

ECE 7650 Applied Computational Intelligence

Project 1

Linear Regression

Winter 2018

Due Date: 27 September, 11:59:59 PM.

1. Do “Exercise 2: Linear Regression” from Andrew’s Ng’s OpenClassroom online course:
<http://openclassroom.stanford.edu/MainFolder/DocumentPage.php?course=MachineLearning&doc=exercise/s/ex2/ex2.html>
2. Do “Exercise 3: Linear Regression” from Andrew’s Ng’s OpenClassroom online course: (Do not do the “Normal Equations” question).
<http://openclassroom.stanford.edu/MainFolder/DocumentPage.php?course=MachineLearning&doc=exercise/s/ex3/ex3.html>
3. Perform linear regression using the data set d2Noisy.txt.
 - a. Plot the error vs iteration
 - b. Plot the training data with your solution overlaid. Your figure should look similar to that shown in Fig. 1.
 - c. What is your total error after 500,000 iterations?

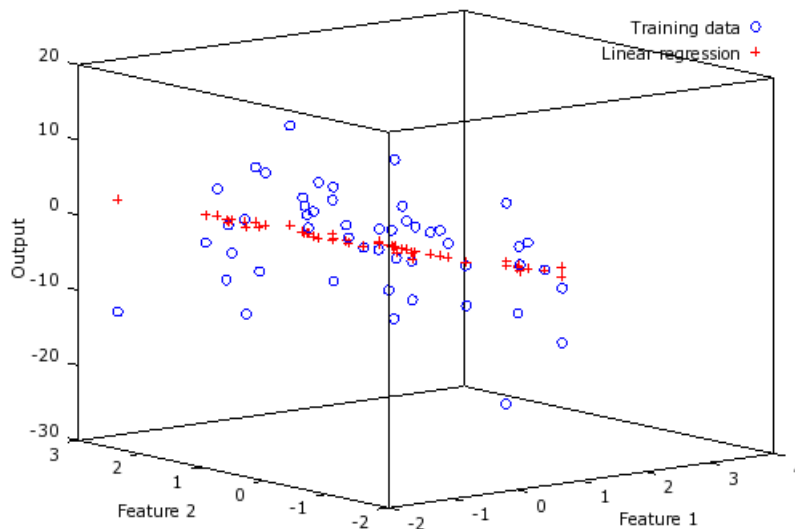


Fig. 1. Training data and solution.

SUBMISSION: Submit your solution to me for marking.