Course Outline
ECE271A – Statistical Learning I
Department of Electrical and Computer Engineering
University of California, San Diego
Nuno Vasconcelos

Your responsibilities in this class fall into three main categories:

1. Take-home quizzes 20%
2. Mid-term 35%
3. Final 45%

The HW assignments are composed of two types of problems.

- **pen-and-paper**: Each assignment includes a number of “pen and paper” problems that are not graded. The solutions are handed out with the assignment and they are mostly for you to practice the concepts that we discuss in class. These are the types of problems that appear in the midterm and final.

- **take-home quizzes**: there will be roughly one take-home quiz per HW set. These are computer problems, where you get to implement and test some of the ideas we discuss in class. These problems are graded and must be solved individually, without consultation of other students or resources like sites on the Internet. They are part of your evaluation for the class. You can talk to the TAs or instructor for clarification questions. Quizzes are typically due one week after they are assigned, see the course site for details.

The official language for solving the computer problems is Matlab. I assume that students have access to it since it is free for UCSD students. You can use other languages, like Python, but at your own risk. Depending on the libraries you use, there could be differences between certain functions (e.g. matrix inversion, especially when matrices are nearly singular) between Matlab and other languages. This may create discrepancies with the solutions. Given the large size of the class, it is impossible for the TAs to take this into account. The solutions are produced with Matlab and these issues should not rise if you use Matlab.

Note, that there are always issues that depend on your particular implementation, say how you handle image borders. There are many ways to do this, zero-padding, copying pixels, etc., and there is “no right way” to do it. However, these variations do not affect the results significantly. Hence, the grading already accounts and accepts these type of variations.

**Instructor**
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Office hours: see course site

**TA**
See course site.
Exam dates:

- Mid-term - In class, lecture 11 (assuming 1.5h lectures)
- Final - finals week

Text: We will follow closely


Supplementary hand-outs will be distributed when appropriate. There are various other books of interest. These are not required but can be used for alternative explanations of the material.


There is a web page for the course,

http://www.svcl.ucsd.edu/courses/ece271A/ece271A.htm

(also accessible from http://www.svcl.ucsd.edu/~nuno)

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