Linear Regression

Due date: Monday, May 15, in-class

Assignment

The assignment is an extension of your Assignment 1.

For each dataset you performed linear regression on in Assignment 1, use gradient descent to approximate the solution of the linear regression optimization problem.

Report the coefficients of the linear regression function you have obtained. Where appropriate visualize your approximation.

Compare the approximate solution you obtained to the exact solution from Assignment 1. How different are the solutions in terms of coefficients? How different are the solutions in terms of Squared Error?

Deliverables

Have your code in a demonstratable form starting May 15, 2017. You will be asked to demo your work in class. You should be able to give a short (5 mins or so) demo describing the independent and dependent variables you used, and showing the resulting regression line/plane and the regression equations.

You may be asked to submit your code via handin at some later time (probably together with your Assignment 2 deliverables).