Texas Tech University
Electrical and Computer Engineering

ECE 5332 – SPECIAL TOPICS: ADAPTIVE INTELLIGENT SYSTEMS

Assignment I: Multi-Layer Perceptron (MLP)

Description:

Implement a MLP with an arbitrary number of hidden nodes and up two hidden layers using Matlab (DO NOT use built-in functions). Assume that the training data is stored in a file. Test your algorithm using the well-known XOR problem.

Comment on the effect of the number of hidden nodes/layers on the MLP performance.

Table 1: XOR

Input 1	Input 2	Desired Output
0	0	0
0	1	1
1	0	1
1	1	0

Deliverable:

- Matlab files
- Short report

ALL should be in a single zip file and submitted via Blackboard by the deadline.