
# Revisiting Regression Projects

8/28/2019

# Today’s Lesson

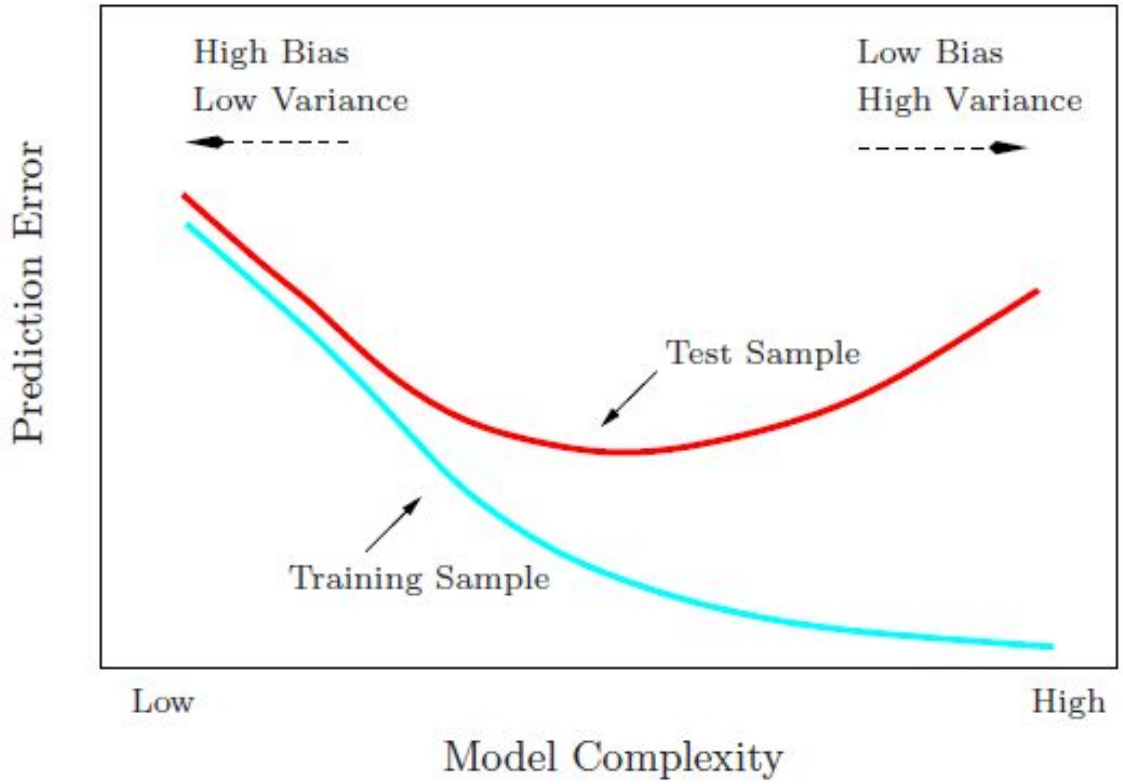
## Learning Objectives

- Use a holdout set to evaluate your model from your regression project
- Use feature selection and/or regularization methods to improve your regression

## Activities

- Two Notes
- Open Q & A
- Regression Project Redux

# How to use a test set




https://stats.stackexchange.com/questions/152882/question-about-bias-variance-tradeoff

# Scale, Then Regularize

Because Ridge and Lasso penalize coefficients based on their magnitude, it is important to put your features on a common scale.

E.G. $$Home\ Value = \beta_0 + \beta_1 * N\ Rooms + \beta_2 * Sale\ Price + \varepsilon$$

$$\beta_1 \approx \$20{,}000 \qquad \beta_2 \approx \$0.98$$

# Open Q & A

# Regression Project Redux

With your project partner, improve your regression project using...

- Train_Test_Split()
- Feature Selection
- Ridge or Lasso Regression

By the end of the class, you should be able to answer the following questions for each method you had time to introduce:

- Why do/don't you think the method could improve your model?
- How did implementing this method affect your fitted model?
- Does implementing this method impact the extent to which your model meets the business objectives? If so, how?