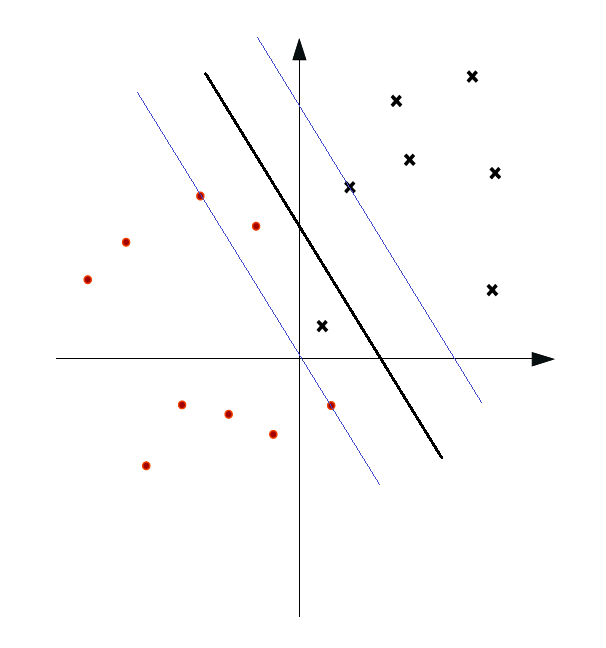
Exercise 5

Hou, Jue

014695647

1. Support vector machines



w

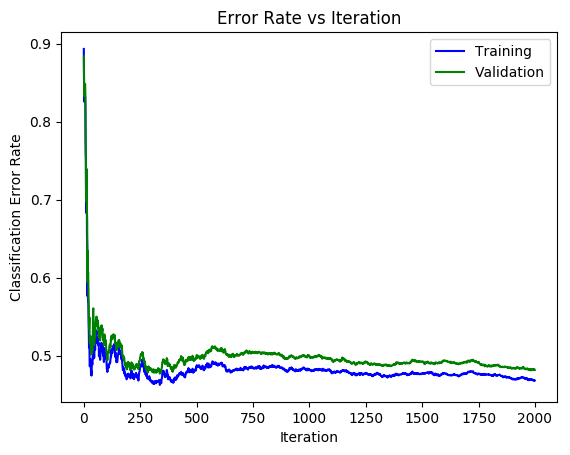
margin

margin

decision surface

Since SVM will only get internal product involved, so it is possible for us to kernelize it. We can replace with , which K denotes the kernels.

1. Decision trees and forests



I do not think my forest is a good classifier, since the best of it still obtain around 50% classification error rate. I suppose that if more features can get involved in one decision tree, instead of decision stump, it can perform better.

Estimated complete time: 6 hours