Programming Assignment 1: The Perceptron Algorithm

Due Feburary 1, 2023

In the repository you have starter code for the first programming assignment, 'pa1.py.' This code contains a class for running the perceptron algorithm, whose methods you should fill in. You should be able to uncomment and execute each of the three steps in the main function.

You should generate a plot which e.g. shows increase in time to convergence with dimension, as in the figure below. Compare this with "dimension agnostic" result from class. Can you hypothesize and provide empirical evidence to explain (resolve) this peculiarity?