CS549 Assignment#4

Mohamed\_Shibl

Sep 25, 2016

## Obtaining R\_Squared

Running a multiple linear regression example with a model where Y = Ozone, X1 = Temp, X2 = Wind. This equation will provide us with the value of R\_squared.

In this case R\_squared is equal 0.5814. Which is a relatively low value meaning that knowing the value of wind and tempreature does not provide us with a certain value of ozone.

# sets the working directory  
setwd("/Users/Shibl/Google Drive/Herguan University/2016 Fall/CS549 - Big Data Analytics/Assignment 1")  
# Reads the data into R   
mydata<-read.csv("Ozone\_data.csv")  
# Runs a Regression model and gives the summary output  
summary(lm(Ozone ~ Temp+Wind, data = mydata))

##   
## Call:  
## lm(formula = Ozone ~ Temp + Wind, data = mydata)  
##   
## Residuals:  
## Min 1Q Median 3Q Max   
## -42.156 -13.216 -3.123 10.598 98.492   
##   
## Coefficients:  
## Estimate Std. Error t value Pr(>|t|)   
## (Intercept) -67.3220 23.6210 -2.850 0.00524 \*\*   
## Temp 1.8276 0.2506 7.294 5.29e-11 \*\*\*  
## Wind -3.2948 0.6711 -4.909 3.26e-06 \*\*\*  
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1  
##   
## Residual standard error: 21.73 on 108 degrees of freedom  
## Multiple R-squared: 0.5814, Adjusted R-squared: 0.5736   
## F-statistic: 74.99 on 2 and 108 DF, p-value: < 2.2e-16