

Assignment 1

Perceptron learning

Out: 08/31/2023. **Due:** before midterm break.

Consider the following training set (gzipped) on 1024 dimensions: [train](#).

Train a Boolean linear classifier (using the Perceptron algorithm) on the training set.

What to submit

Submit the following via email:

- The **classifier** (as a real-valued normal vector for the line separator).
Use the same format as a single row in the training file (without the label).
- The **margin** parameter achieved by your linear classifier on the training sample.
Simply include this in your email.
- **Source code**.
Provide your own implementation (without using built-in functions from ML packages).

You may work in groups of two.
