

2017 Fall: COMP-SCI 5590/490 - Special Topics

Python Programming

In Class Exercise 5

Course Plan

The following in class exercise focus on to make one familiar with regression and clustering techniques

Regression Techniques

Linear Regression

Logistic Regression

Clustering Technique

In-Class Exercise

1. Create linear regression model for the following table using numpy only. Plot the model using matplotlib.

| X | Y |
|---|----|
| 0 | 1 |
| 1 | 3 |
| 2 | 2 |
| 3 | 5 |
| 4 | 7 |
| 5 | 8 |
| 6 | 8 |
| 7 | 9 |
| 8 | 10 |
| 9 | 12 |

Hints: You need to calculate the mean of X , Y using numpy and then calculate the regression coefficients.

- 2) Solve T Shirt size problem as illustrated in class using k means clustering method.