Neural Net Project 6: Software Evaluation

In this project, we evaluate our progress in the previous projects.

1. Using the neural net approximation software available from this webpage:
   (a) Apply a first-degree functional link net to twod.tra, single2.tra, Power14, oh7.trn, and x.dat
   (b) Using the same data files, train MLPs with 3, 5, 12, and 25 hidden units, with 20 iterations
   (c) Using the same data files, cluster the inputs with 5, 10, and 25 clusters, using the self-organizing map and 30 iterations.
   (d) Make a table summarizing your training errors.

2. Using your own software, developed during the Neural Net Projects, repeat the experiments above and make the table.

3. Comparing hardcopies of your two tables,
   (a) Determine the relative performances of your software versus the lab's software.
   (b) Determine which of your programs has errors, and develop a plan for debugging your software.
   (c) Your neural net software should produce smaller training error than your linear network software, but greater error than the demo neural net software from this webpage.