

Homework #0.5

RELEASE DATE: 09/10/2012

DUE DATE: 09/13/2012, BEFORE THE BEGINNING OF CLASS

Homework 0.5 is an unusual assignment. You do not need to turn in the homework in writing. But you do need to finish it before the due date to follow the pace of the class. We ask you to go watch lecture 1 of the famous Caltech online course, which uses the same textbook and notations as ours:

<http://www.youtube.com/watch?v=VeKeFIepJBU>

The lecture is of 1 hour of teaching followed by 0.5 hour of Q&A. We expect you to at least finish the teaching part, and learn the following items from the lecture. We expect you to raise questions in the next class (9/13), if any, or we will ask you questions based on those items. We will teach the next class assuming that you understand those items sufficiently.

- What is the essence of machine learning?
- What are the components of learning?
- What does the “Perceptron Learning Algorithm” do?
- What are the variations (different setups) of learning?

In the end of the lecture, there is a learning puzzle. **Please record your answer to the puzzle, and the reason behind your answer. We will discuss about that in our next class.** Enjoy the lecture!