

CS4811 Homework 1 Final Submission Guidelines

The submission should contain the following files compressed into a single tar or zip file:

- Program files
The program should be fully commented. Include your name, class, and assignment title at the top.
- A README file with instructions on the following
 - How to run your program with the training sets you provided
 - How to change the training sets
 - How to graph the results
 - How to change the network structure
- Input data files, if any
- Output data files, if any
- Files related to graphs, for example, .csv or Excel files
- The report

The report should contain the following items.

- **The software:** Describe the design of your program in essay format. Did you fully implement the pseudocode provided? Does every component work? How can the number of layers or nodes be changed?
- **The training process:**
 - How did you decide on the network configuration to use?
 - How were the weights initialized?
 - How many iterations were needed?
 - What was the training data used (provide in text)? How did you create the training data?
- **The end results:** How far did the networks converge? Show the following
 - The trained networks (nodes and weights).
 - A graph of the training data
 - A graph of the function learned by using more inputs than the training data

- **The software development process:**
 - What were the obstacles you faced? How did you resolve them?
 - Were you able to follow your original schedule given in the interim report? Were you able to put in work on all the days you planned? What were the changes to the original schedule, if any? Why did they happen?
 - How flexible is your program to be used as a tool by someone else? Do you have any projects for which neural networks could be used?
- Please provide comments on the assignment in general? Did it contribute to your learning? How can it be improved?