6.867 : Homework 1

Anonymous authors

***Abstract*— Abstract here.**

I. Problem 1: Gradient Descent

In this section, we implemented Gradient Descent in Python to find the minimum of a function.

The implementation begins with an initial guess of the argument x that minimizes the function. The gradient, dfdx, is calculated analytically, and the rule next estimate of x_{min} is updated according to the rule $x[i+1] = x[i] - \alpha \cdot dfdx(x[i])$.