Statistics Experience

Self-growth

Due date

I adopt this assignment from Maria Tackett's teaching material. This assignment is due on **Monday, November 24 at 11:59pm** on Gradescope.

The world of statistics and data science is vast and continually growing! The goal of the statistics experience assignments is to help you engage with the statistics and data science communities outside of the classroom.

You may submit the statistics experience assignment anytime between now and the deadline.

Each experience has two parts:

- 1 Have a statistics experience.
- 2 Make a slide reflecting on your experience.

You must complete both parts to receive credit. The statistics experience will count as a homework grade.

Part 1: Experience statistics outside of the classroom

Complete an activity in one of the categories below. Under each category are suggested activities. You do not have to do one these suggested activities. You are welcome to find other activities as long as they are related to statistics/data science and they fit in one of the six categories. If there is an activity you'd like to do but you're not sure if it qualifies for the statistics experience, just ask!

Category 1: Attend a talk or conference

Attend an talk, panel, or conference related to statistics or data science. If you are attending a single talk or panel, it must be *at least 30 minutes* to count towards the statistics experience. The event can be in-person or online.

Category 2: Talk with a statistician/ data scientist/ economist

Talk with someone who uses statistics in their daily work. This could include a professor, professional in industry, graduate student, etc.

Category 3: Listen to a podcast / watch video

Listen to a podcast or watch a video about statistics and data science. The podcasts / videos must be (1) one podcast or video that is at least 30 minutes or (2) multiple podcasts and/or videos that are at least 30 minutes combined.

A few suggestions are below:

- Stats + Stories Podcast
- Causal Inference Podcast
- posit::conf talks (formally called rstudio::conf)
 - 2024 conference
 - 2023 conference
 - 2022 conference
 - 2021 conference

This list is not exhaustive. You may listen to other podcasts or watch other statistics/data science videos not included on this list. Ask me if you are unsure whether a particular podcast or video will count towards the statistics experience.

Category 4: Participate in a external competition or challenge

Participate in any external competition. You can participate individually or with a team. It doesn't have to be related to statistics or economics. Discuss the role of statistics in the competition or how it helps you to prepare for it.

Category 5: Read a book on statistics/data science

There are a lot of books about statistics, data science, and related topics. A few suggestions are below. If you decide to read a book that isn't on this list, ask Professor Tackett to make sure it counts toward the experience. Many of these books are available through Duke library.

- Weapons of Math Destruction by Cathy O'Neil
- How Charts Lie: Getting Smarter about Visual Information by Alberto Cairo
- The Theory that Would Not Die by Sharon Bertsch McGrayne
- The Art of Statistics: How to learn from data by David Spiegelhalter

- The Lady Tasting Tea by David Salsburg
- List of books about data science ethics

Category 6: Complete self-guided training in statistics or coding

There are a lot of useful self-guided training resource you can do online, some of them are free for student. It doesn't have to be in R, you can learn to do statistics in Python if you want. Here are few example:

- https://www.coursera.org/learn/probability-intro
- https://www.codecademy.com/learn/learn-statistics-with-r
- And many more

This list is not exhaustive.

Part 2: Reflect on your experience

Make one slide summarizing and reflecting on your experience. Submit the slide as a PDF on Gradescope.

Include the following on your slide:

- Description of the experience
 - Name and brief description of the event/podcast/competition/etc.
- Something you learned
 - Write 2 4 sentences about something you learned or found particularly interesting or unexpected.
- Connection to ECON2250
 - Write 2 4 sentences about how the experience connects to what we've done in the course.
- Citation or link to web page for event/competition/etc.
 - No citation needed if you do an interview.

Make sure the slide includes the information mentioned above and is easily readable (i.e. use a reasonable font size!). Creativity on the experience and slide design is encouraged!

Submission

This assignment is due on Monday, November 24 on Gradescope. Standard homework late policy applies.