Portfolio Review for Stat 495

This activity will allow you to reflect on your experiences in statistics looking through the materials in your portfolio. You will look at two pieces in depth, and could replicate the process for as many pieces as you like.

Please complete this form, submit it on Gradescope, and bring it to class as directed on Moodle. We will spend that class day on a related discussion. You will then be writing a reflection and setting goals for future work for homework. Note that I'm not grading the content here – but participation is VERY important.

Portfolio Piece #1

Consider your earliest portfolio piece (or earliest you want to look at). Review it briefly / skim over it.

1. What year were you in when you generated this piece? How much statistical experience did you have?

I was a first year when I generated this piece. I had taken statistics in high school, and this was my first statistics class at Amherst College.

2. Which of the following statistical skills are you practicing, applying, and/or demonstrating in this portfolio piece?

Descriptive Statistics	**Appropriate Graphical Displays**
Exploratory Data Analysis	**Regression (of any kind)**
Design	Resampling Methods (Bootstrap, Randomization Tests)
Model Assessment (Comparison)	Hypothesis Testing (and Sampling Distributions)
Estimation	Understanding Variability
Other Statistical Methods	Understanding Probability
Working with Statistical Notation / Writing Models	

3. If you have a technical appendix or code associated with the piece, which of the following skills are you practicing and/or demonstrating in this portfolio piece? (Skip if not present).

Data wrangling	Good programming practices (comments, organization)
Reproducible workflow	Understanding code syntax

4. Now let's consider communication skills in relation to this portfolio piece. Which of the following are you practicing and/or demonstrating?

Using writing to demonstrate and help develop my understanding of new concepts
Use writing to communicate statistical knowledge and understanding to:
      A teacher
      My classmates / peers
      A non-expert audience
The ability to make a clear, convincing, coherent, well-organized argument
Present ideas in a logical order with an appropriate narrative thread

Provide sufficient interpretation/explanation of figures/graphics
Provide an appropriate amount of supporting evidence without too much extraneous information
Provide a conclusion that summarizes your findings, their importance and implications, and sets forth proposals for future work

5. What do you consider as the strengths of this portfolio piece?

The report contains a lot of parts that make it easy for any audience to understand, while representing the steps that were taken to reach the conclusion. There are lots of well analyzed visuals and graphs. The piece is interesting to read and reproduce if necessary.

6. What do you consider as the weaknesses of this portfolio piece?

Re-reading the piece, I found that there could've been less wordy sentences and more concise explanations in places. I also found some grammatical errors and typos in the report which I missed while writing it.

7. Does this portfolio piece show proper citation of the data set and other sources?   **Yes**   No

Portfolio Piece #2

Consider another portfolio piece – we'll call it the second piece for purposes of this activity, but it doesn't need to be your second piece (in time order). Review it briefly / skim over it.

1. What year were you in when you generated this piece? How much statistical experience did you have?

I was in my sophomore year when I generated this piece. I had now taken multiple statistics classes at Amherst College.

2. Which of the following statistical skills are you practicing, applying, and/or demonstrating in this portfolio piece?

Descriptive Statistics	**Appropriate Graphical Displays**
Exploratory Data Analysis	Regression (of any kind)
Design	Resampling Methods (Bootstrap, Randomization Tests)
Model Assessment (Comparison)	Hypothesis Testing (and Sampling Distributions)
Estimation	Understanding Variability
Other Statistical Methods	Understanding Probability
Working with Statistical Notation / Writing Models	

3. If you have a technical appendix or code associated with the piece, which of the following skills are you practicing and/or demonstrating in this portfolio piece? (Skip if not present).

Data wrangling   **Good programming practices (comments, organization)**
Reproducible workflow   **Understanding code syntax**

4. Now let's consider communication skills in relation to this portfolio piece. Which of the following are you practicing and/or demonstrating?

Using writing to demonstrate and help develop my understanding of new concepts
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Provide sufficient interpretation/explanation of figures/graphics
Provide an appropriate amount of supporting evidence without too much extraneous information
Provide a conclusion that summarizes your findings, their importance and implications, and sets forth proposals for future work

5. What do you consider as the strengths of this portfolio piece?

I think that this piece is interesting to read and follow along with, as it shows some cool graphical representations of something that most audiences are familiar with. There is also lots of documentation and explanation of the process so that the audience can understand where the data comes from.

6. What do you consider as the weaknesses of this portfolio piece?

This portfolio piece does have a portion that is technical and may be harder for some audiences to understand.

7. Does this portfolio piece show proper citation of the data set and other sources?   **Yes**   No

Feel free to copy/paste and fill this out for more portfolio pieces if you like.

Combined

1. Are any of the portfolio pieces you looked through in application areas of interest to you? Do these application areas elicit passion in you? If not, what application areas would? What makes you passionate about these application areas?

I thought my data science on harry potter was interesting because it took something that was familiar to me and built upon that. I also enjoyed my first portfolio piece in which we analyzed wages and factors that contributed to that because I find economics to be interesting.

2. Are there any additional skills (in any category), beyond those listed above, that you believe you were practicing or mastering in these pieces? If so, what are those skills?

I think that they were all mentioned, from what I can remember.

3. Consider the skills you observed in your portfolio pieces.

a. What skills do you think you have improved the most over time, given your submissions?

I think that my data wrangling skills have improved, as well as my communication skills. I have gotten better about creating concise statements that are more easily understood.

b. What activities, classes, or other learning opportunities do you think most contributed to the growth of these skills?

I have enjoyed doing projects which I believe helped me grow because they allowed me to play with the skills that we have learned in class and build something from them.