CSE 5693 Machine Learning HW3
Due 6:30pm, Mar 18, 2009
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1. Written assignment (from the textbook):
   (a) 4.1
   (b) 4.2
   (c) 4.9

2. Programming assignment: Artificial Neural Networks

   Implement the back propagation algorithm for a feed forward artificial neural network with one hidden layer. Your implementation should include at least these input parameters:

   (a) number of input units
   (b) number of hidden units
   (c) number of output units
   (d) learning rate
   (e) number of iterations (stopping criterion)

   Try your implementation on:

   (a) the play tennis problem (Table 3.2)
   (b) the 8x3x8 problem (Figure 4.7)
   (c) one other data set with continuous attribute values and multiple outcomes (same with HW2)

   Again, your implementation should have at least two executables: one for training and one for testing/performing after the neural net is trained. Your implementation should also report how accurate the neural network is on a training or test data set. Use your favorite programming language (C, C++, Java, or LISP).