

BST 5930 Data Visualization

Assignment 4 on Using Shiny

Due Tuesday November 20, 11:59 pm

Consider the data in PEEP1.csv. (Note that this is different from the data set we used in class, which was in the file PEEP.csv. This data set is fictitious.)

Write a shiny app that takes as input from a drop-down box one of the variables (OpTime, PackYears, rFRC, or aPO) and plots this variable on the x-axis versus the response variable aPODay2.

Use separate color/symbol combinations for when PEEPTr = 0 and when PEEPTr = 1. (For example, you may want to use a red solid dot for PEEPTr = 0 and a green open square for PEEPTr = 1.) A second drop-down box should be for type of model to be fit to the data, and should have the values: None, Linear, Quadratic, and LOESS. See the plot below for one of the possible plots.

Run a separate model (Linear, Quadratic, or LOESS) for those observations with PEEPTr = 0 and those operations with PEEPTr = 1. Plot both of these curves on the graph using a color scheme that is consistent with the plotted symbol. (If “None” is selected, then don’t plot any lines or curves.)

Make sure you follow all the rules for a good graph. Create a legend for the two sets of points and the two lines (or curves).

Create an account at shinyapps.io and upload your work to this web site. Then email me the link to your posting.

