

COGS 400/CISC/CMPE 452
Assignment 1
ANN

Farhana Zulkernine

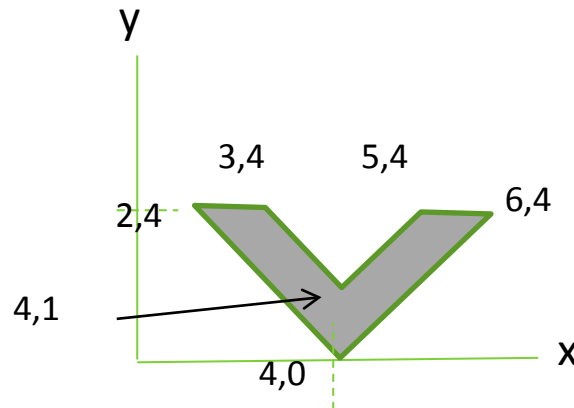
General Instructions for Code and Submission

(for all assignments)

- You can use any programming language (preferred C, C++, Java, or Matlab)
- For all assignments you have to submit
 - The source code with inline comments and comments in the beginning of the program saying briefly what your program does and how.
 - The executable with anything else that may be required to run your binary (libraries, input).
 - A readme.txt or word document file explaining your results. Your choice of initial values of variables and architecture of your network can influence your results.
 - Outputs as requested (as a text or doc file)
- Make **one zip file named as Asg#_studentID**.
- Upload your assignment to the moodle site.

Assignment 1

- i. Implement an ANN that can take an input of two coordinates (x, y) and return a 'yes' or 1 if a point lies on the shaded area of the following 2D image.



Outputs

- Submit the equations of the linear separators or ANN nodes you used in your program (e.g. $xw_1 + yw_2 = \theta$).
- Explain how your ANN solves the problem.

Deliverables

- A zip file **Asg#_studentID** containing the following.
 - The source code with comments.
 - A readme.txt or word document file explaining your results, execution instructions and output (as requested).
 - The executable with other modules if required for execution (include in the text file how to execute code if special input is required). If a data file is needed for execution, include it in the same directory as your executable in the zip file.
 - You will not get the 3 marks if we cannot execute your code.

Marks and Deadline

- Assignment should be uploaded to Moodle by **October 3, 2015**.
- Mark Distribution for a total of **10 marks**
 - Comments in program (in line and beginning of program stating how your network works) : 3 marks
 - Proper (correct) execution : 4 marks
 - Requested output with discussion if requested: 3 marks
- Late submission each day -1.