Regression Analysis (II)
Project 2.

Due Dec. 16, 2019

You may use any statistical packages like R, minitab, spss, sas, etc.

1. Make your own dataset based on data in Example 8.9 (p. 324). Let $Y \leftarrow Y + \epsilon$, where $\epsilon \sim N(0, 0.1^2)$. Model and test for (1) the effect of temperature, (2) the effect of pressure, and (3) the interaction effect.

2. Make your own dataset based on data in Table 9.1 (p. 331). Let $X \leftarrow X + \epsilon$, , where $\epsilon \sim N(0, 0.01^2)$. (1) Fit to the logistic regression model. (2) Obtain 95% approximate C.I. for the median of he fitted regression model.

3. Make your own dataset based on data in Example 9.4 (p. 341). Let $X \leftarrow X + \epsilon$, where $\epsilon \sim N(0, 0.1^2)$. (1) Fit the data to the proportional odds model. (2) After 10 years of serving as a coal miner, what is the risk for being infected by the severe pneumoconiosis?