Machine Learning Lab: Instructions

When you're ready to submit your solution, go to the assignments list.

In this assignment, you will be using an approach to optimization called *gradient descent* to implement a rudimentary machine-learning algorithm Wow, these machine-learning jokes write themselves. Eventually.

You can do this lab before watching this week's lectures. The lab is based on material from *The Inner Product*, and serves in part as motivation for this week's lectures.

To complete this assignment, please carefully follow these instructions:

1. Download this ZIP file
2. Unzip the ZIP file, and copy all its files into your `matrix` directory.
3. Verify that all the files from the ZIP file (including `machine_learning.py` and `machine_learning.pdf` and `submit_machine_learning.py` and `cancer_data.py` and `train.data` and `validate.data`) are now directly in the `matrix` directory.
4. Detailed instructions are in the file `machine_learning.pdf`.
5. Some of the problems/tasks are *ungraded*. You don't submit solutions to these.
6. For each graded problem/task,
   - test out your solution in the Python REPL;
   - copy your solution into the stencil file `machine_learning.py`;
   - submit your solution by running (from a console, *not* from the Python REPL) the command `python3 submit_machine_learning.py` to submit. You will need a one-time password to submit this assignment. It's located on this page.

You can use the submit command to submit as many problems as you like at one time.

Have fun!