Assignment 3
CIS 472/572 Machine Learning, Winter 2014
due 11:59 pm, Monday, Feb 24th

1. Exercise 6.2 in the textbook.

2. Exercise 6.3 in the textbook.

3. Exercise 6.5 in the textbook.

4. Exercise 6.6 in the textbook.

5. Considering the positive and negative instances in problem 2.4 in text, please build a hyperplane to make them linearly separable in a different set of dimensions. Find the hyperplane with the maxim margin in a graph in the new dimensions and label the support vectors you think. To get the full points, you need to get the function of the hyperplane. If you draw it correctly, you can get most points.

6. Summarize the ideas of Deep Learning and Multiple Kernel Learning.

To turn in by paper version: Put your answers into the homework box for CIS 472/572 in Deschutes hallway (the first floor).

To turn in by emails: If you are in **CIS 472**, email your answers to **hang@cs.uoregon.edu**. If you are in **CIS 572**, email to **dou@cs.uoregon.edu**. We prefer that you send in a pdf file. If you are using Word, you should be able to convert your word file to a pdf file.