

Homework 03

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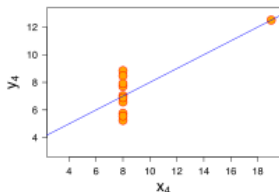
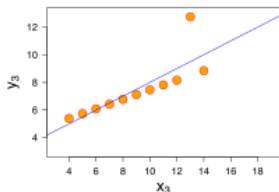
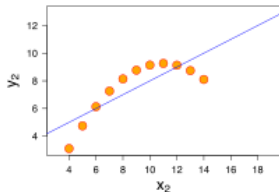
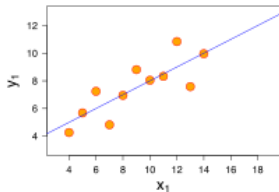
September 14, 2020

Overview

- 1 Q1: Linear Regression
- 2 Q2: Hastie and Tibshirani Summary

Linear Regression Problem 1: Simplicity

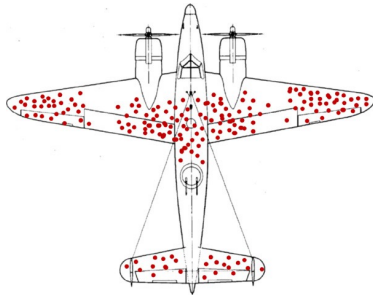
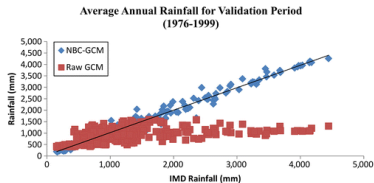
- + Computationally easy
 - Can only accurately represent simple relationships
 - Can only accurately represent linear relationships



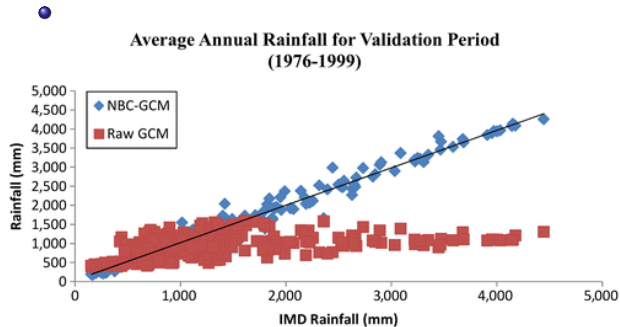
Linear Regression Problem 2: Selection Bias

Linear regression is susceptible to selection bias

- A type of overfitting
- Occurs when a type of data is over-represented in test set

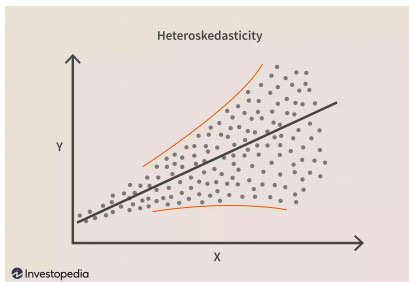


Linear Regression Problem 3:



Linear Regression Problem 4: Heteroscedasticity

- Divergent data
- May be easily bound between two curves
- Difficult to accurately predict



Hastie Lectures Summary

