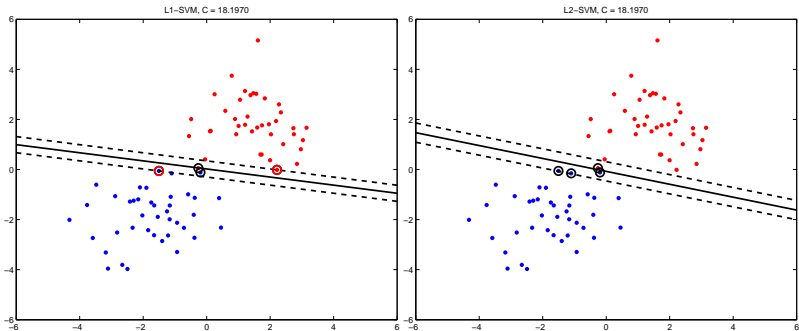


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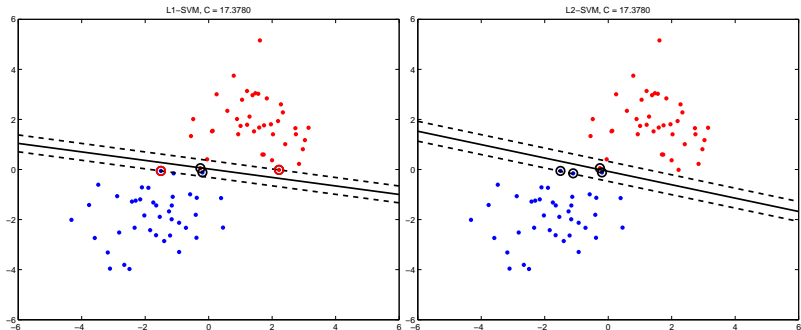




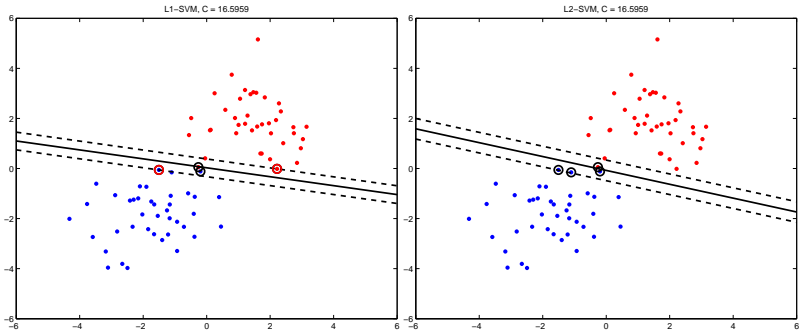
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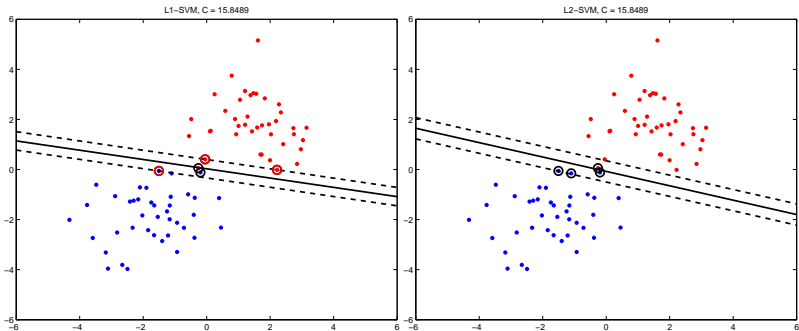
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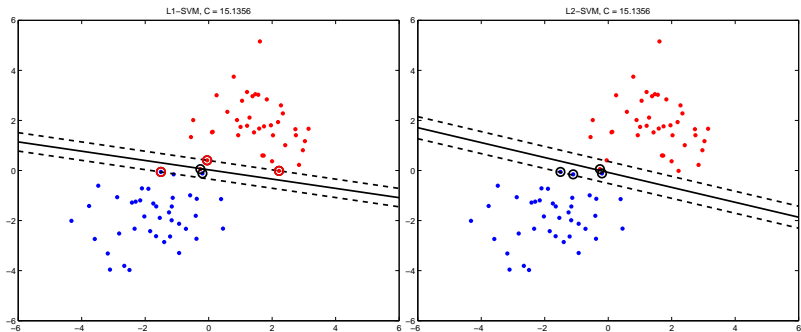
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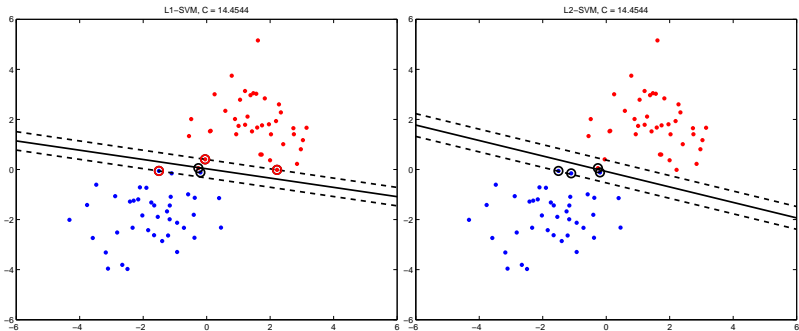
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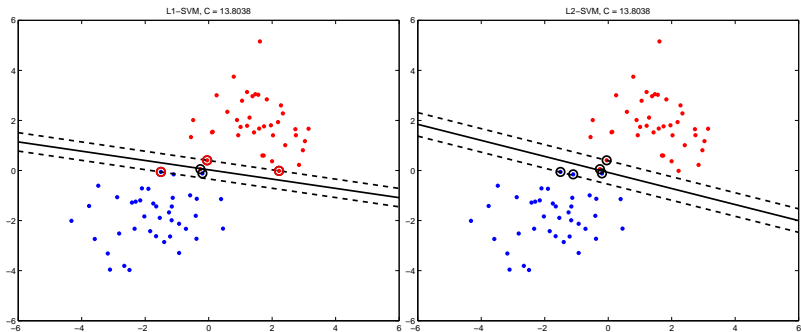
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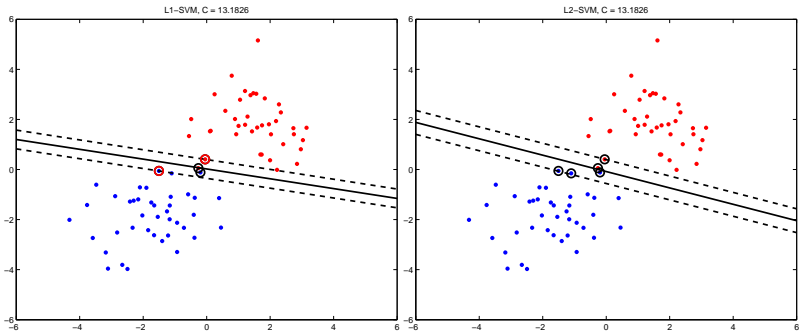
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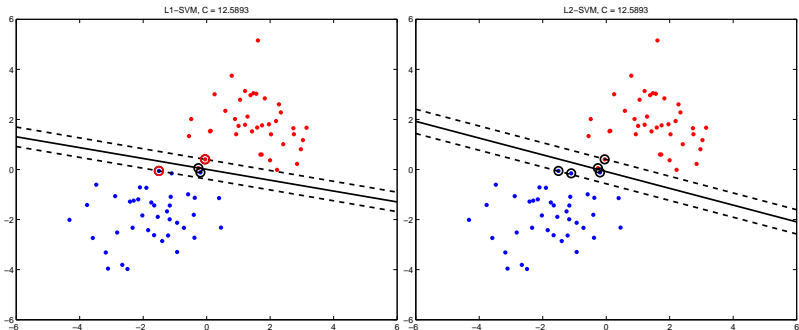


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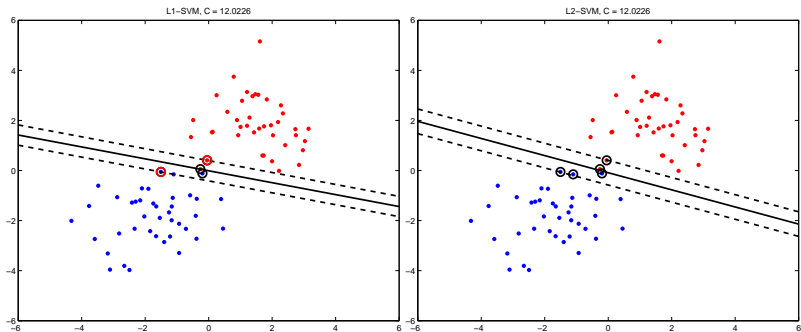




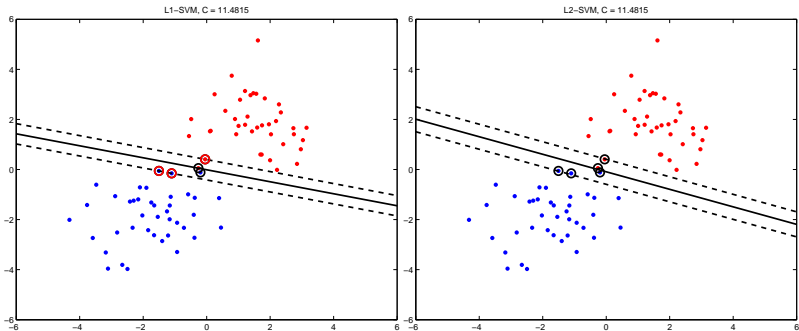
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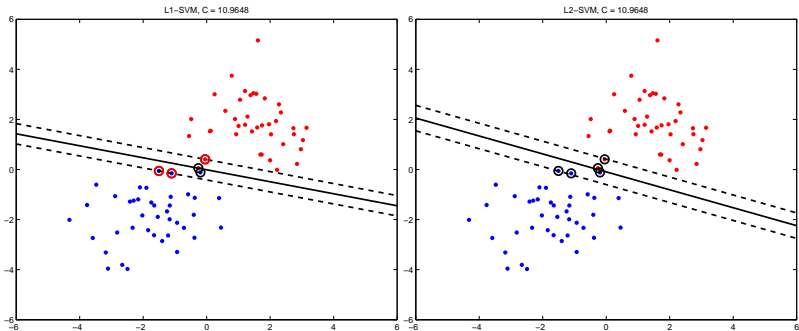
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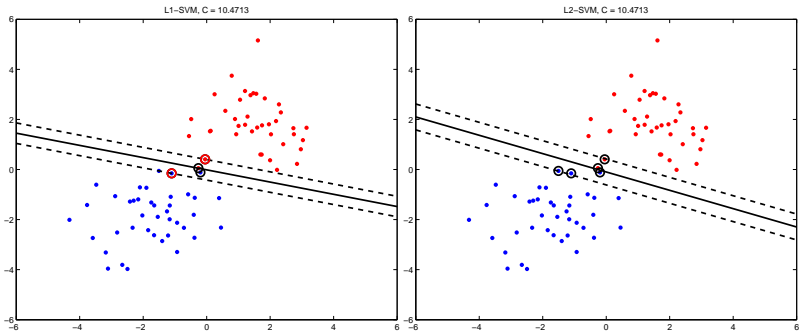
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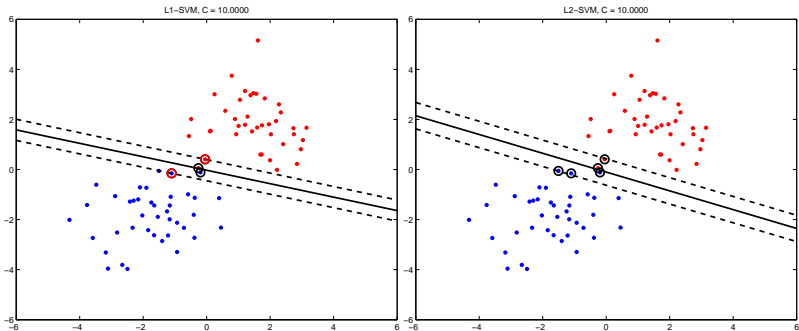
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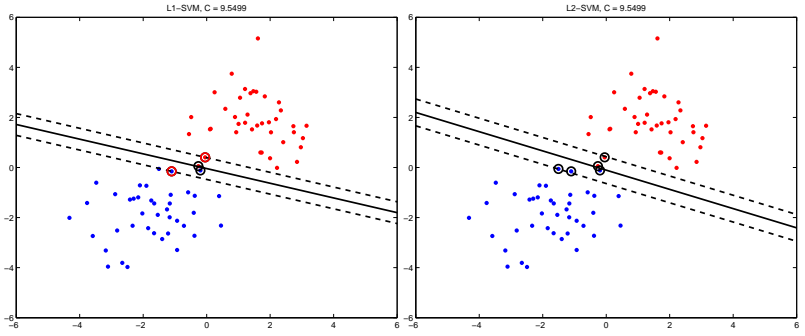
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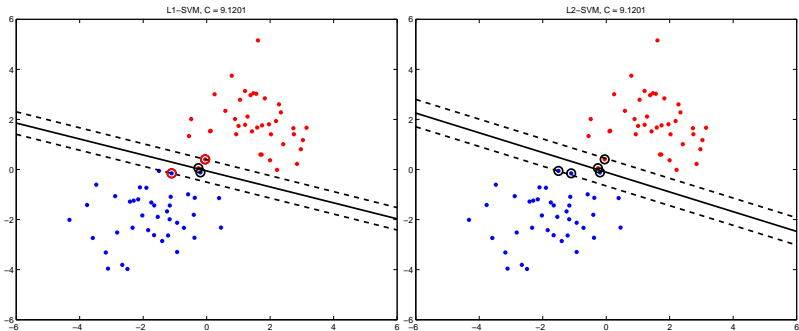
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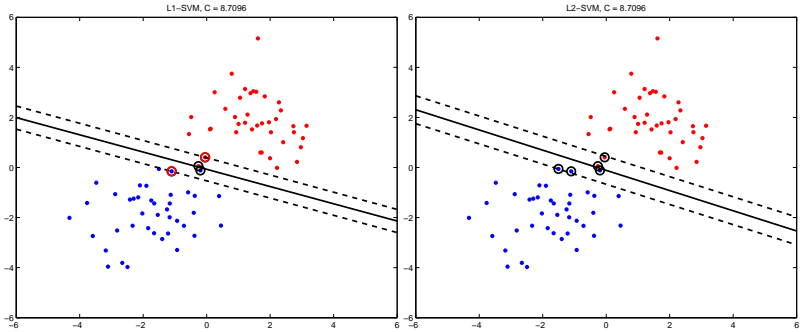


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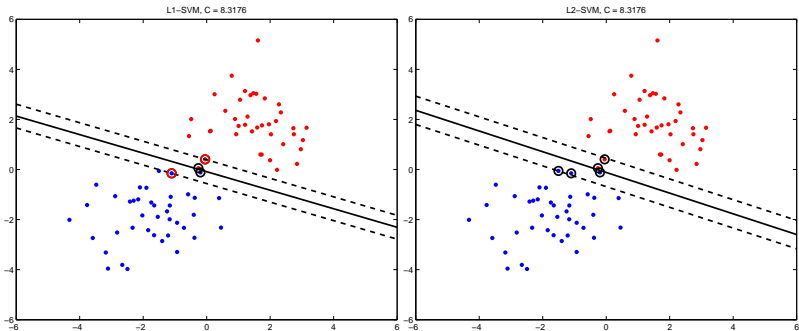




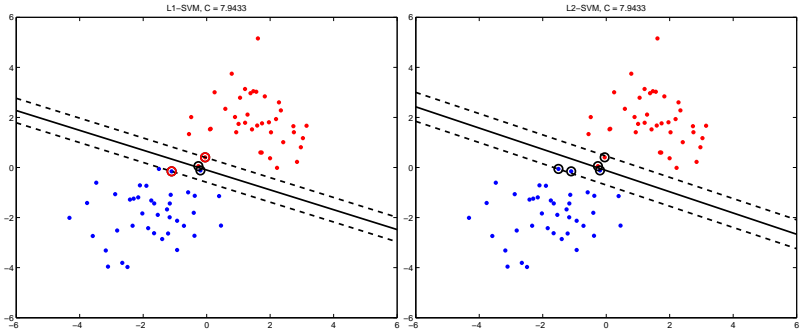
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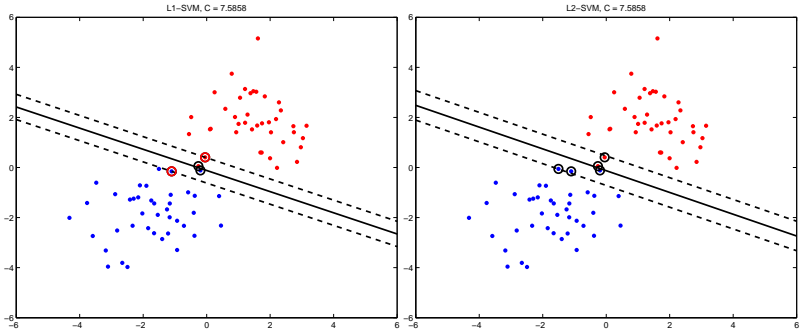
# L1-SVM vs L2-SVM



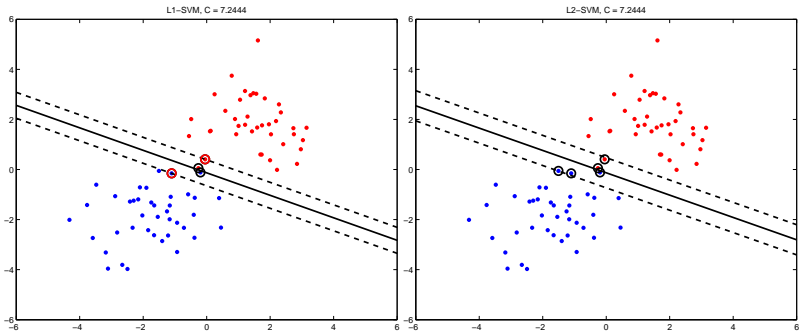
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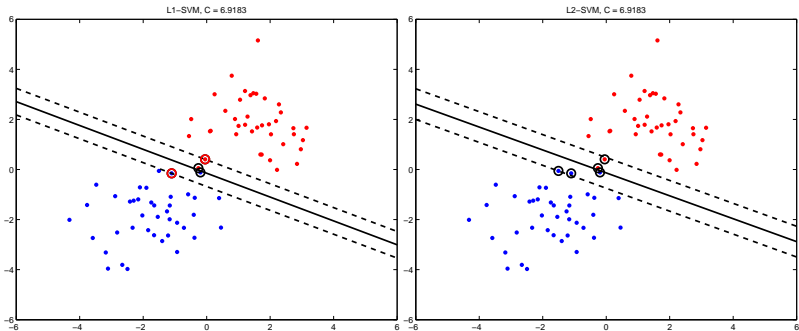
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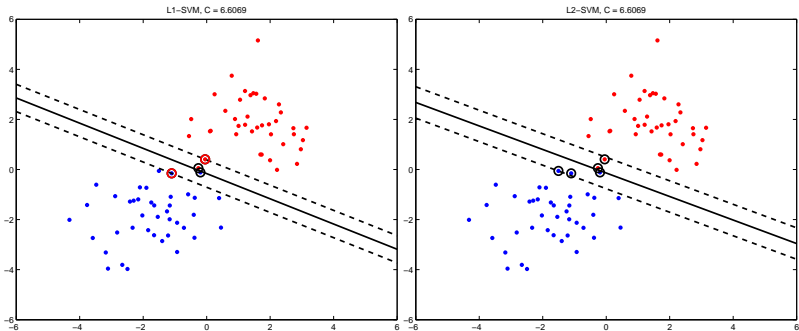
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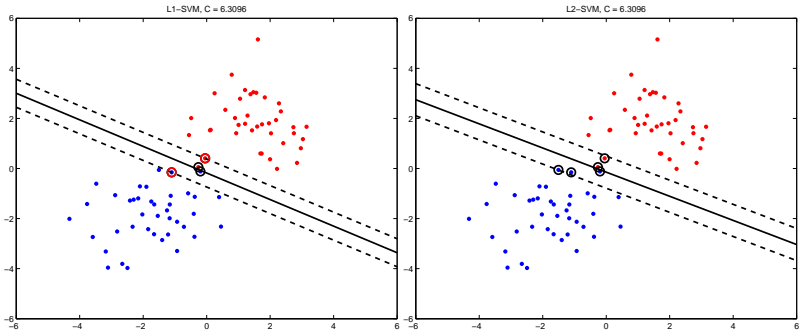
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# L1-SVM vs L2-SVM

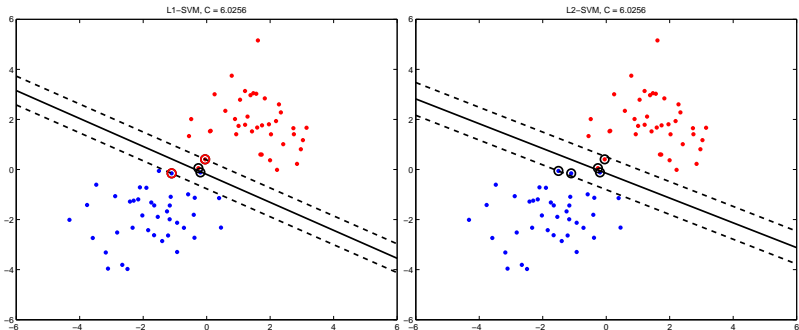


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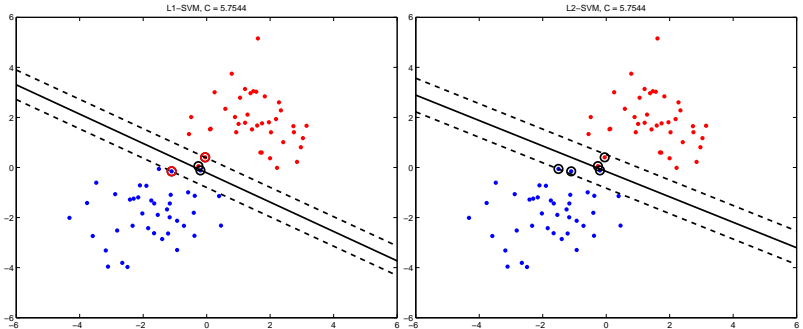




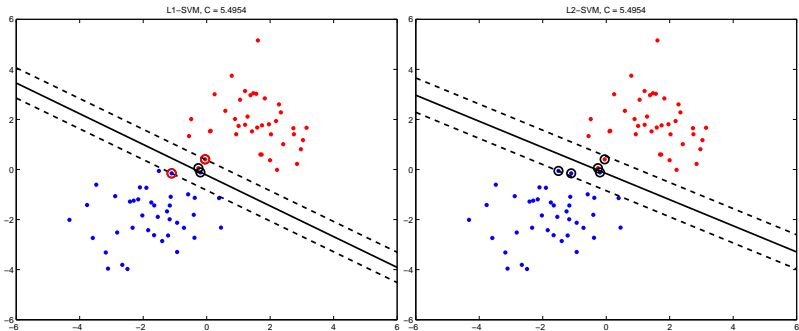
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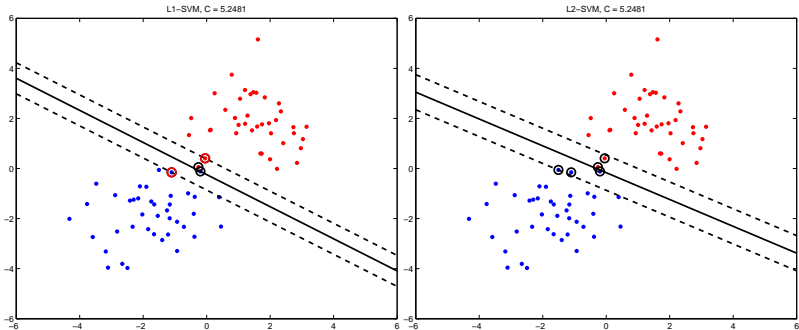
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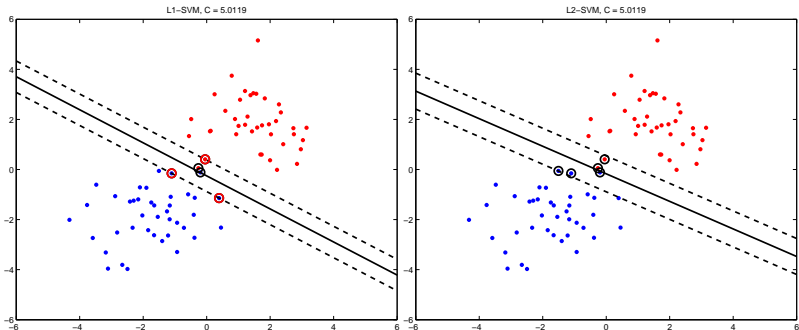
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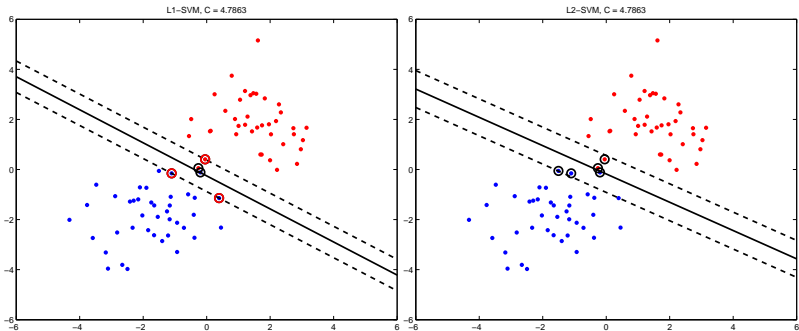
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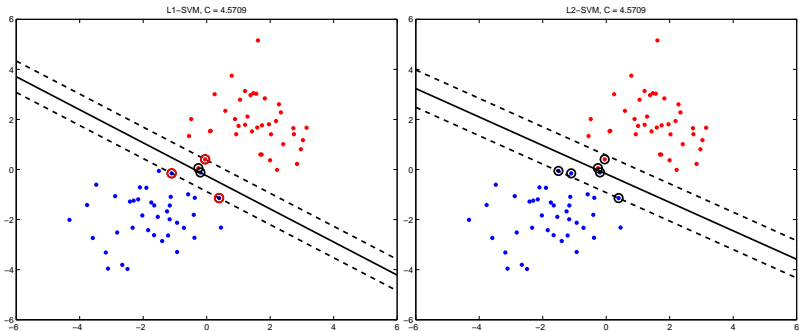
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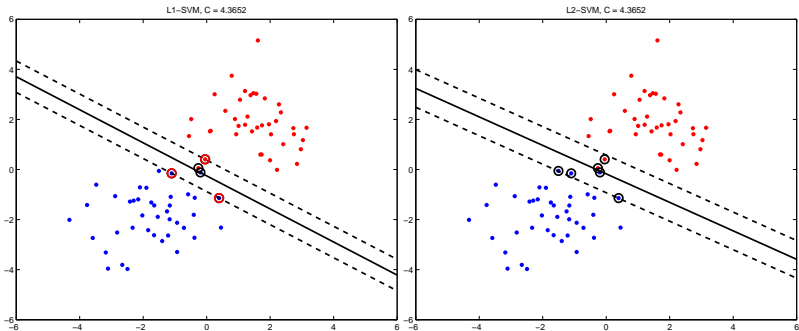
# L1-SVM vs L2-SVM



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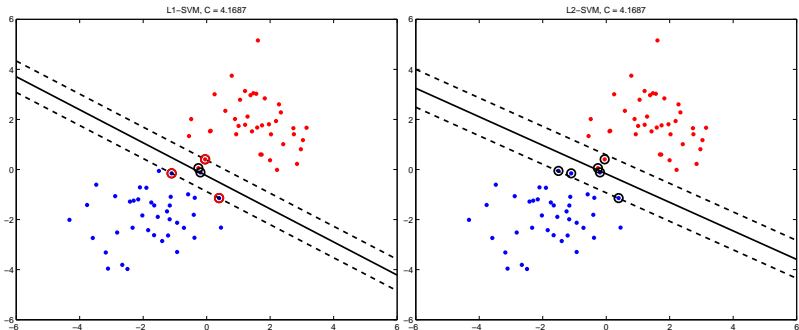


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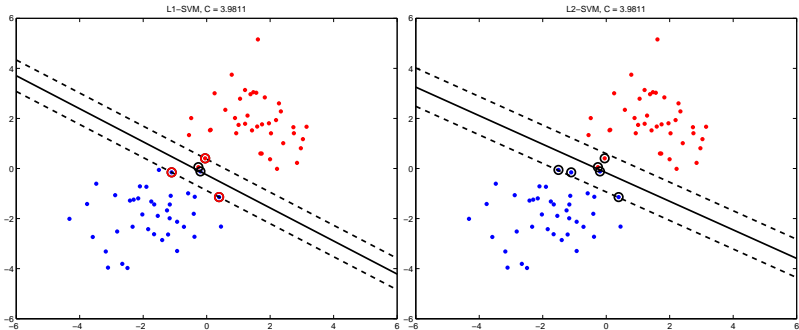




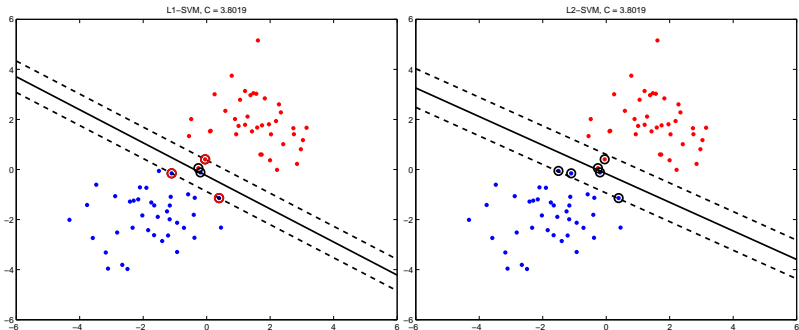
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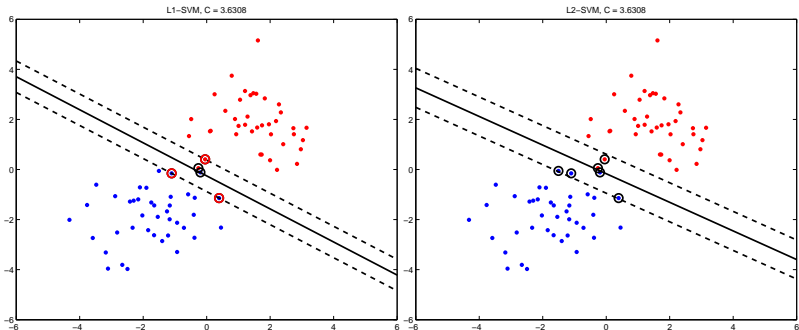
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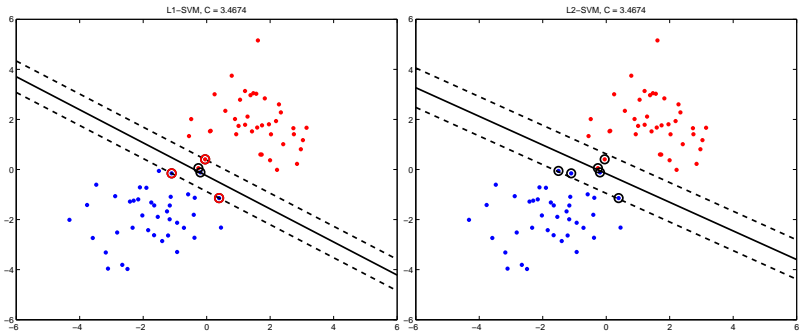
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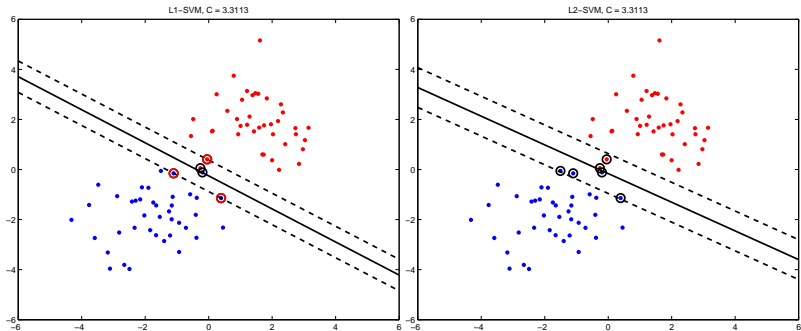
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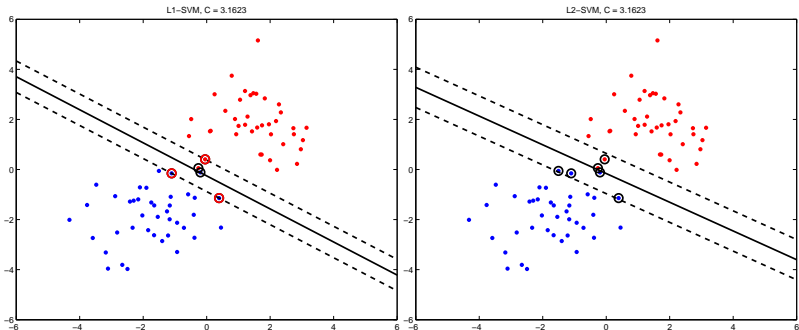
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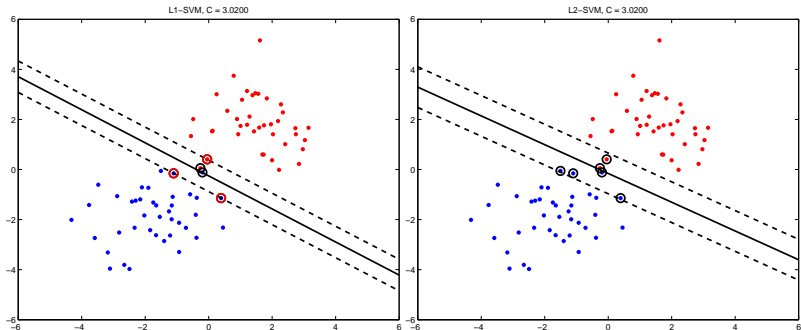
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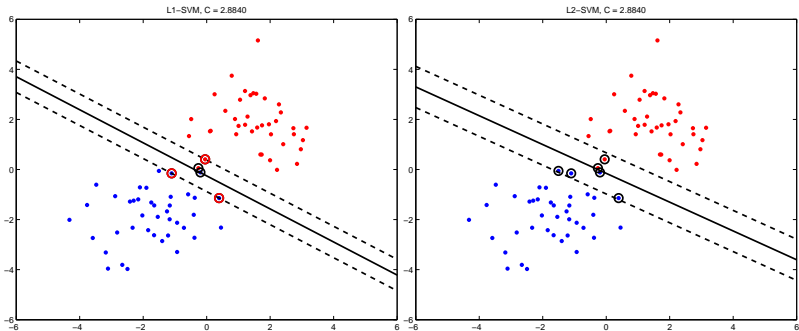


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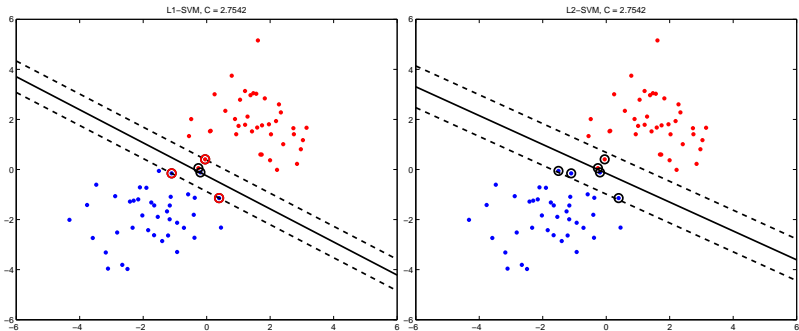




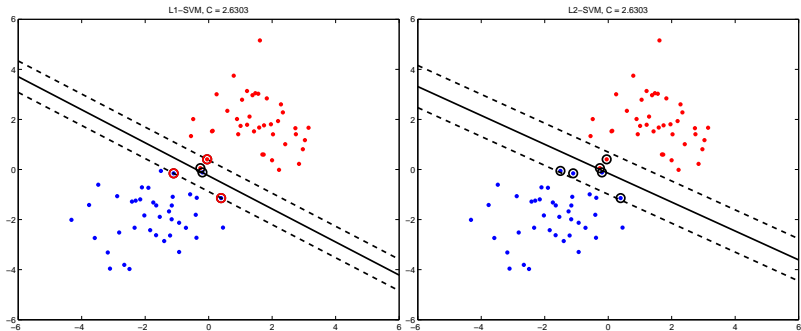
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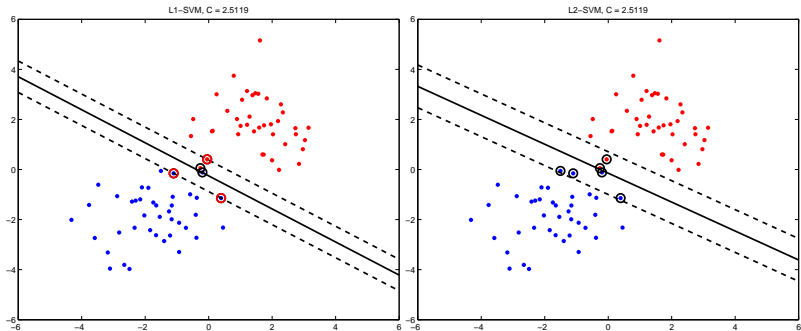
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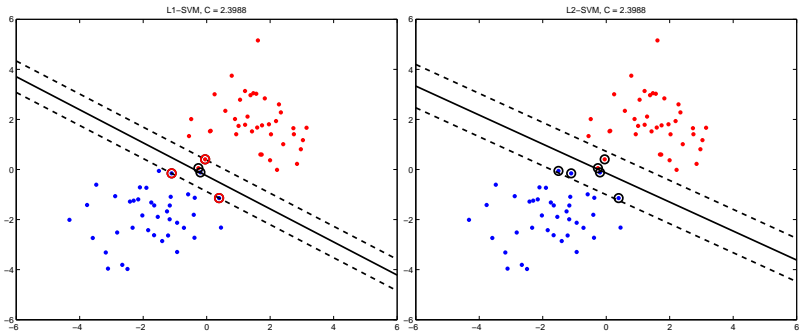
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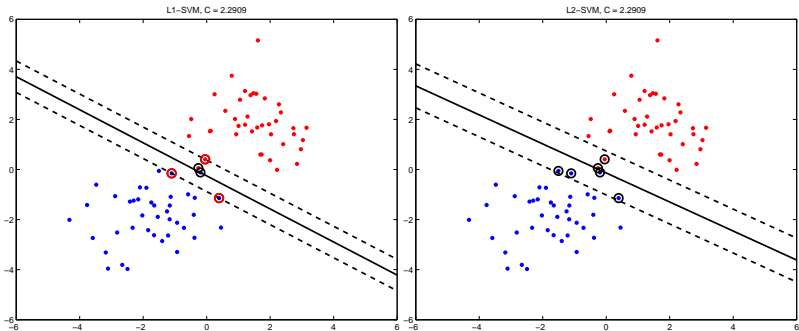
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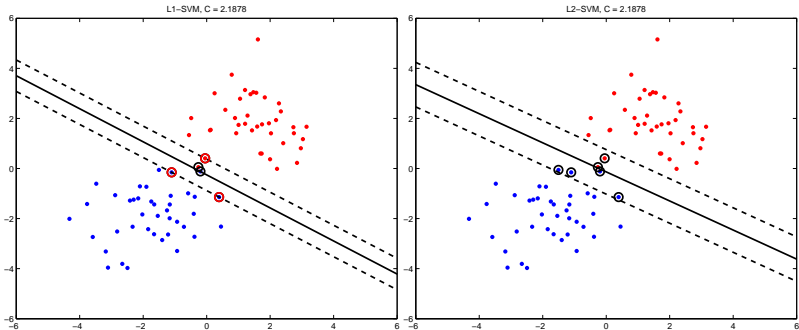
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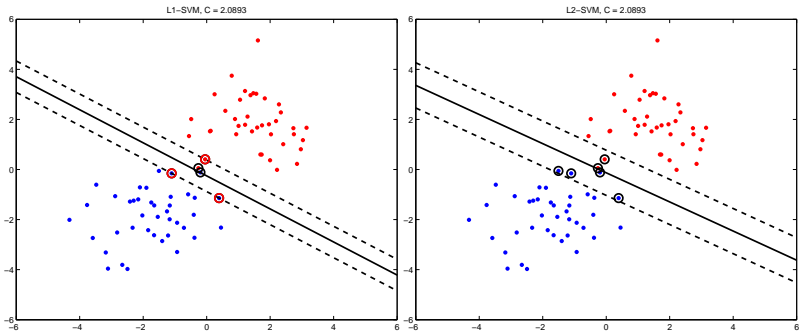
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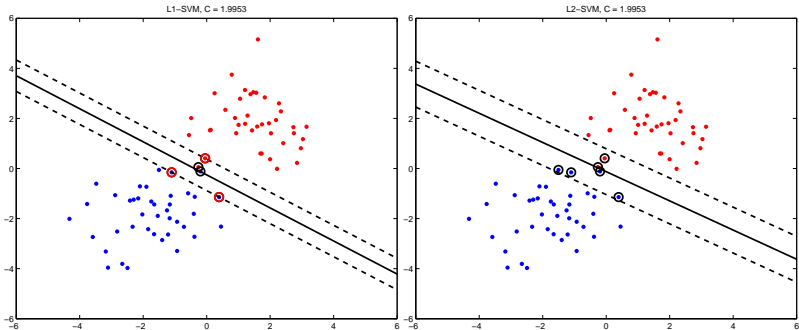


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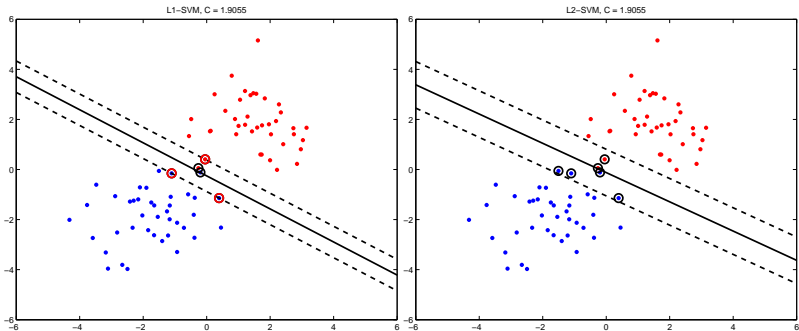




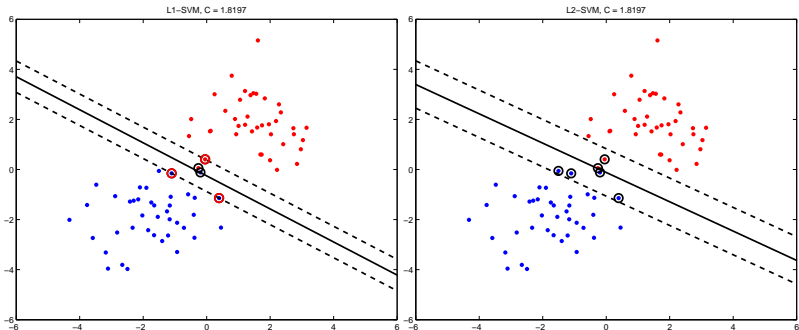
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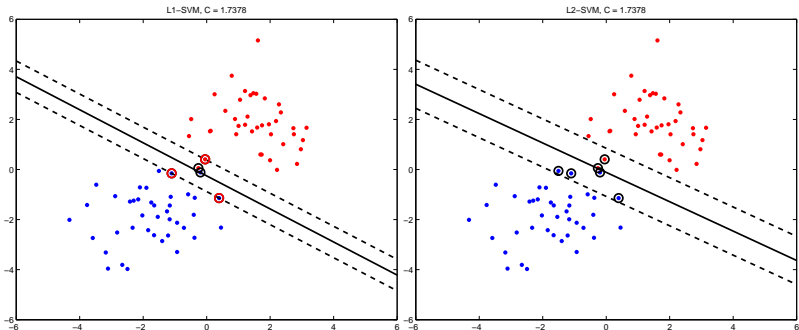
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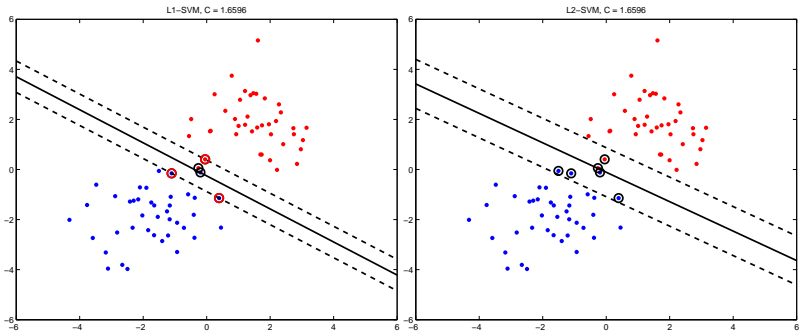
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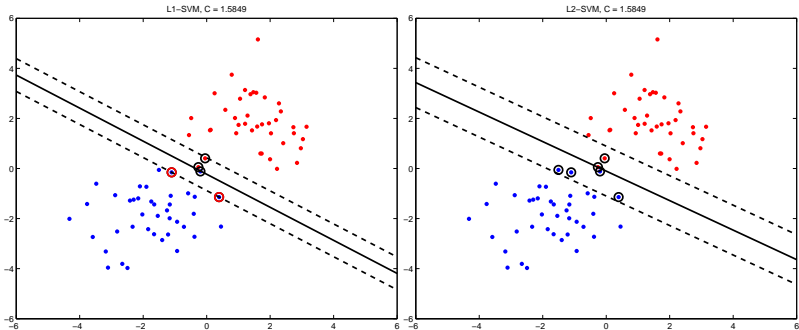
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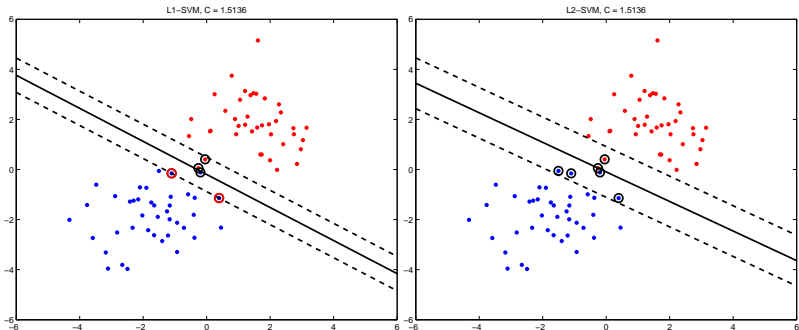
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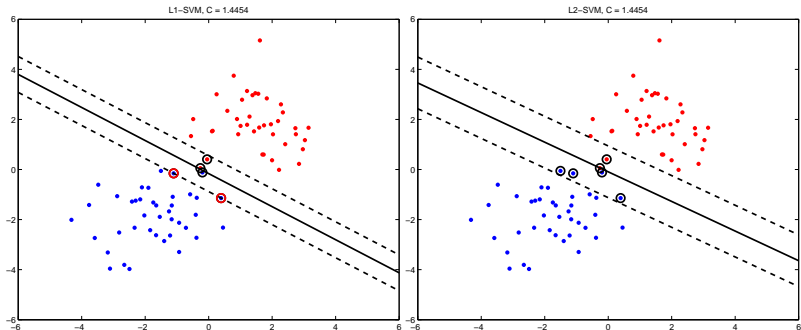
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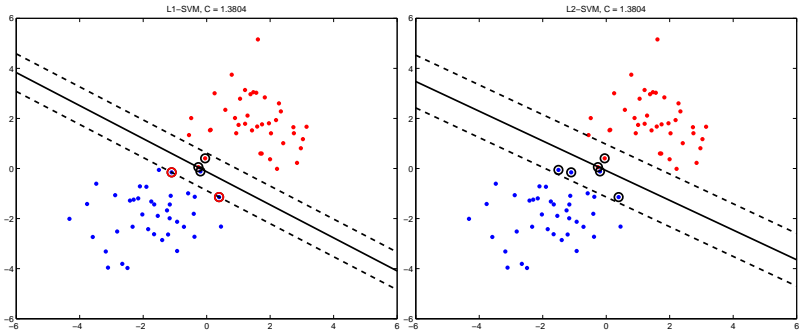


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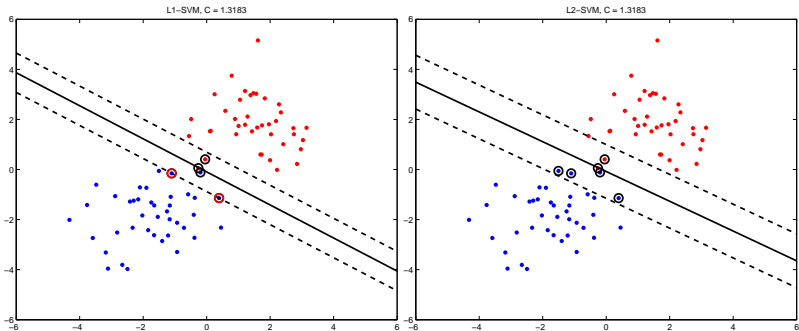




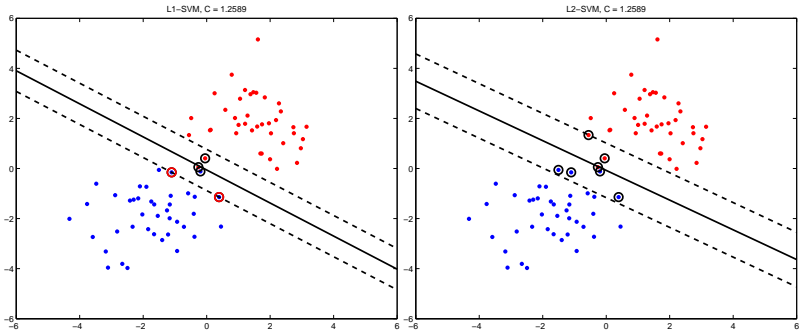
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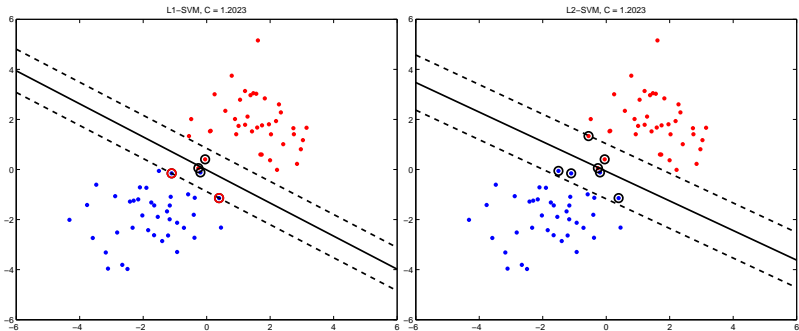
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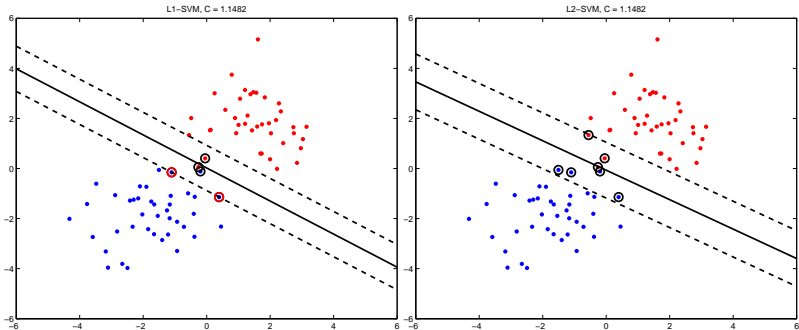
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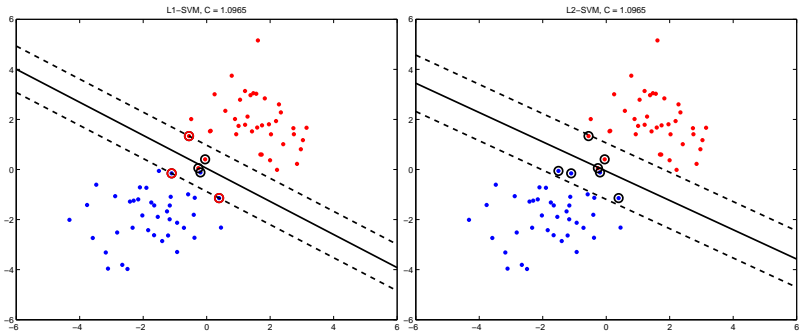
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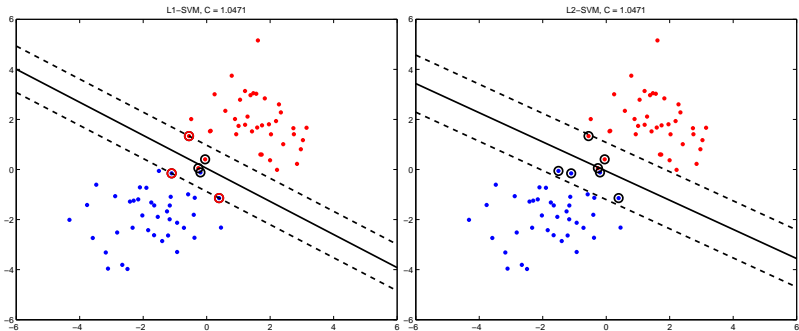
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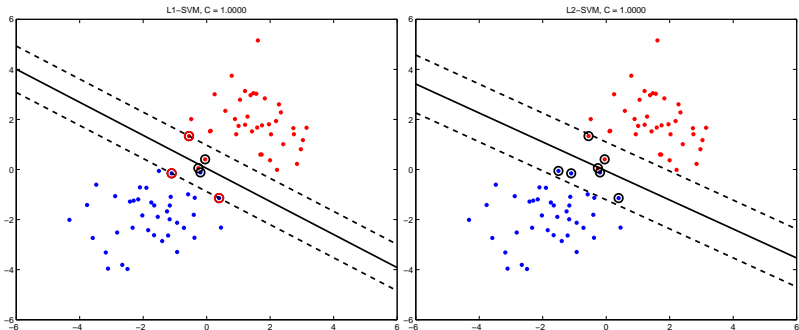
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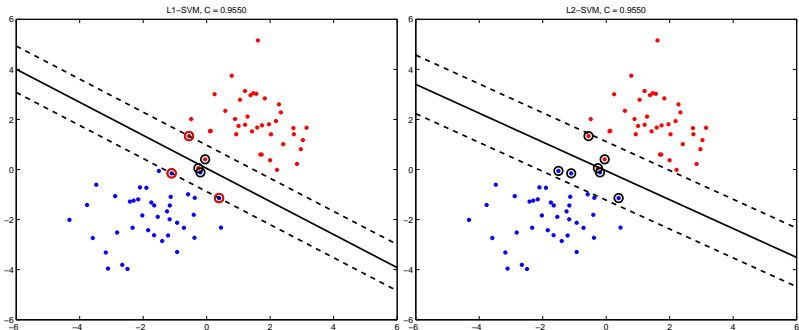


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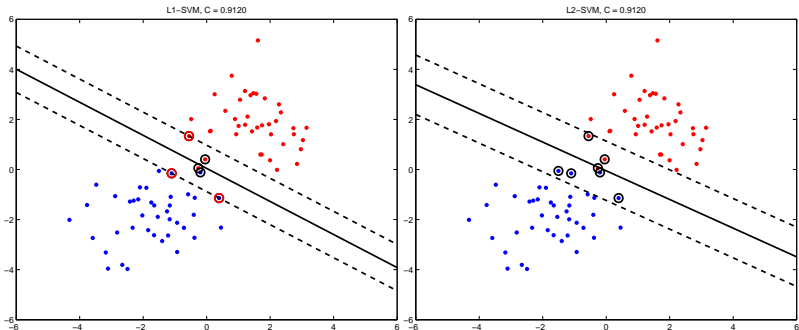




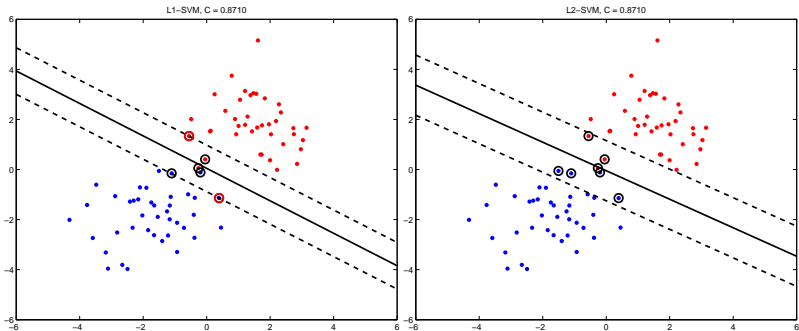
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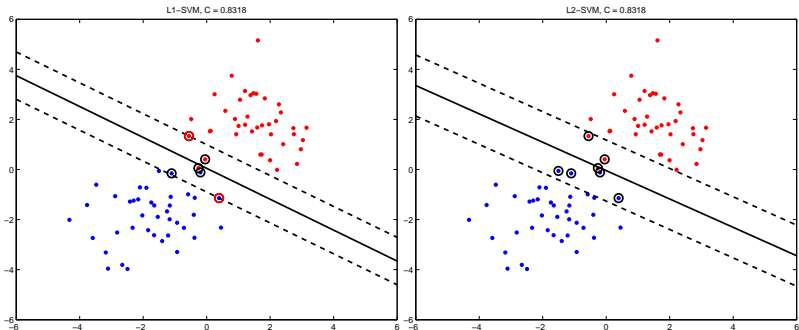
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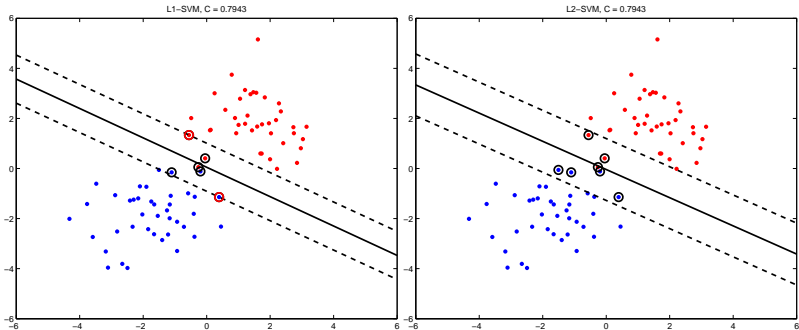
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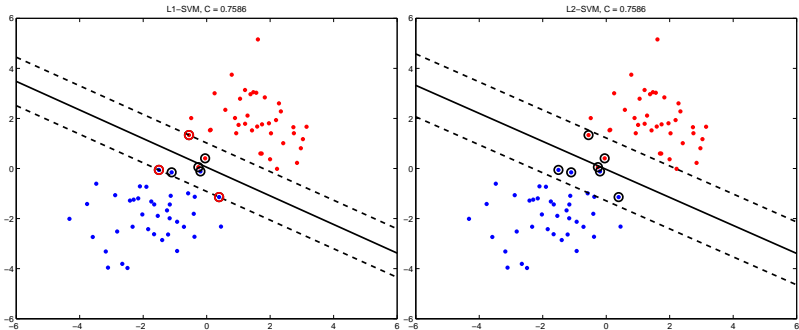
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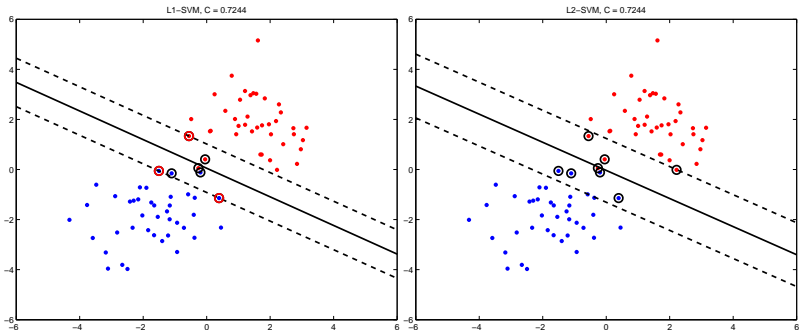
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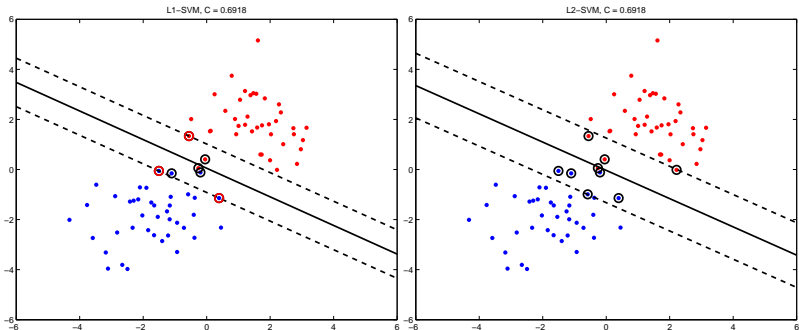
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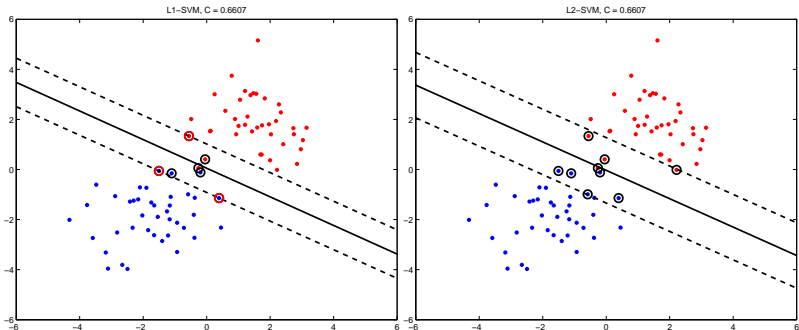


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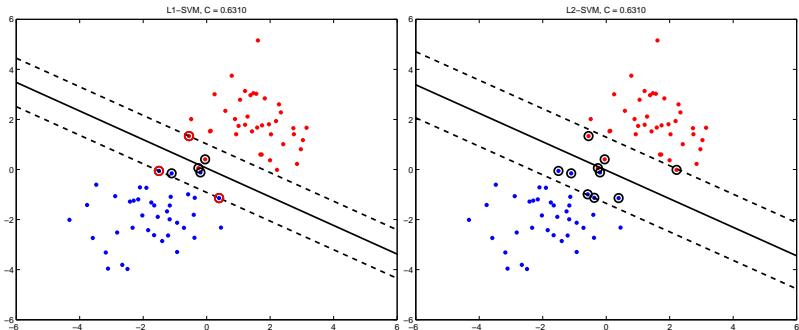




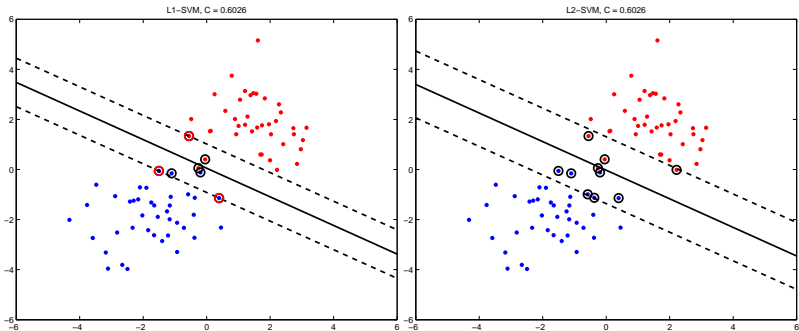
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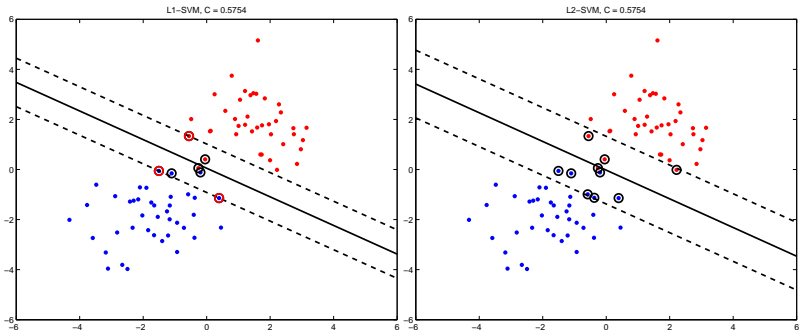
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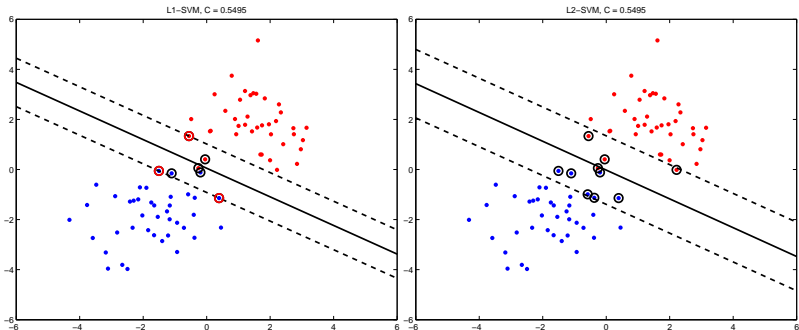
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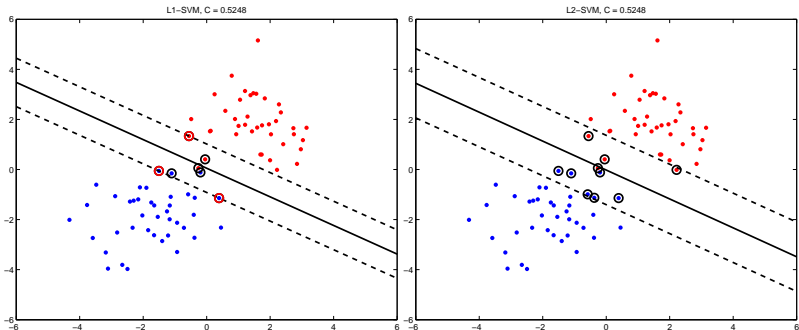
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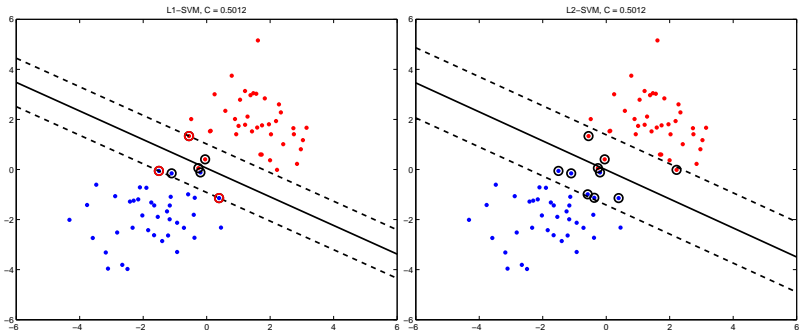
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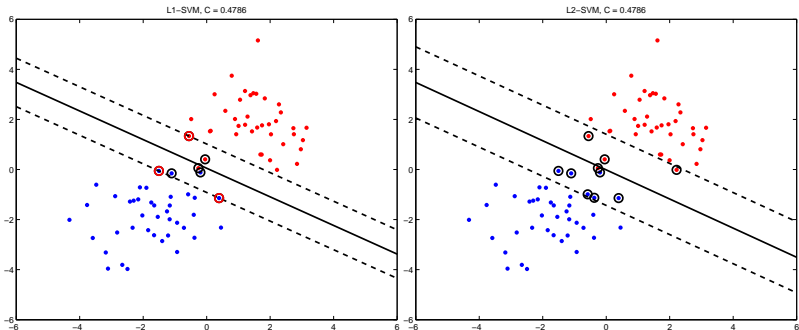
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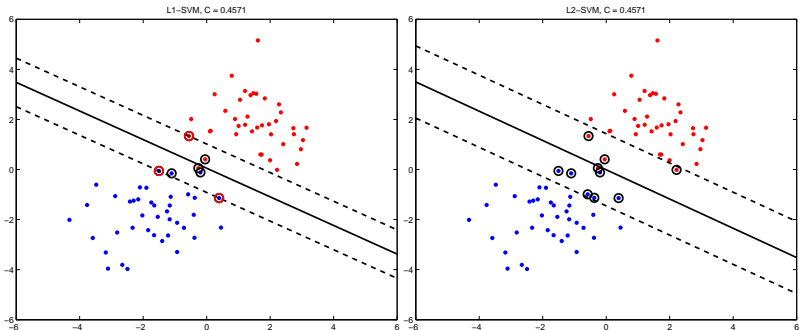


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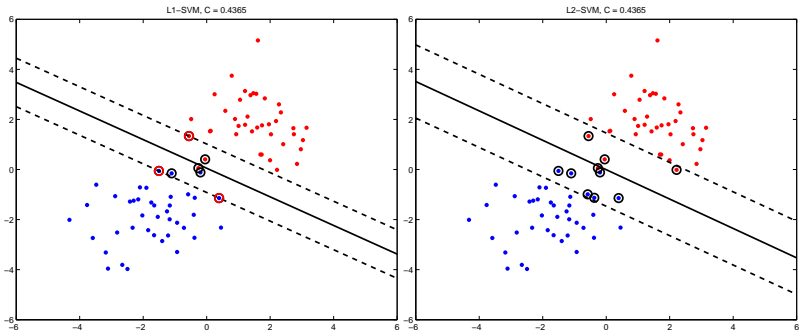




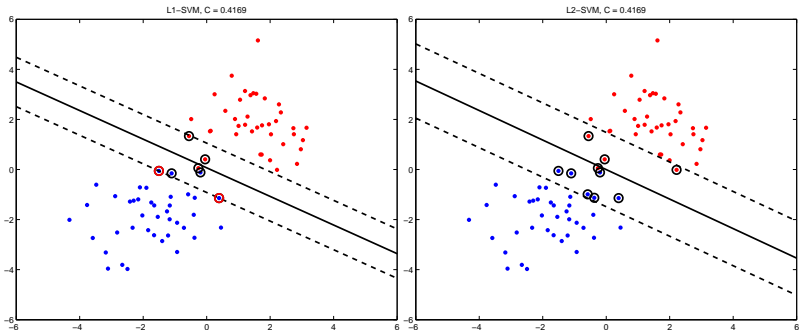
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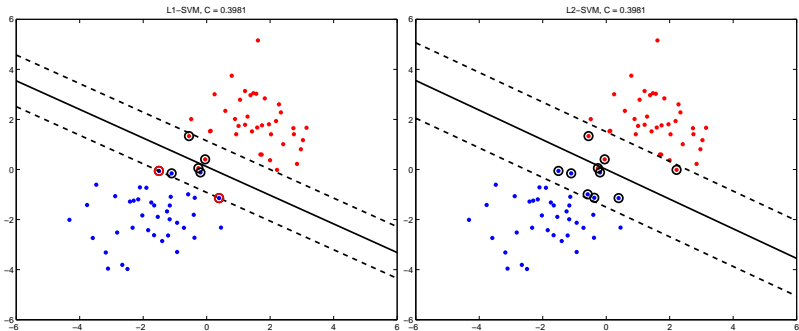
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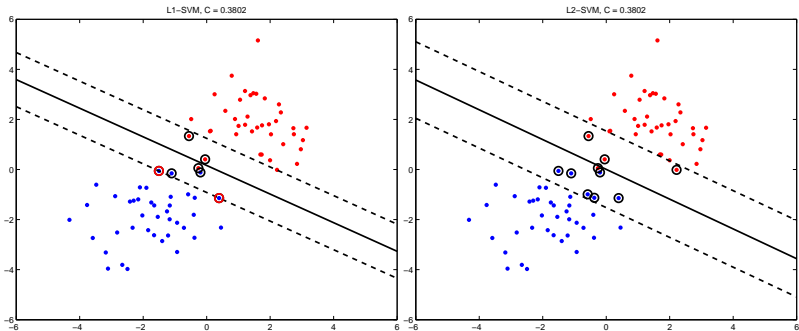
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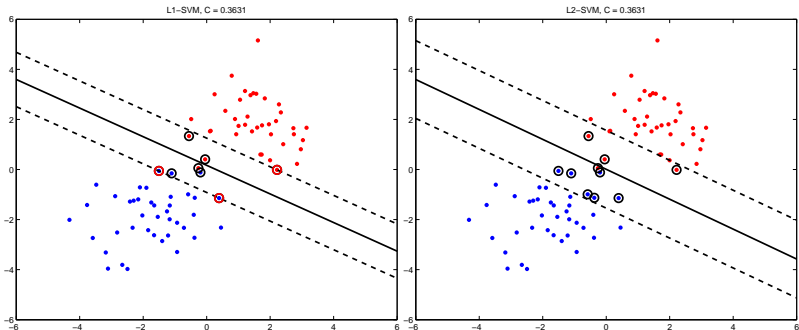
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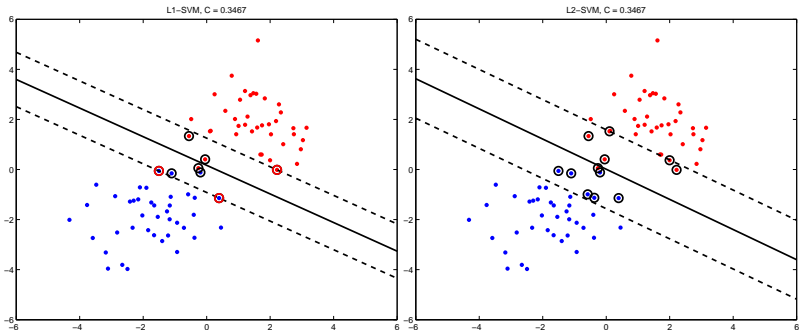
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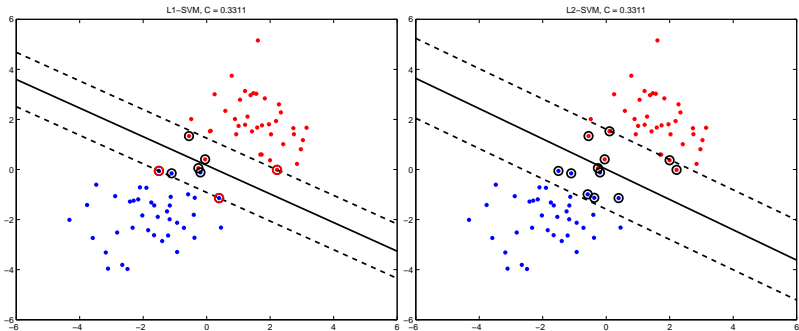
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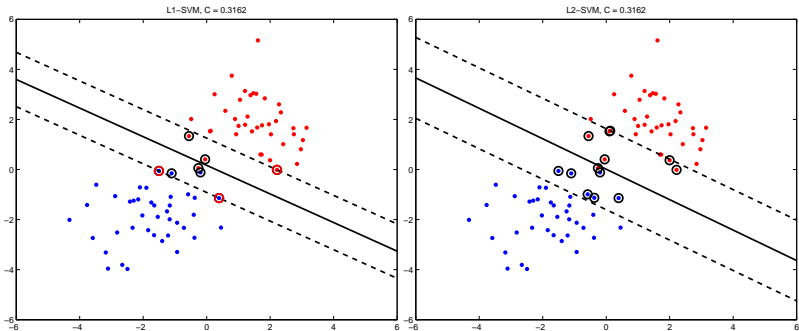


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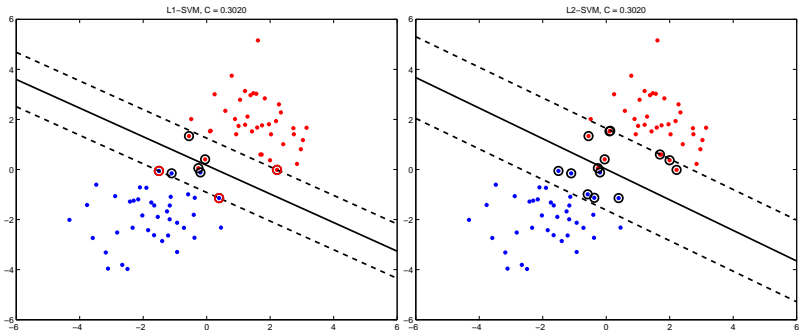




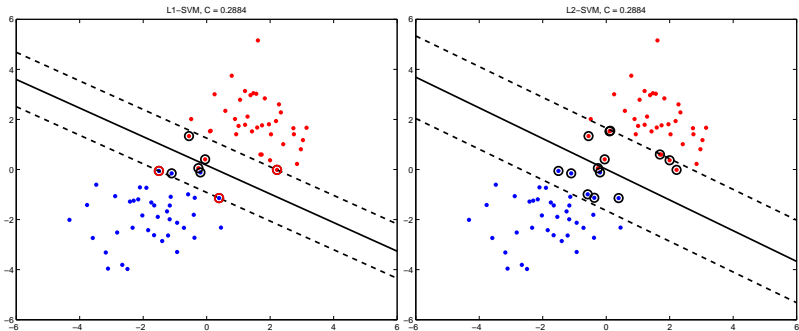
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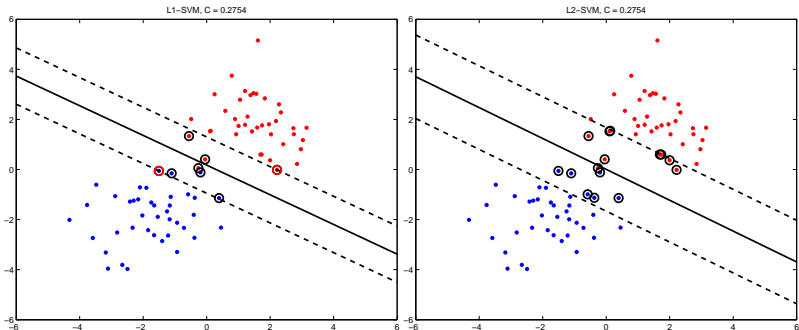
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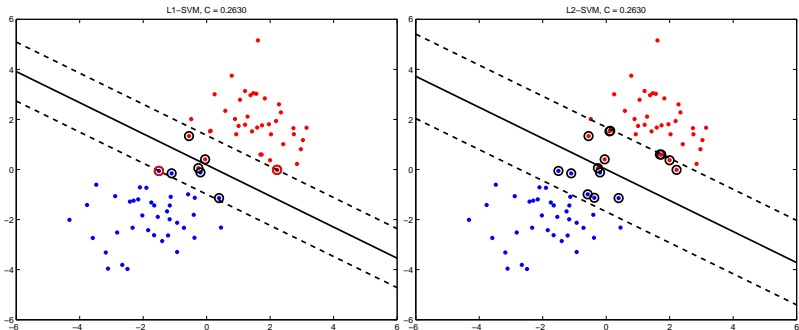
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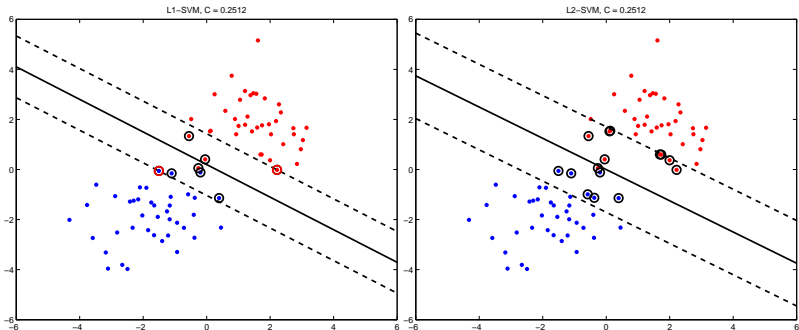
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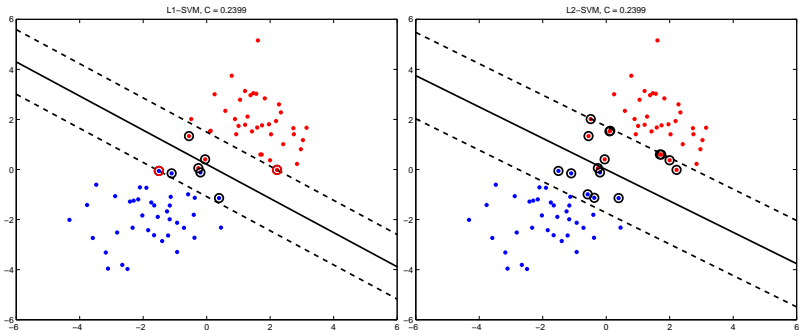
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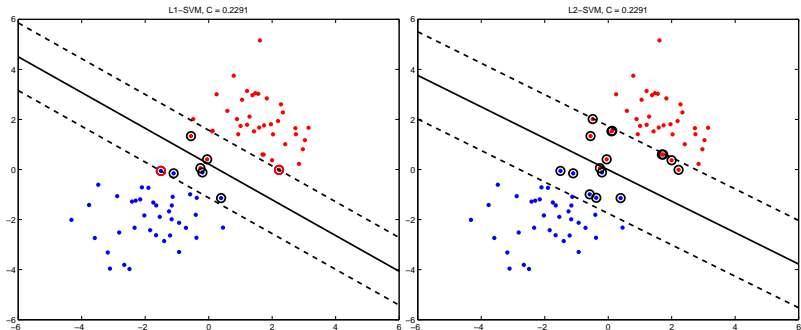
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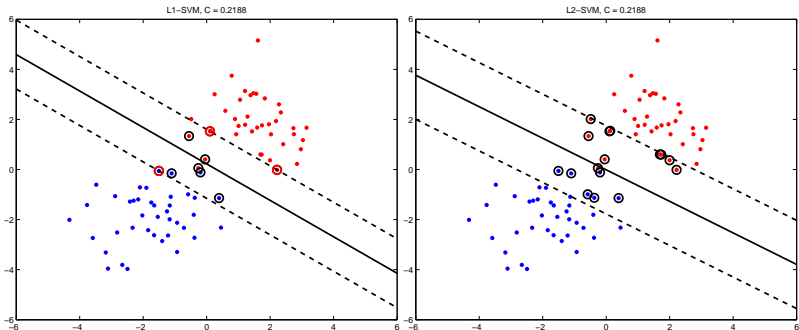


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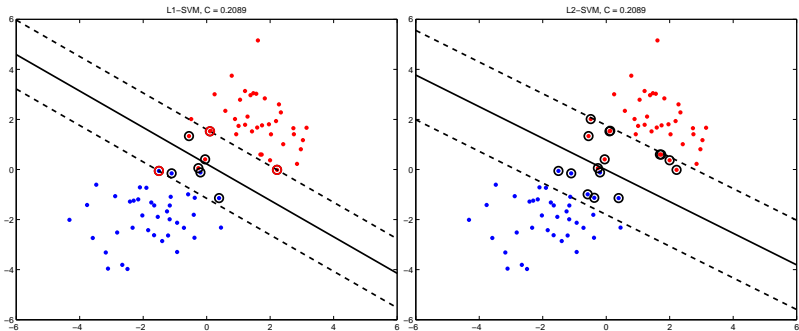




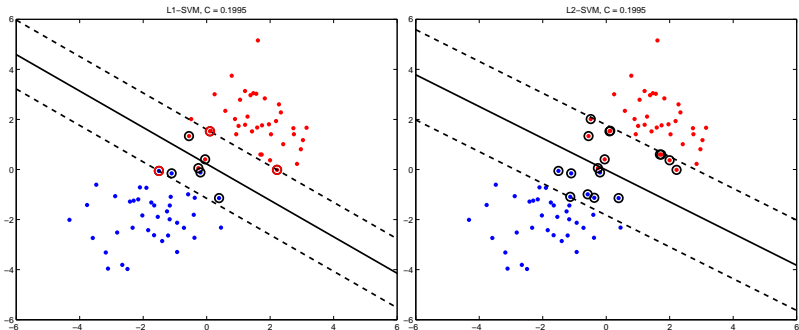
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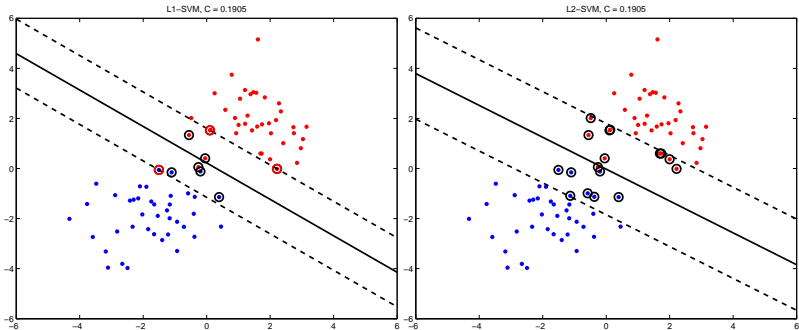
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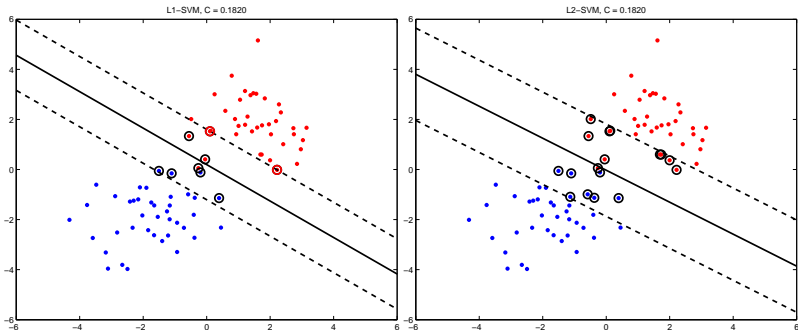
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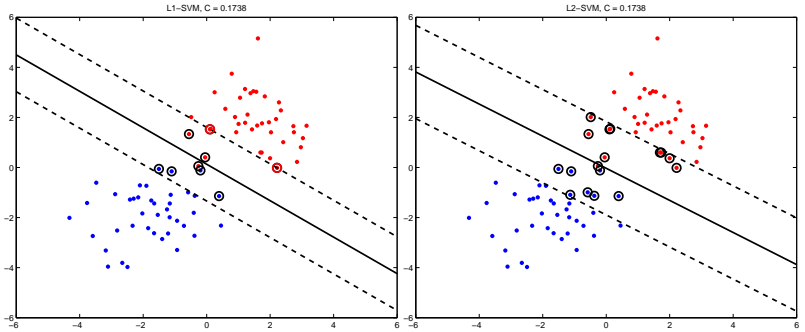
# L1-SVM vs L2-SVM



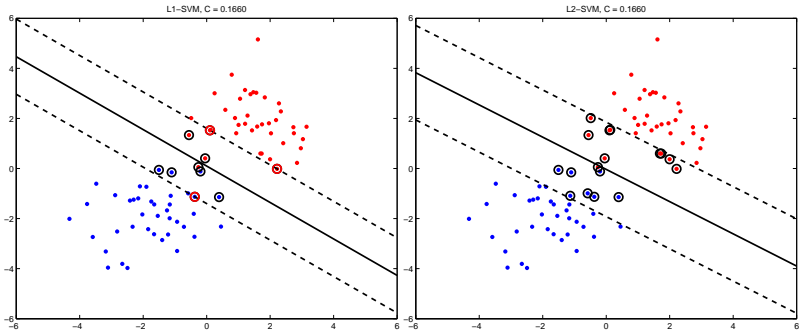
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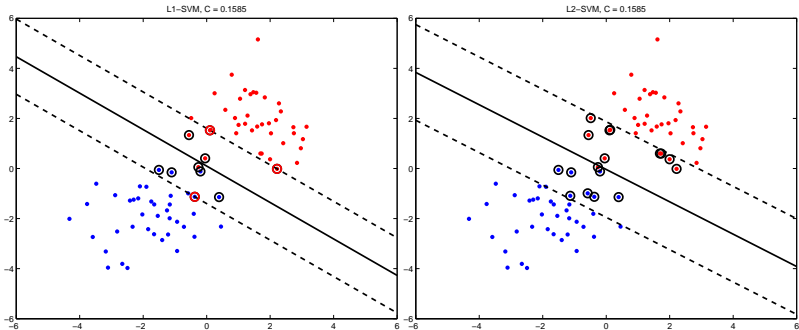
# L1-SVM vs L2-SVM



# L1-SVM vs L2-SVM

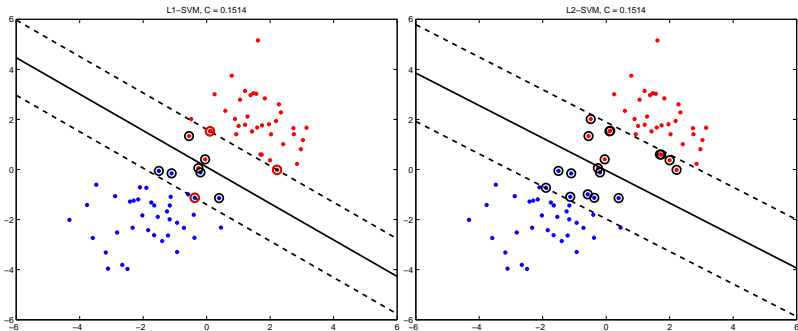


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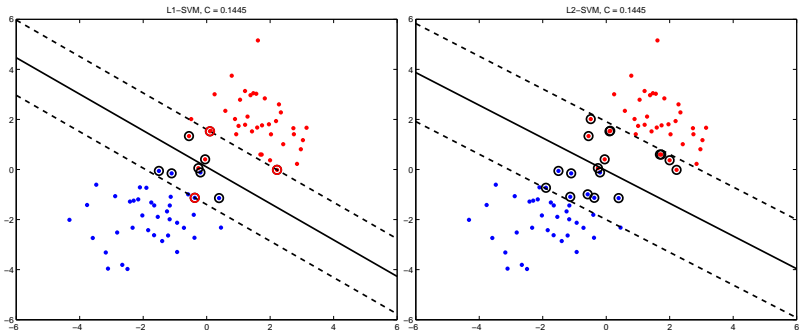




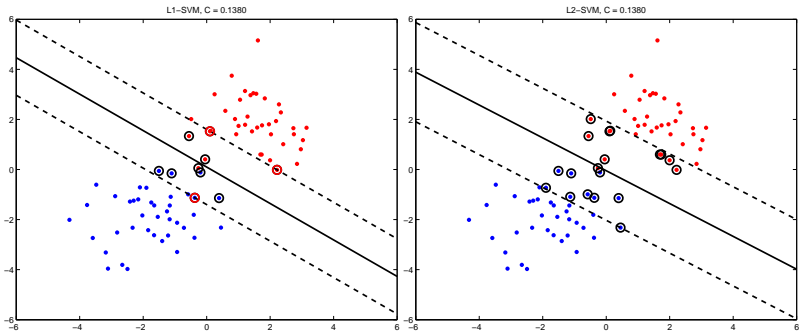
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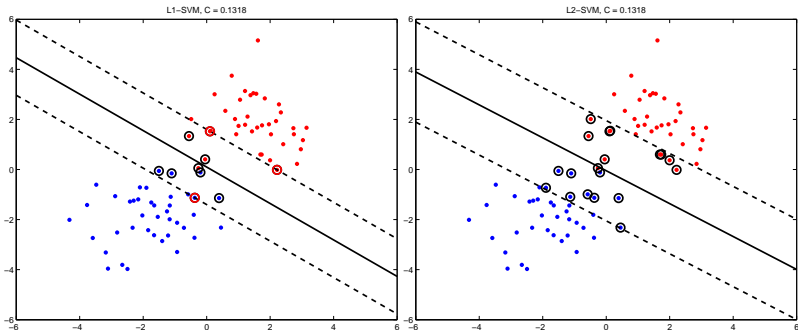
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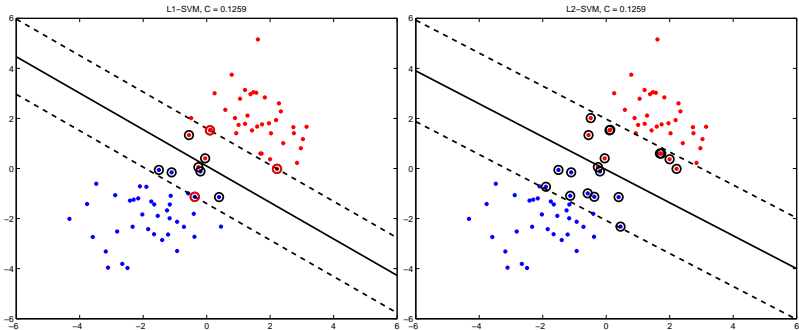
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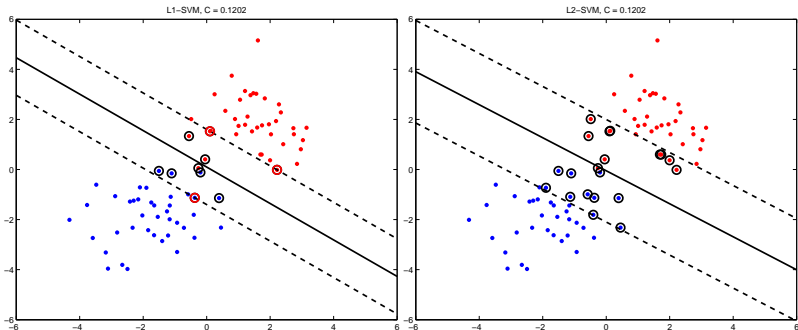
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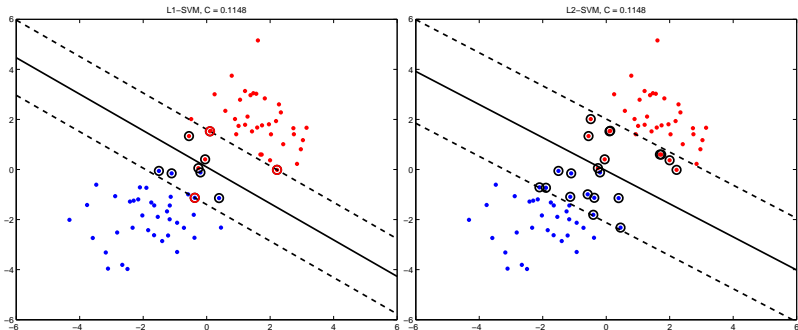
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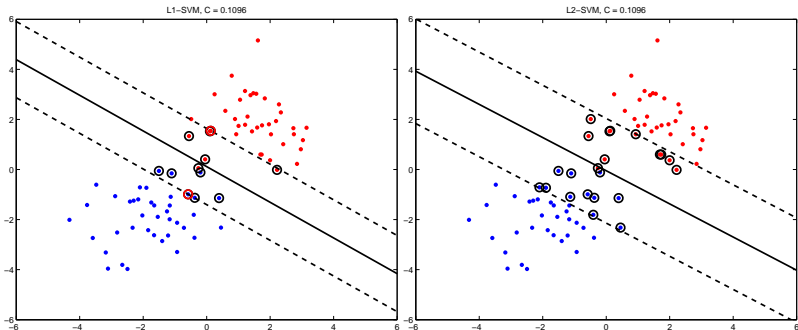
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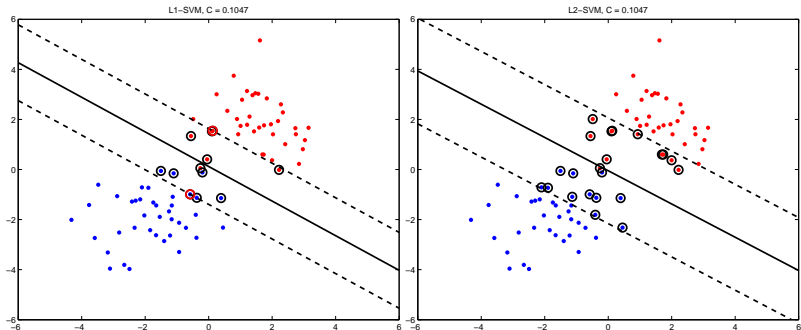


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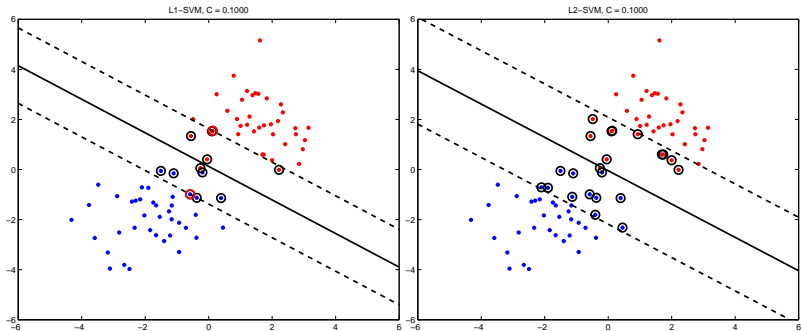




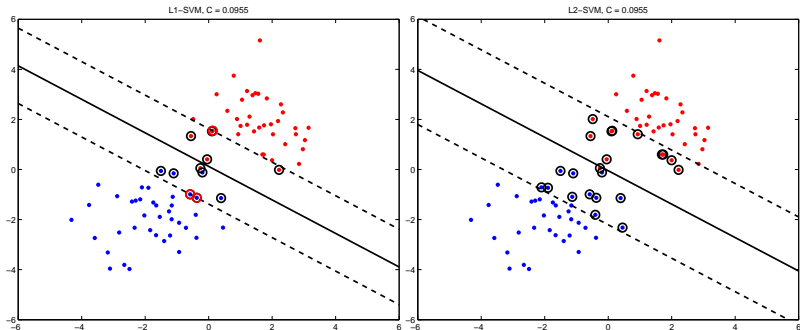
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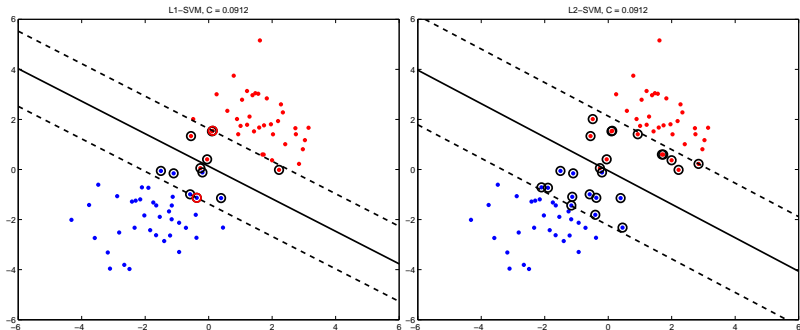
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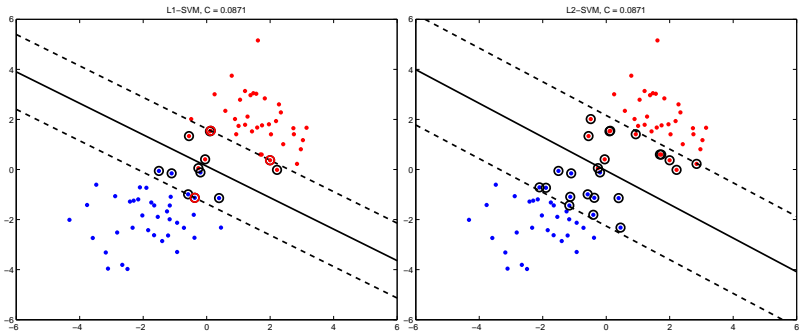
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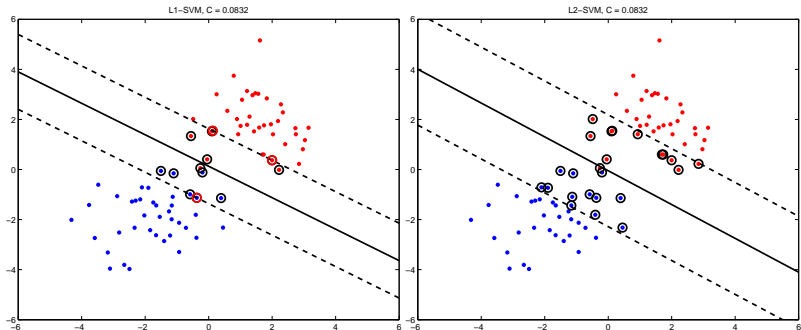
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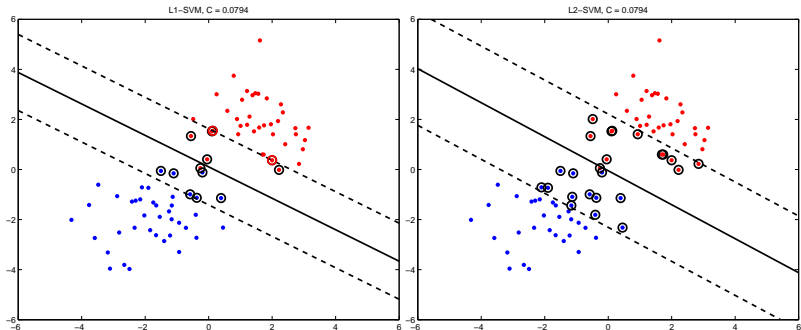
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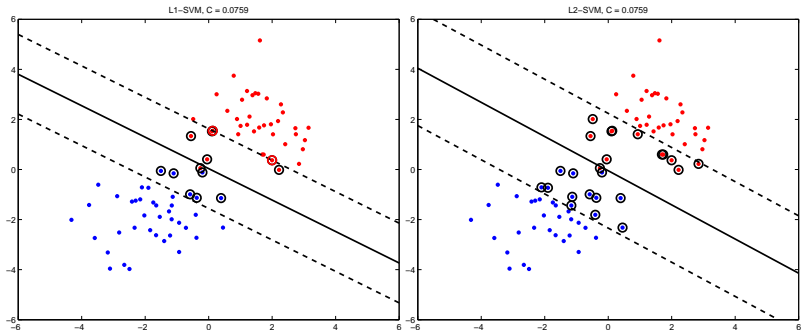
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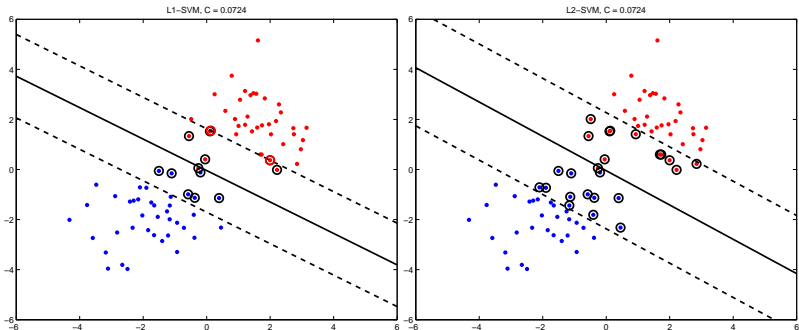


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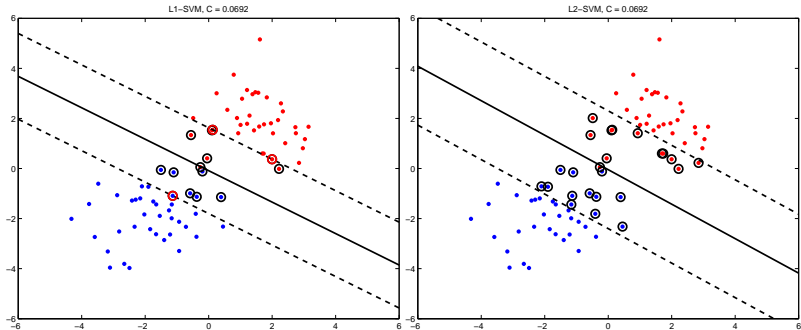




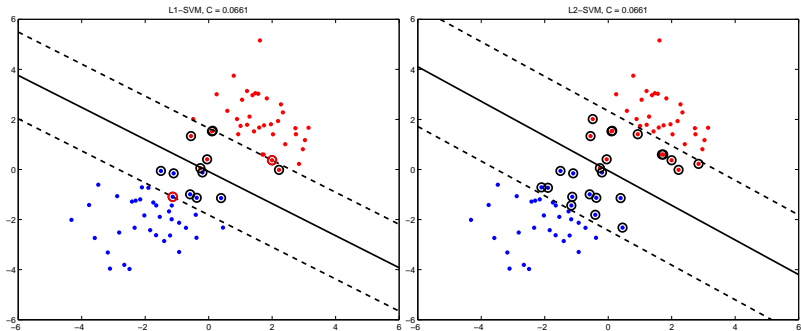
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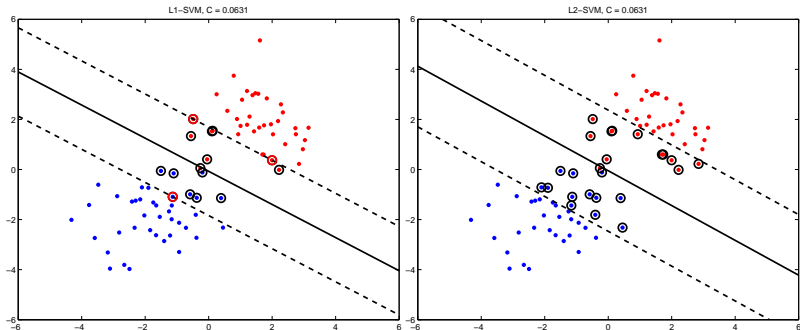
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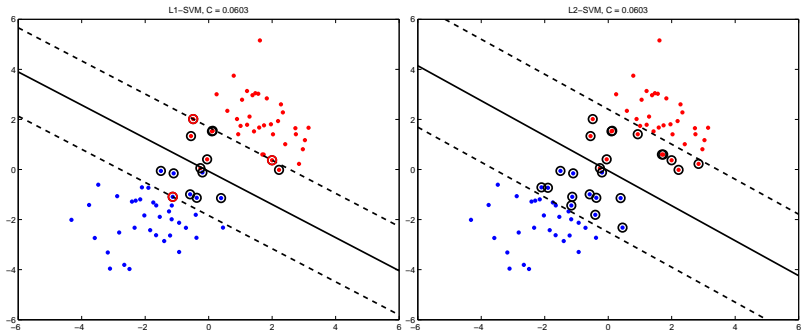
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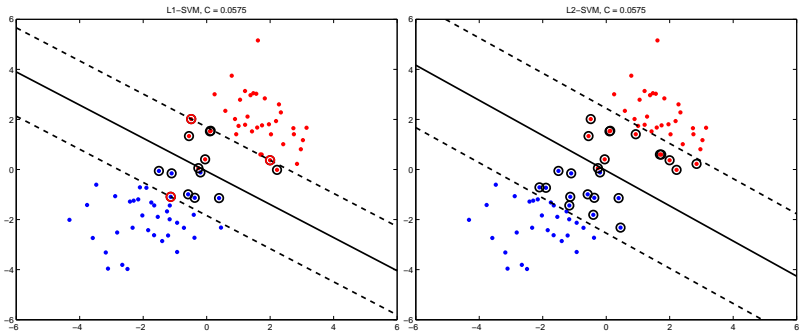
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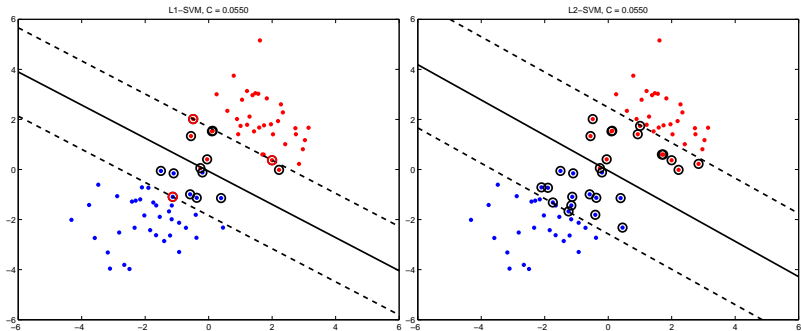
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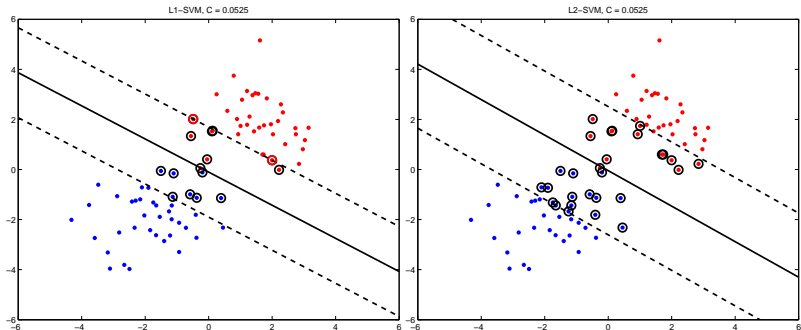
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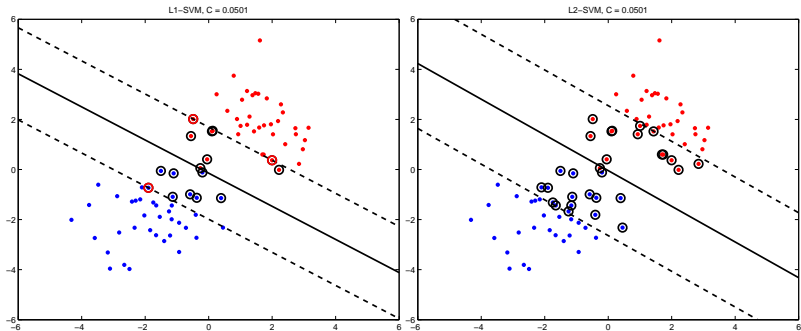


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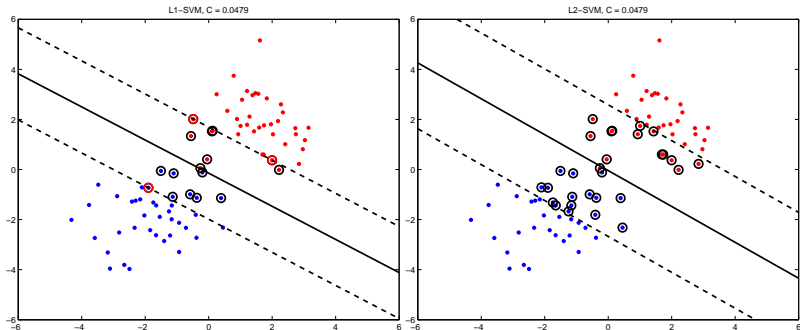




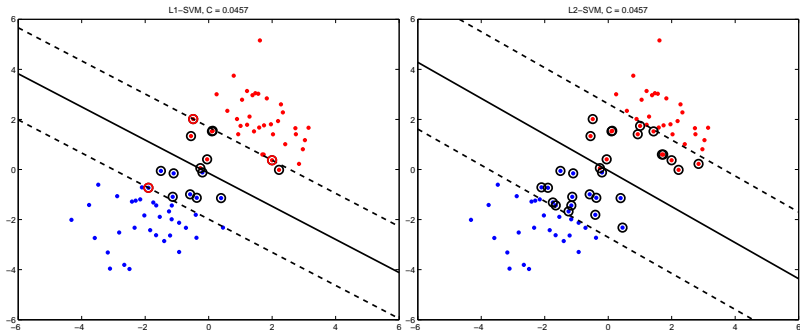
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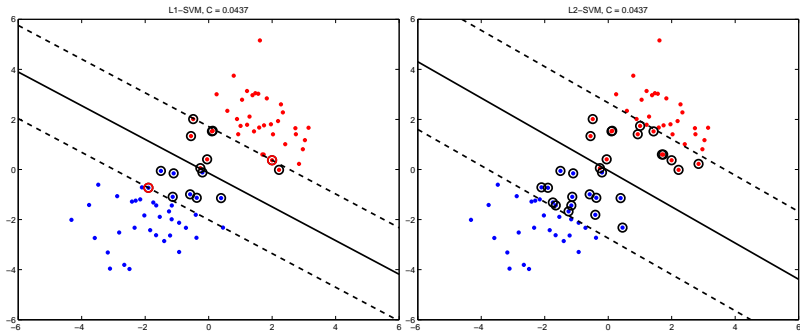
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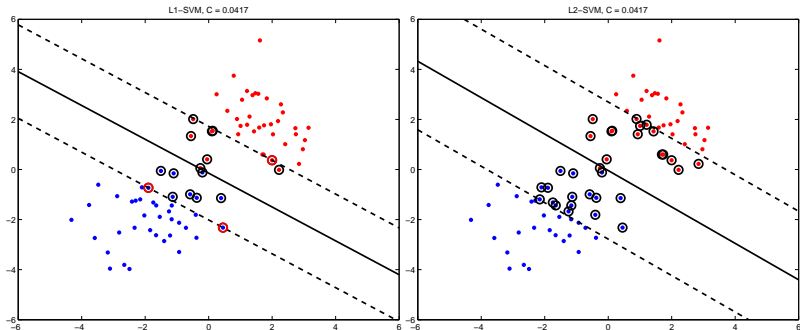
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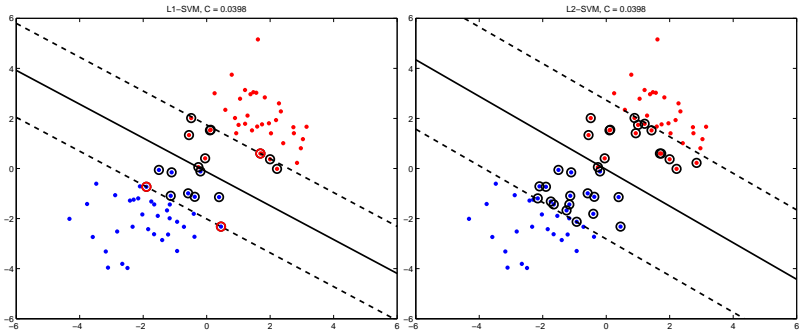
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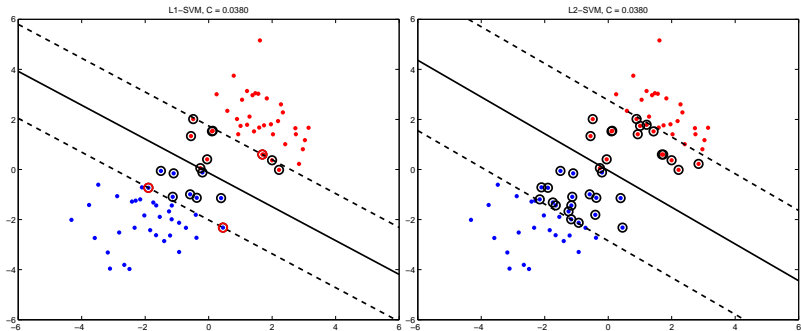
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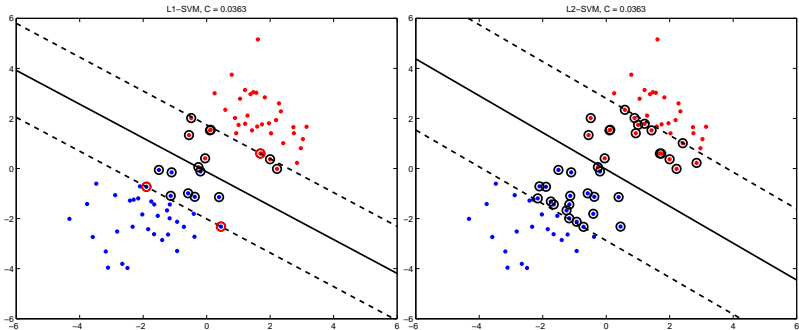
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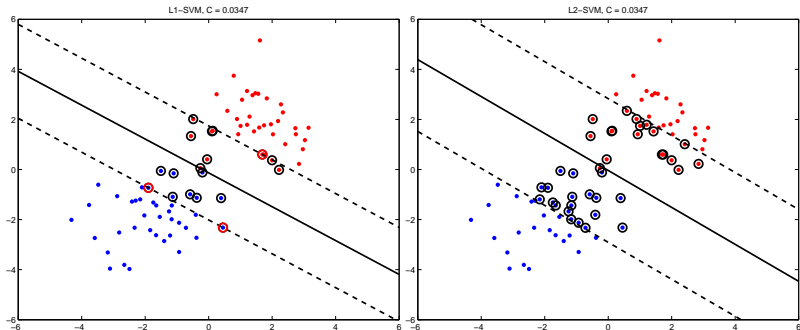


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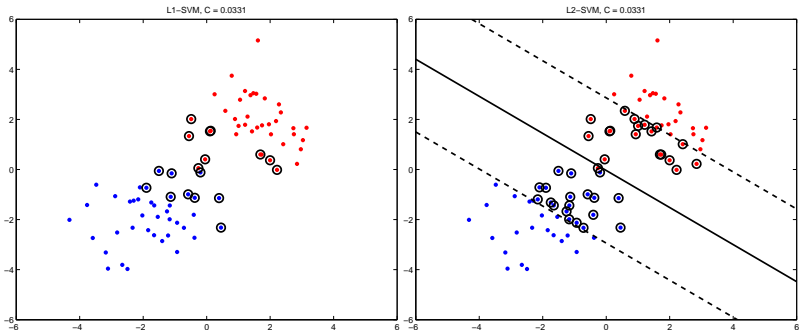




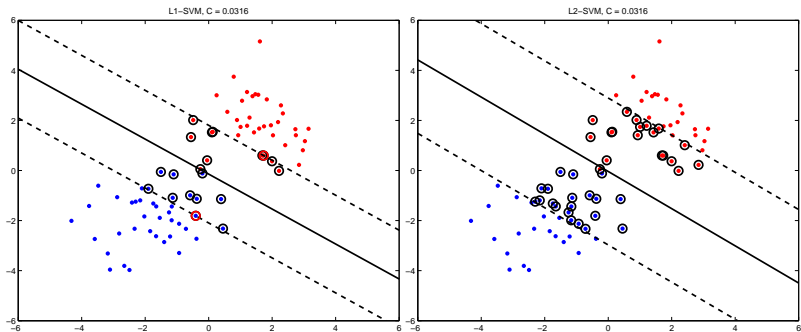
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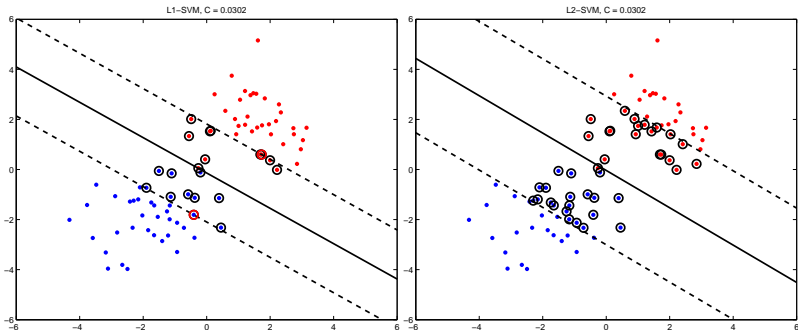
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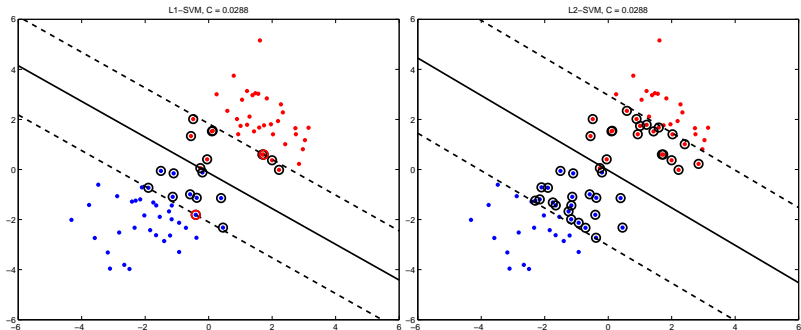
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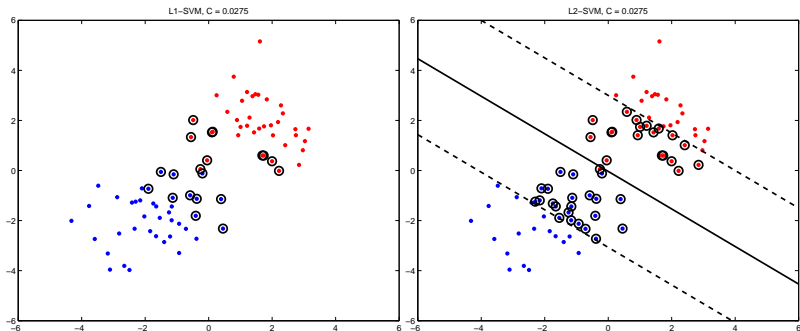
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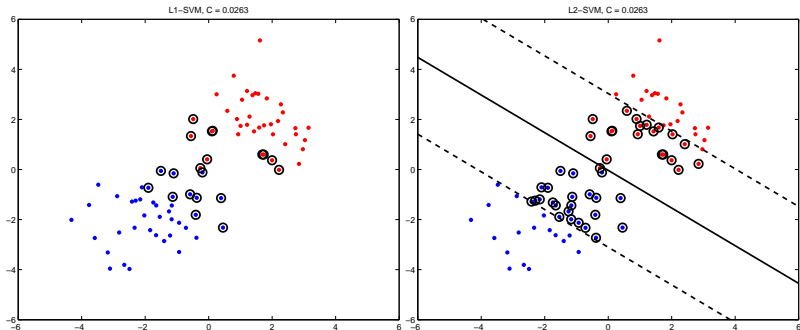
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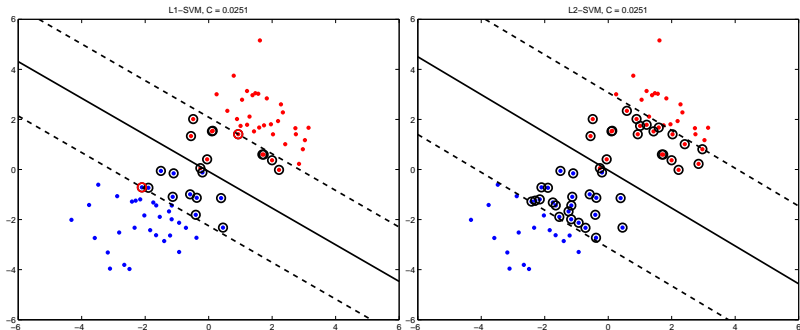
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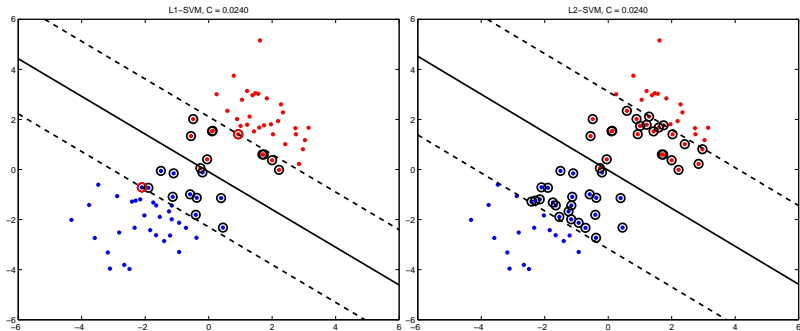


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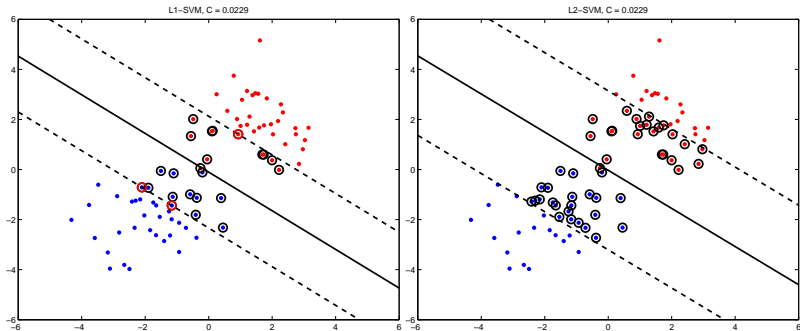




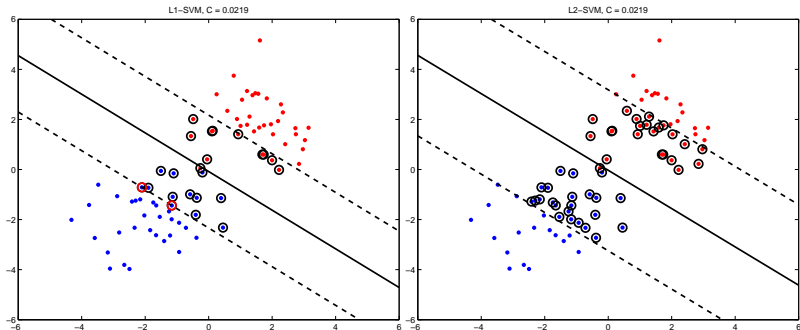
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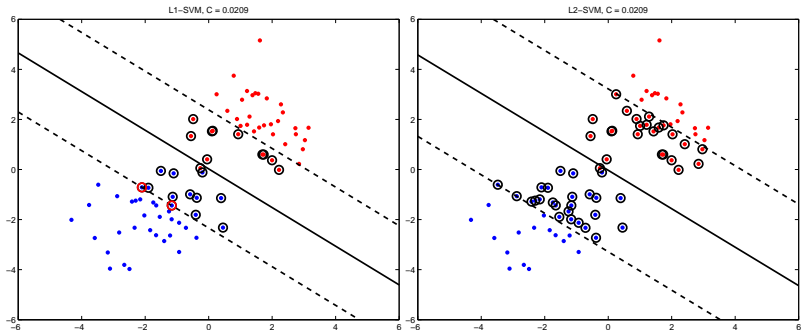
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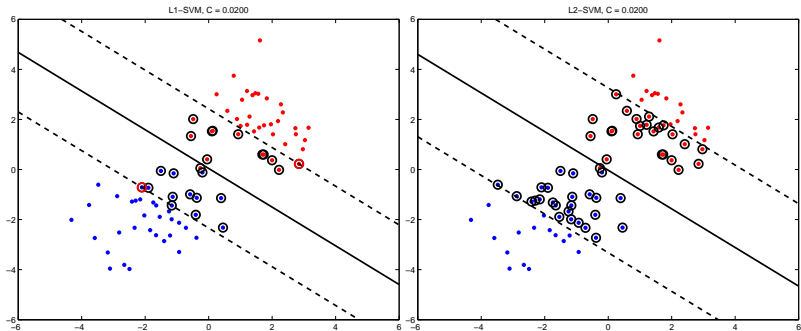
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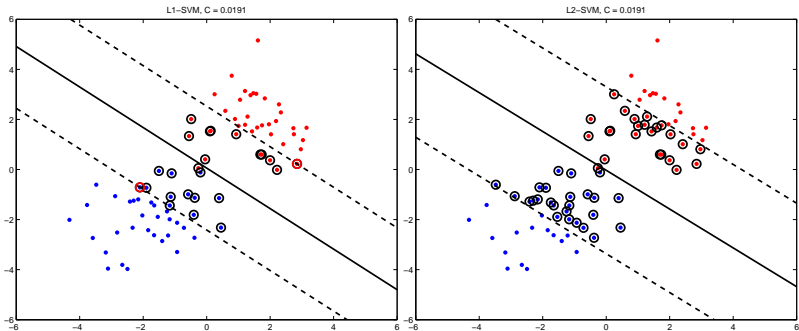
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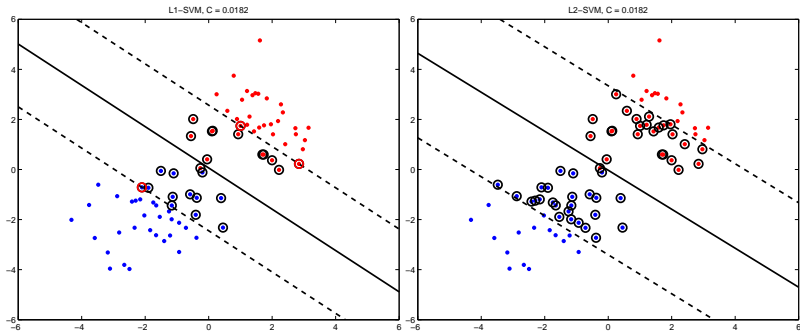
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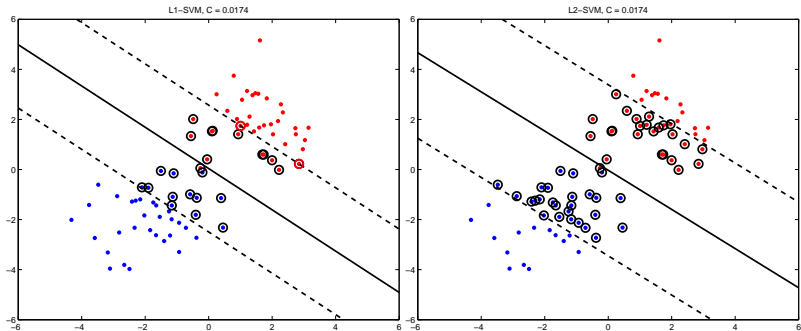
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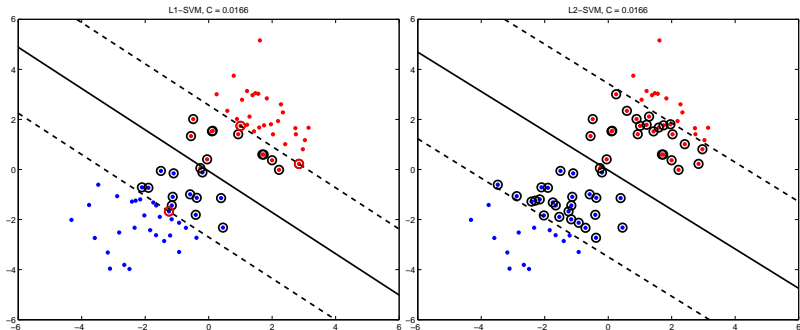


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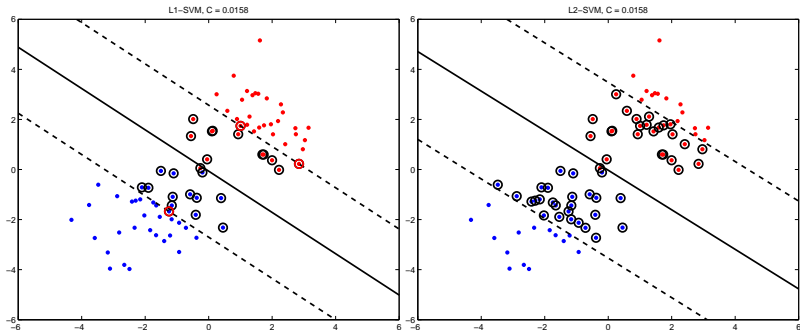




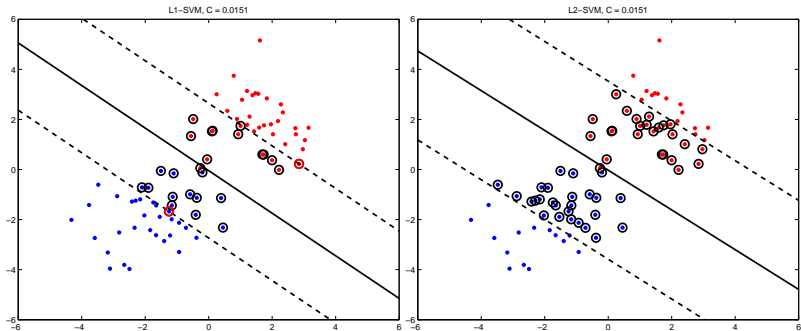
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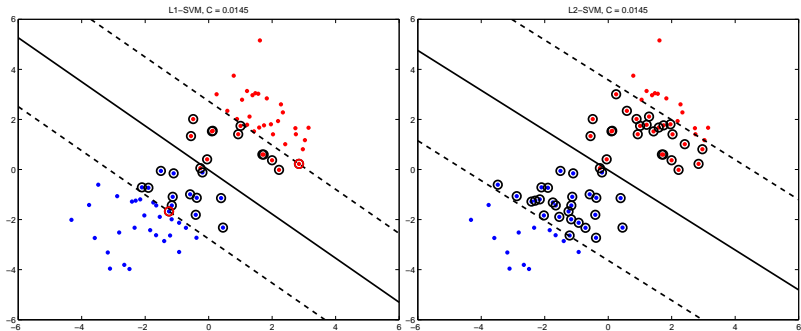
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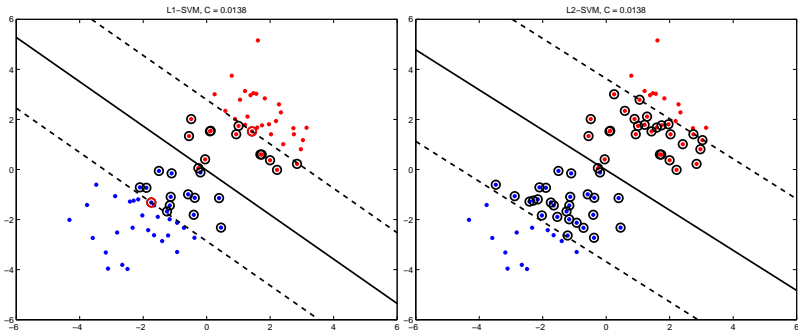
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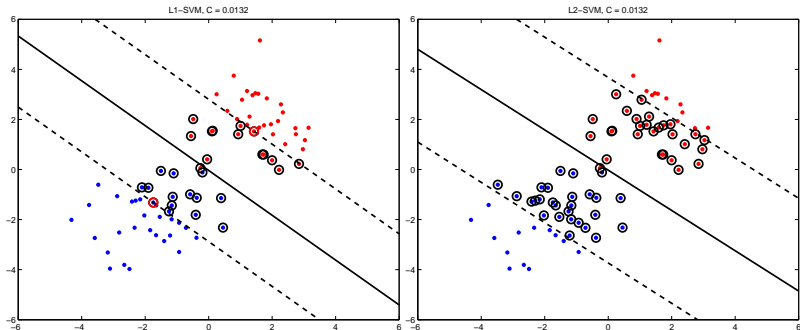
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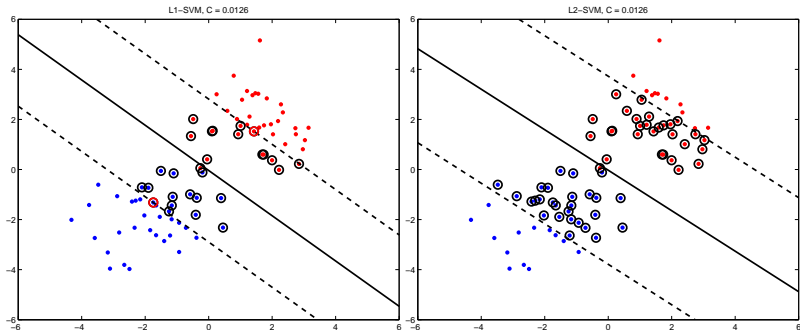
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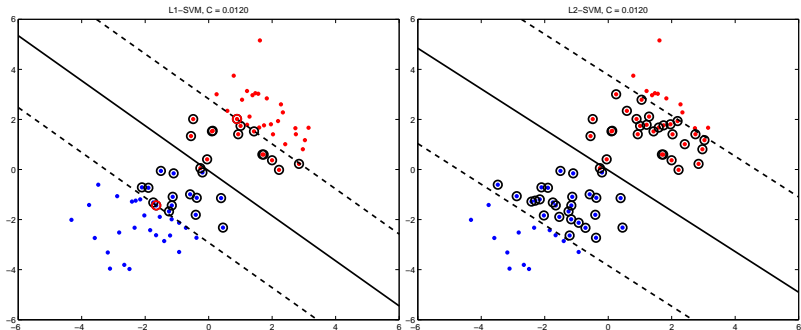
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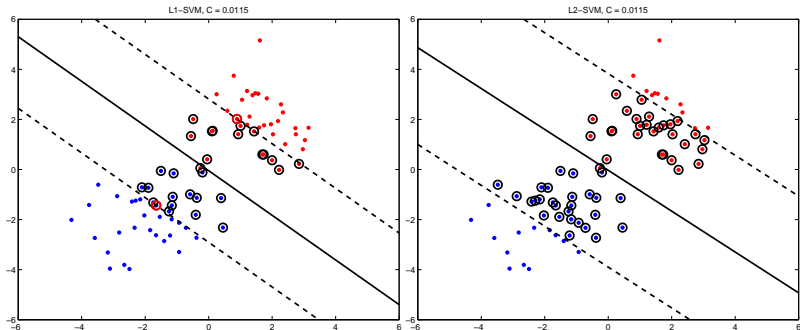


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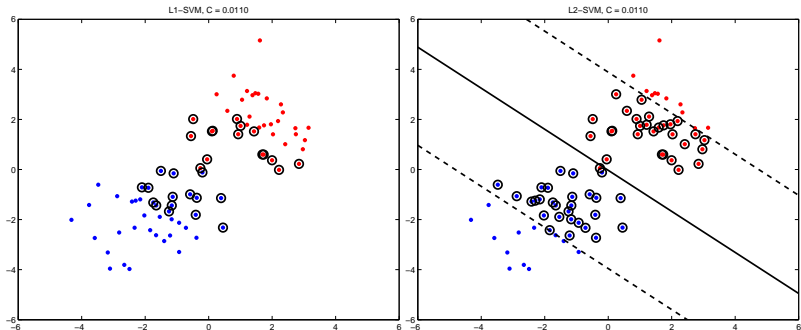




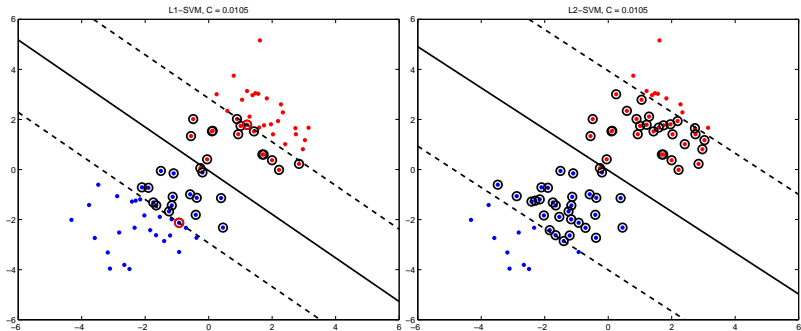
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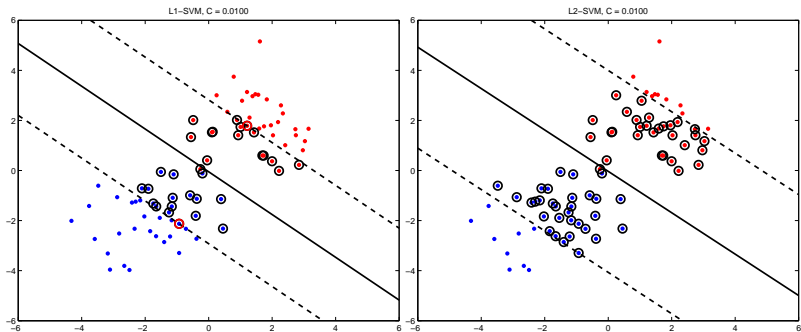
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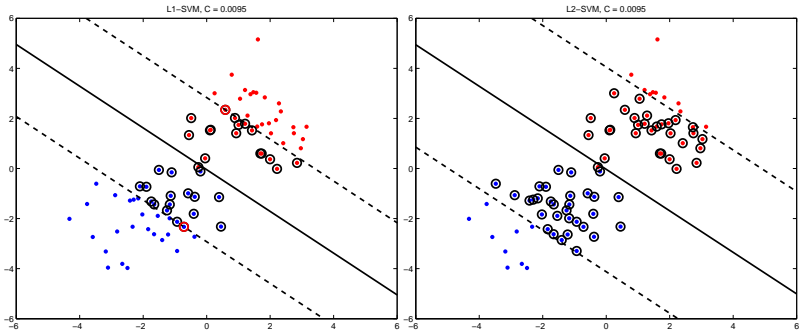
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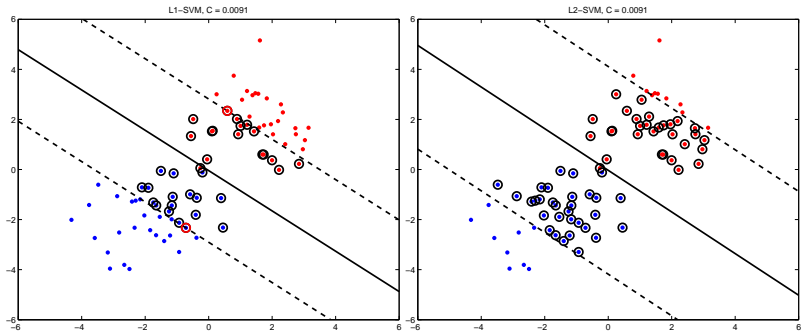
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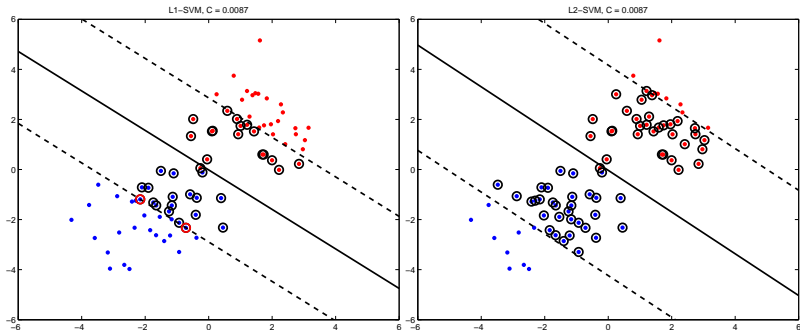
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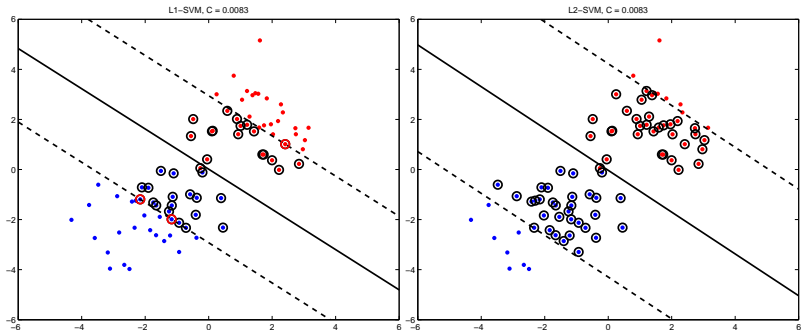
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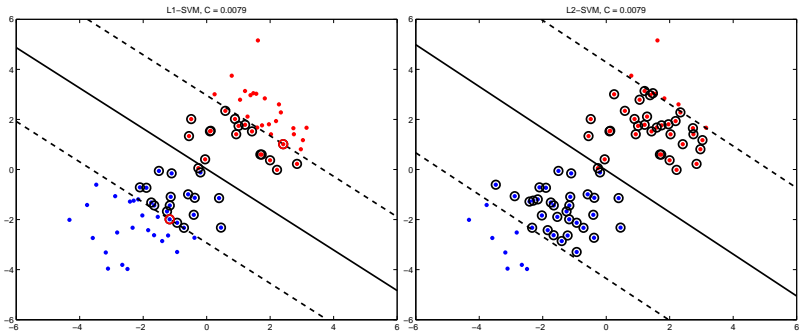


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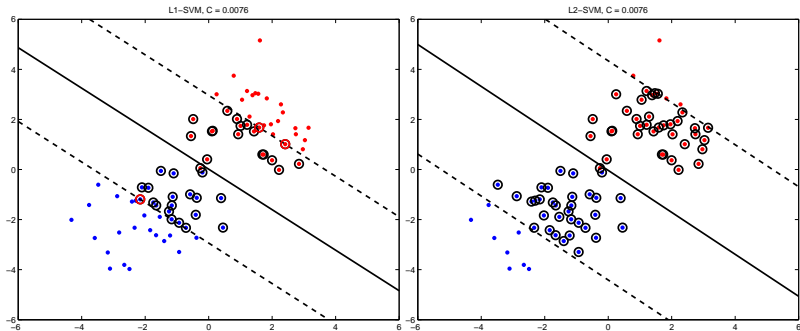




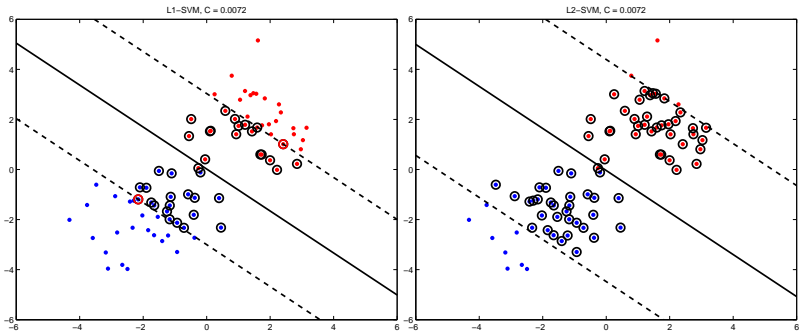
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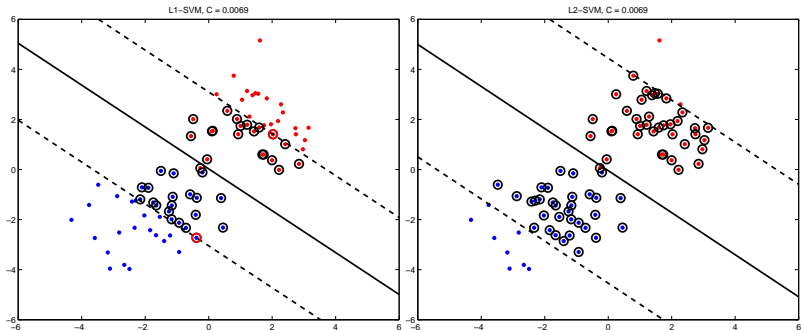
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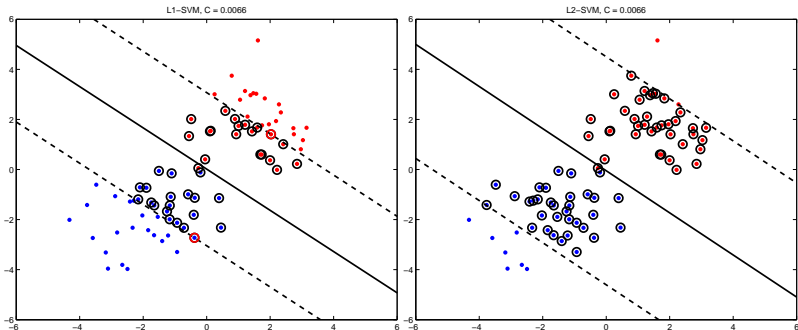
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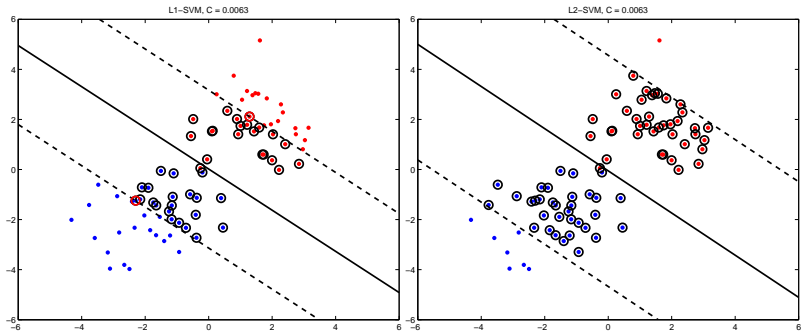
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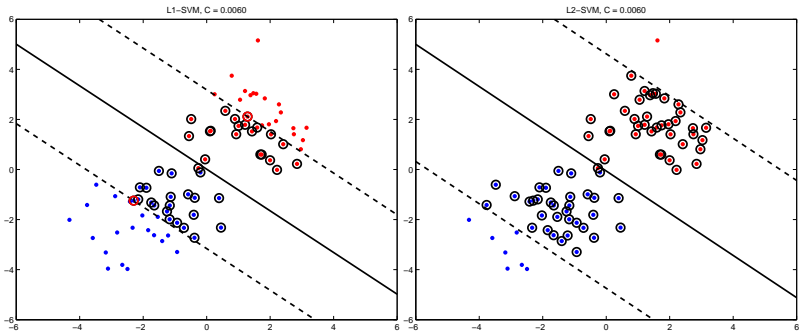
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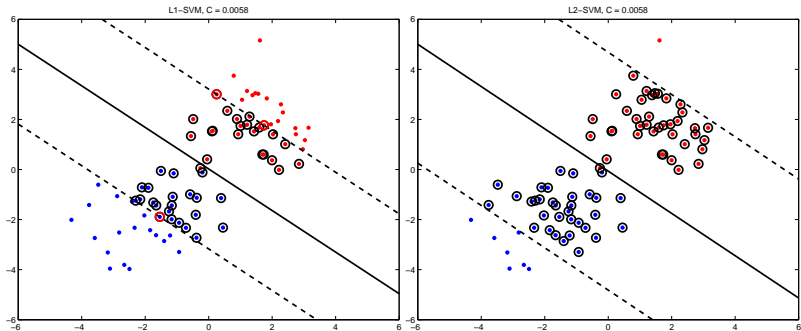
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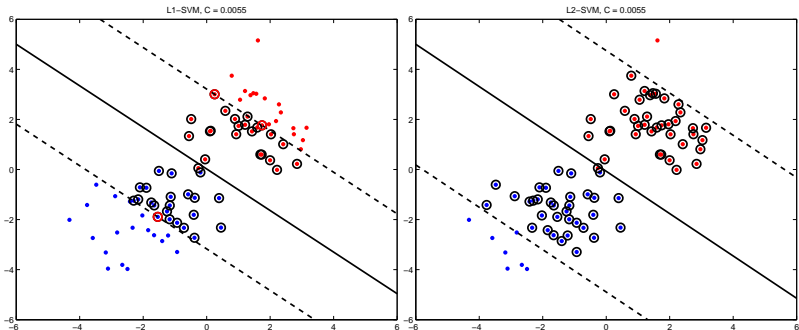


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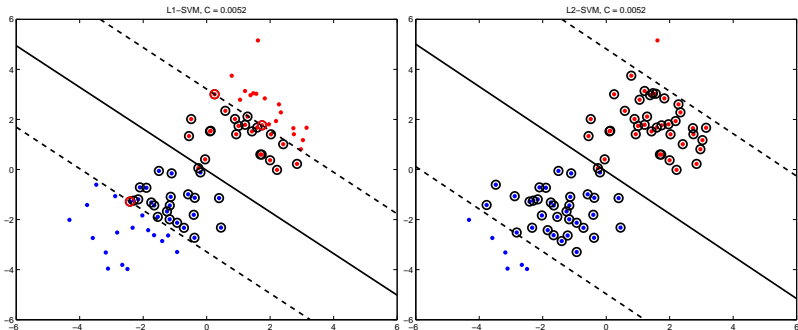




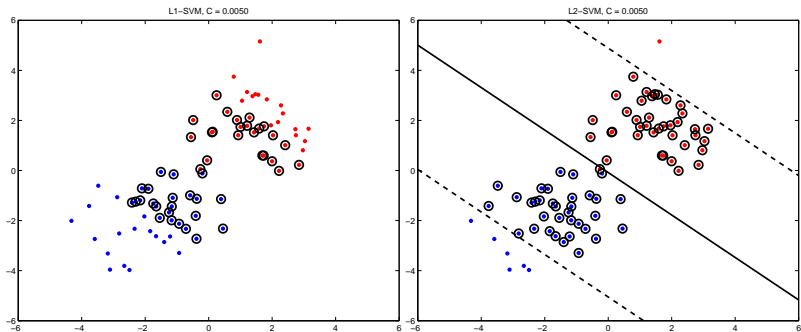
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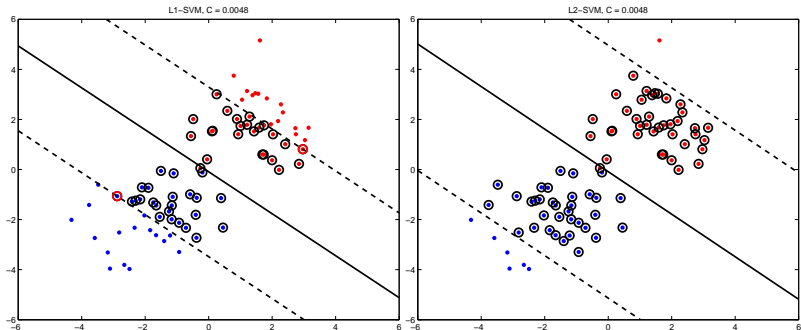
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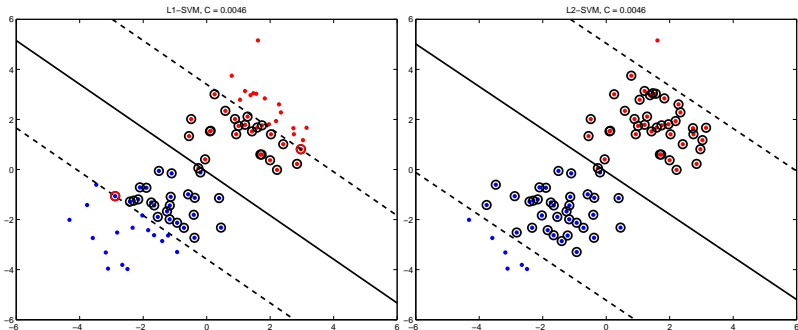
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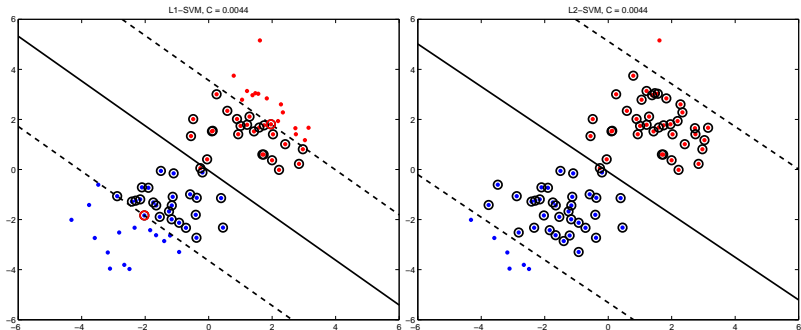
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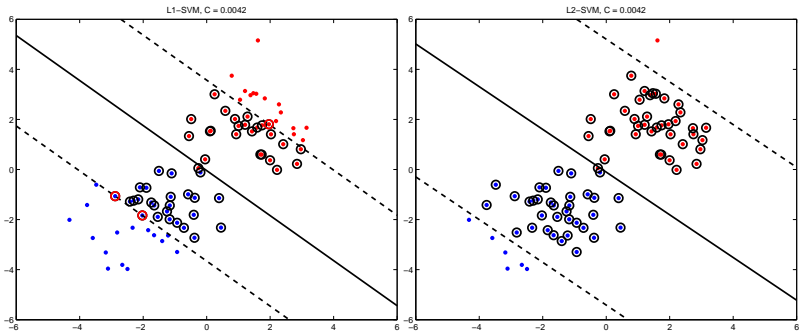
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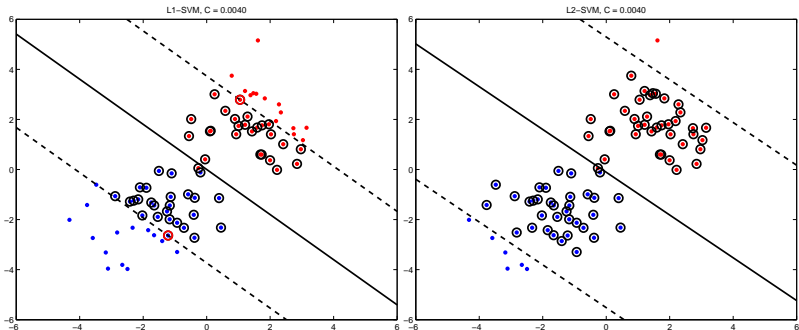
# L1-SVM vs L2-SVM



# L1-SVM vs L2-SVM

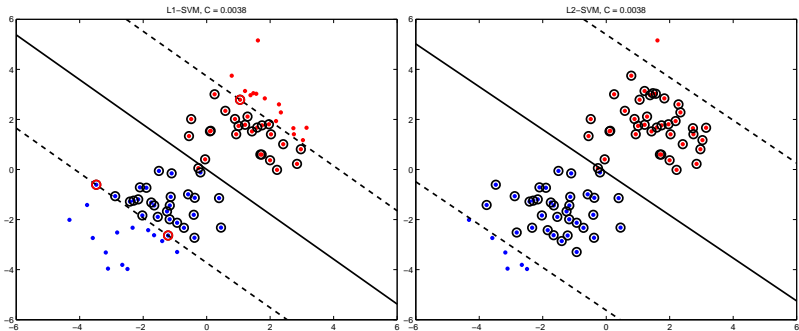


# L1-SVM vs L2-SVM

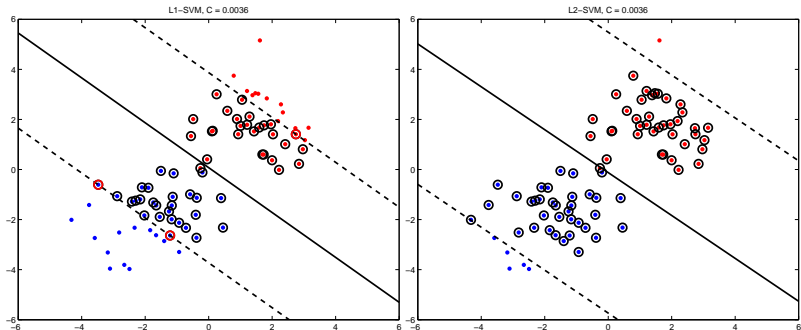




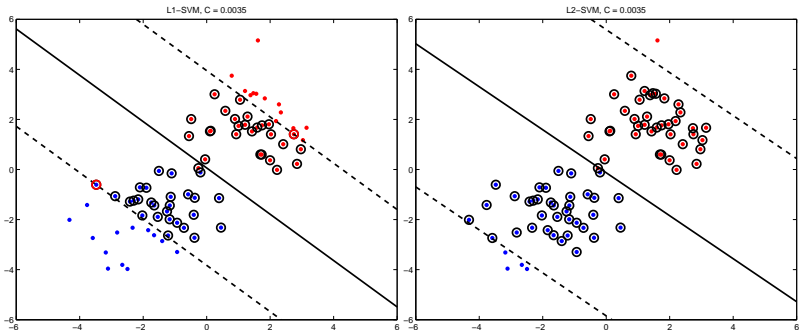
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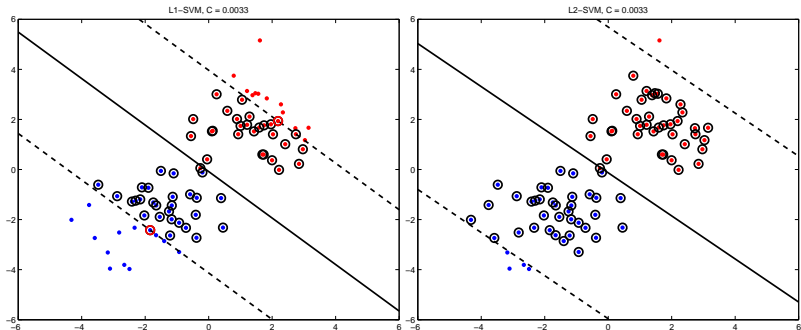
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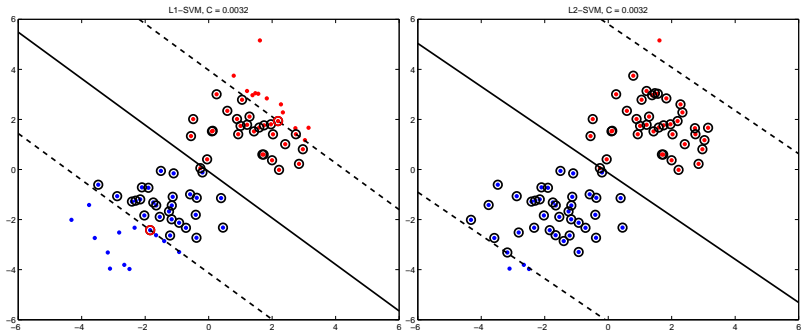
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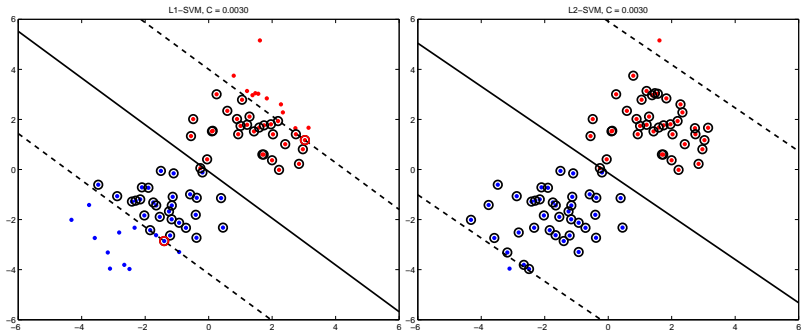
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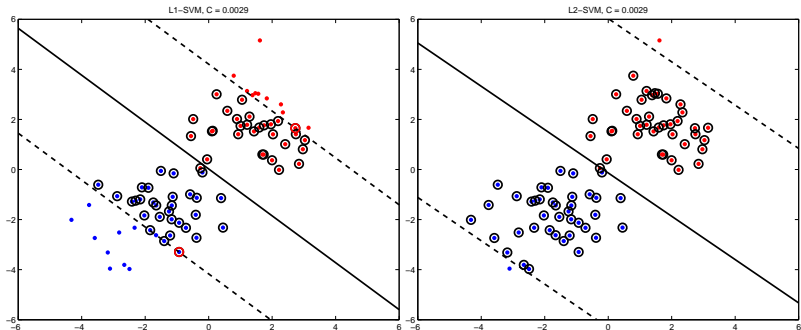
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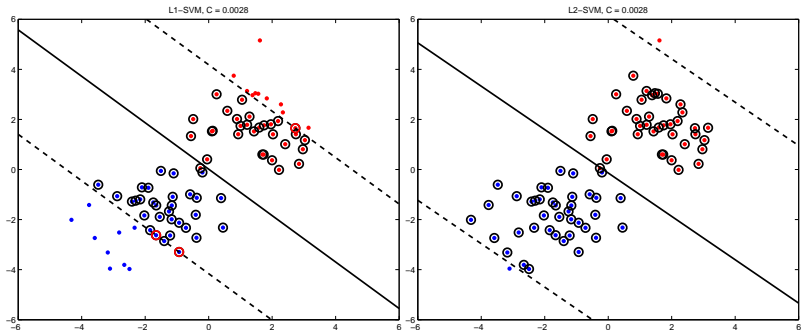
# L1-SVM vs L2-SVM



# L1-SVM vs L2-SVM

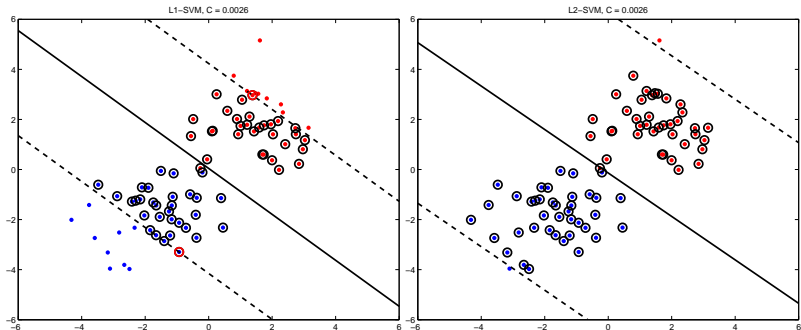


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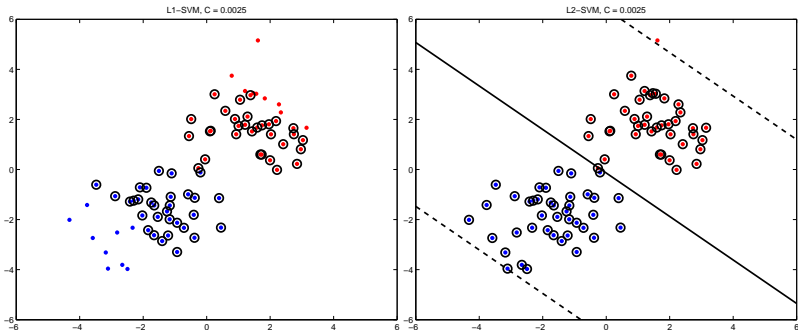




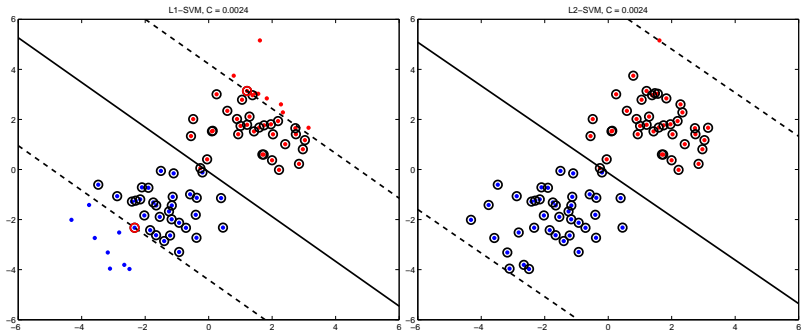
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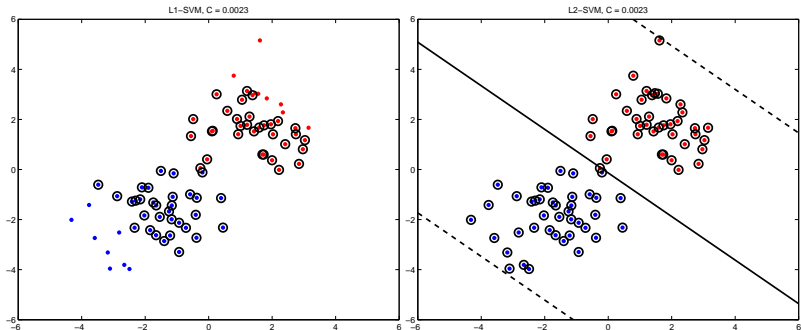
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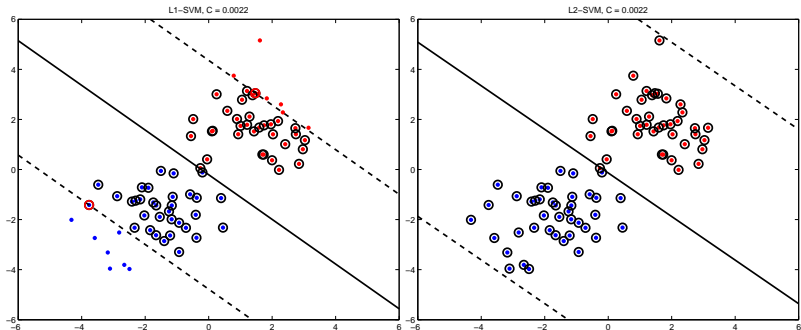
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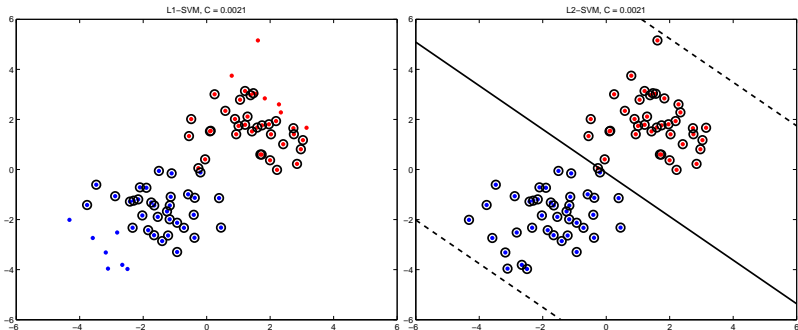
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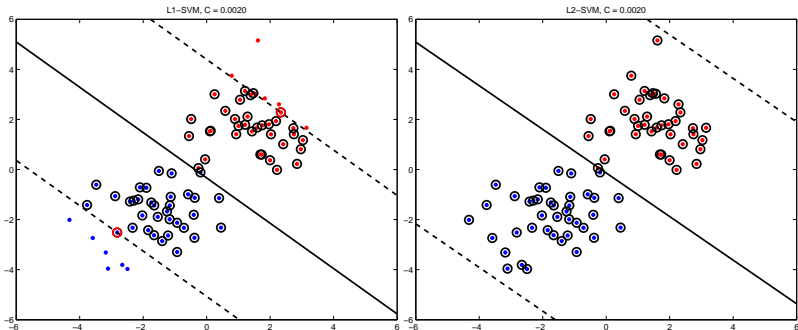
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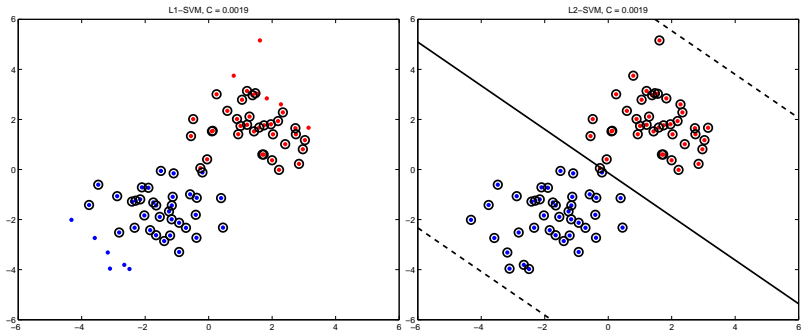
# L1-SVM vs L2-SVM



# L1-SVM vs L2-SVM

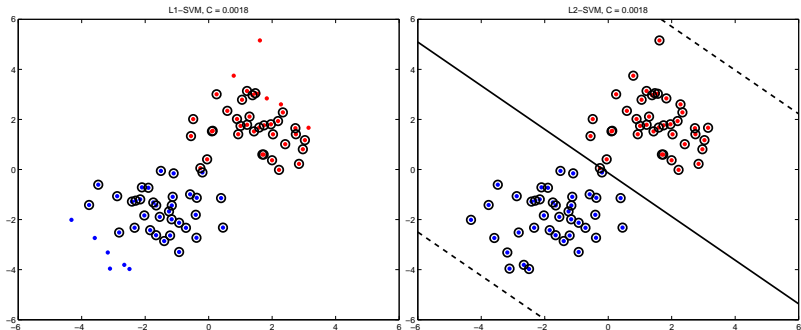


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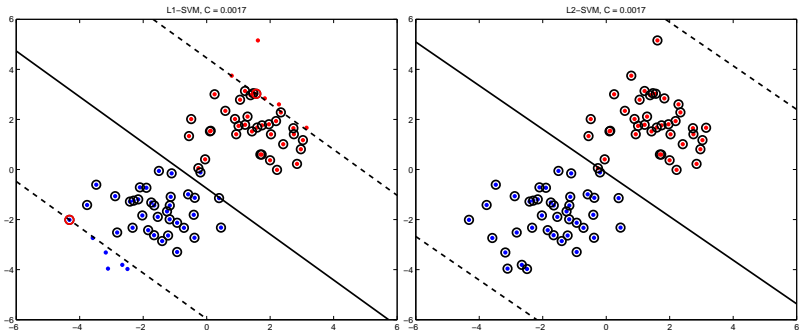




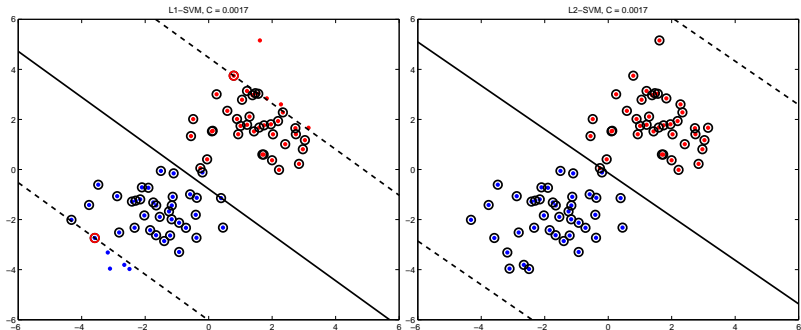
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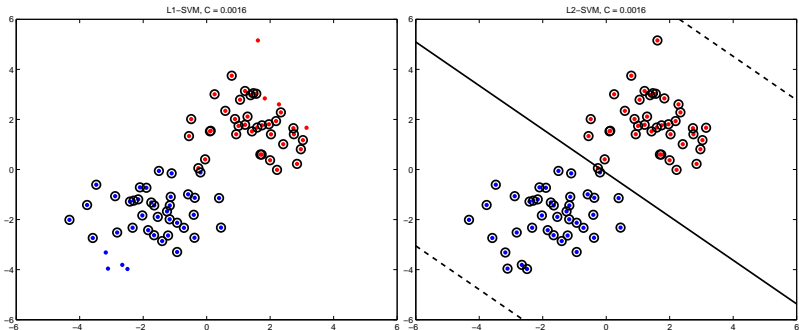
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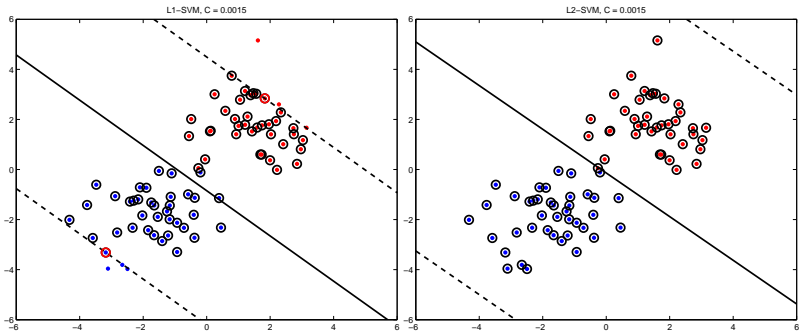
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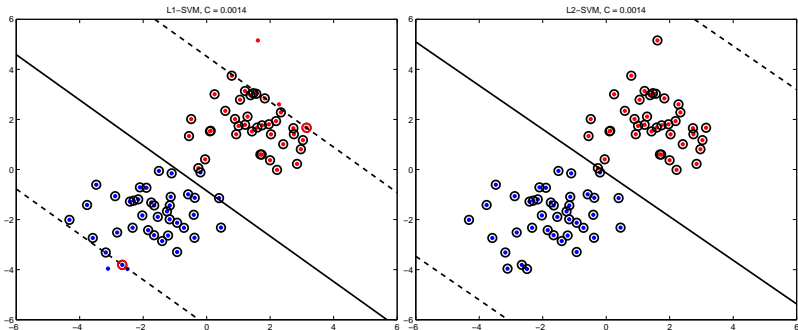
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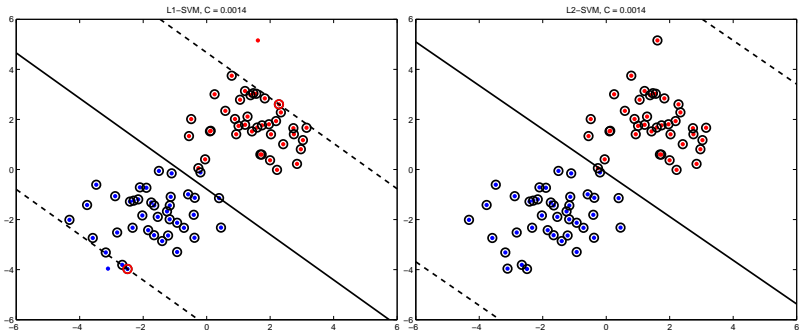
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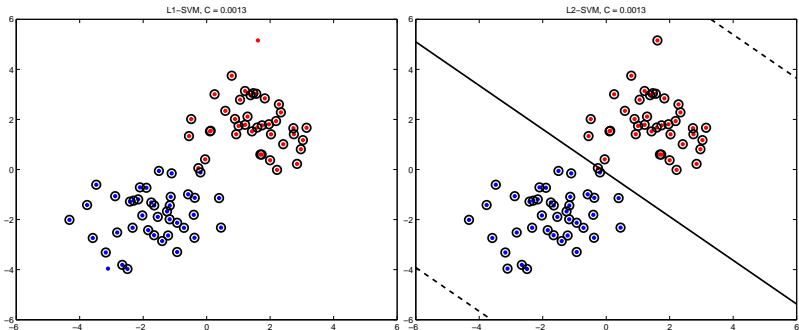
# L1-SVM vs L2-SVM



# L1-SVM vs L2-SVM

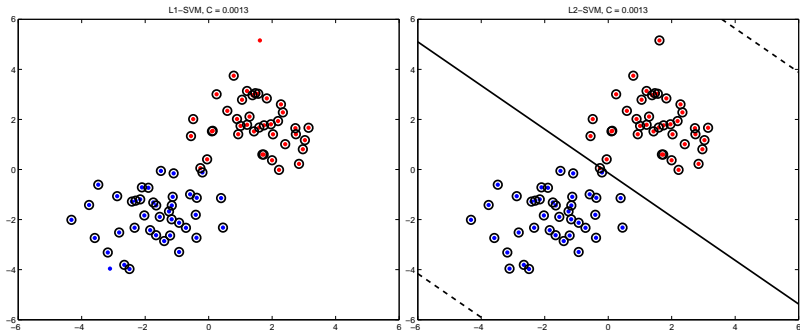


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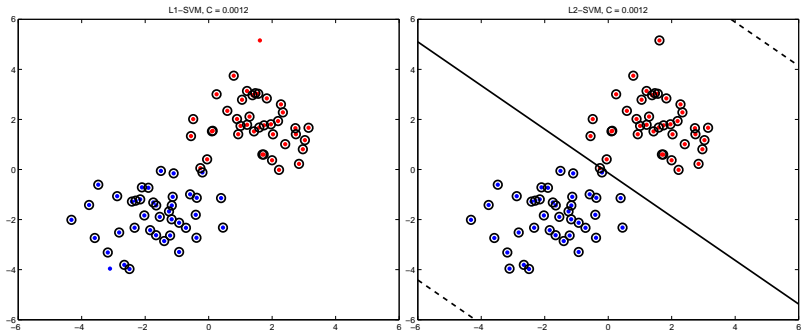




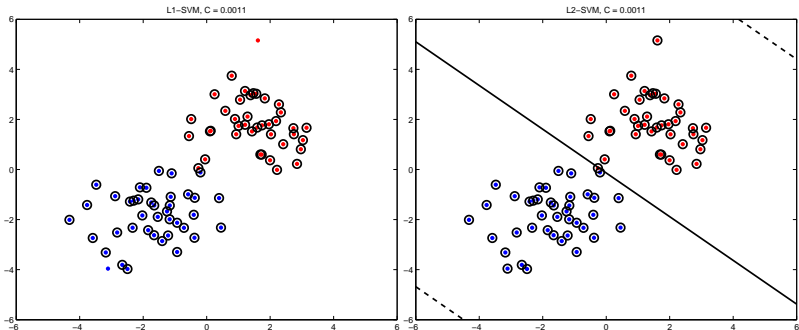
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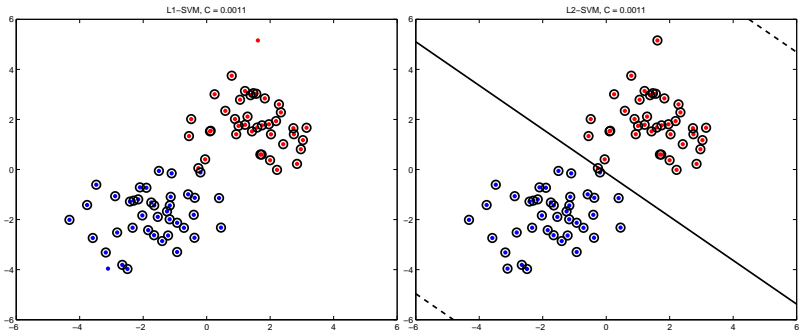
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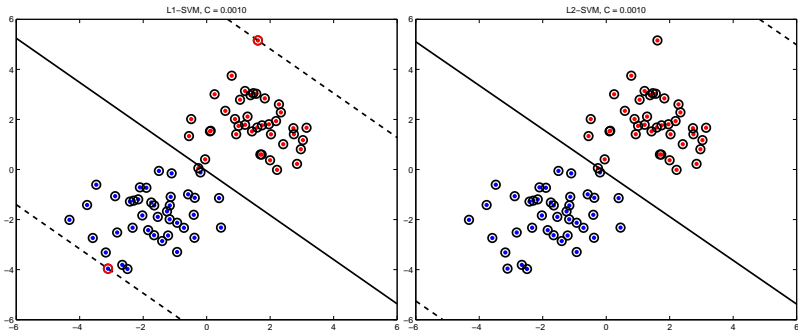
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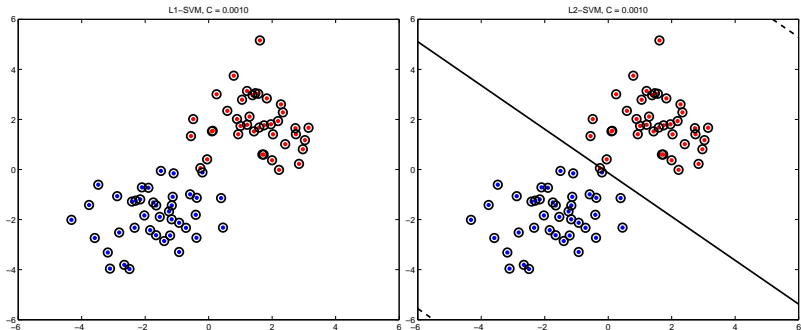
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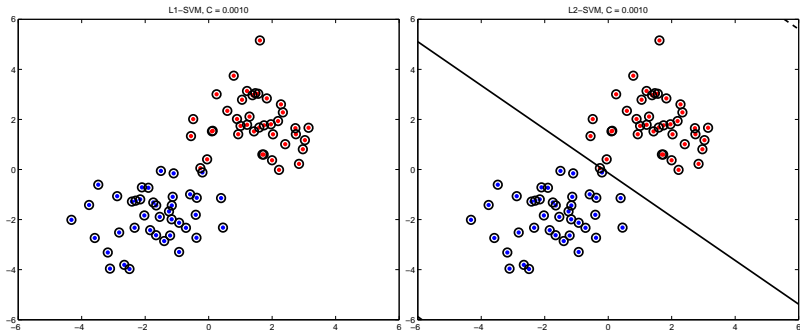
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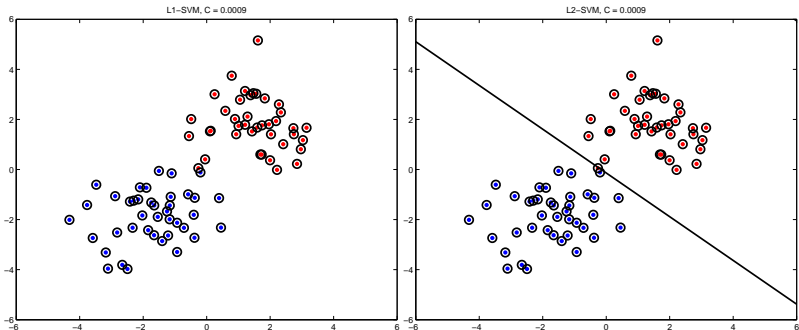
# L1-SVM vs L2-SVM



# L1-SVM vs L2-SVM

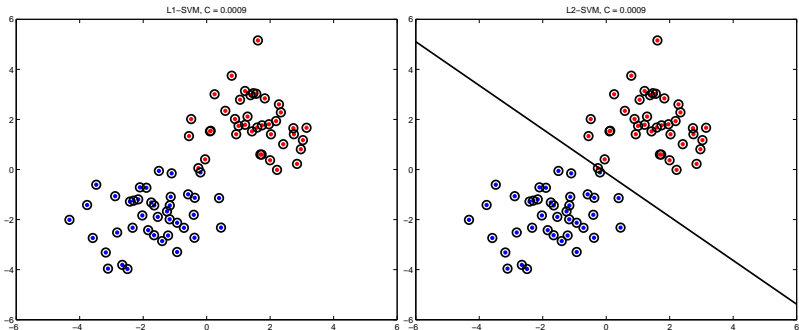


# L1-SVM vs L2-SVM





# L1-SVM vs L2-SVM



# L1-SVM vs L2-SVM

