Fall 2017

CSCI 0360 Introduction to Statistics with R

Assignment weight: 100 points

Assignment 2 - Layering Plots

1. Save your R scipt file using the following format: **assignment2_lastnameFirstname.R**
2. Use comments to display your name and the assignment number at the top of the script file.
3. For this assignment you will be using the variable **Petal.Length** from a built-in dataset called **iris**. Load the data from Petal.Length into an object called **petal_length**.
4. Create a histogram of petal_length. Set the probability to TRUE (we want this to be a probability distribution rather than a frequency distribution). Set the number of breaks to 12. Use the color "#E5E5E5", remove the border from the chart, and set the title of the chart to “Petal Lengths for 3 Species of Iris”
5. Create a normal curve plot for the variable petal_length with a line width of 3 pixels using the color “red”.
6. Create a kernel density plot (lines) for the variable petal_length using the color “blue” and a line width of 2 pixels.
7. Create a rug plot for the variable petal_length using the color “darkgreen” and a line width of 2 pixels.
8. Export your layered plot as a png file with a resolution of 2048x1536 pixels. Your file should be named **assignment2_lastnameFirstname.png**
9. Export your layered plot as a pdf file with a size of “US Letter”. Your file should be named **assignment2_lastnameFirstname.pdf**
10. Upload the script file in addition to your png and pdf files (**a total of 3 files**) to Blackboard under Assignment 2.