Welcome!

Winter 2024

Jeremy R. Manning
jeremy@dartmouth.edu

What's this course about?

- Telling effective stories 📖
- Data science: finding, analyzing, interpreting, and displaying data 📈📊

Logistics 📋

- Course GitHub: github.com/ContextLab/storytelling-with-data/
- Slack workspace: stories-about-data.slack.com/
- Google colaboratory: colab.research.google.com/

Logistics 📋

- Part 1 of the course is organized around 4 themes (roughly 1/week):
  - What makes a good story?
  - Data visualization
  - Python and Jupyter notebooks
  - Data science tools
- Each module has an associated assignment

Logistics 📋

- Part 2 of the course is organized around mini data science projects:
  - Students/groups pick a question + dataset
    - Do some analyses
    - Create a YouTube video with your story
- You'll need to create a minimum of 3 "stories" during part 2

Scheduling 

- I usually teach this course with 3 meetings/week
- Roughly:
  - Day 1: introduce new topic
  - Day 2: workshop stories
  - Day 3: present/critique stories as a class

Scheduling 

- This term we're in a 2 day/week block. We could:
  - Refactor the schedule a bit (accepting some awkwardness) and stick with Tu/Th meetings
  - Shorten Tu/Th meetings + use our X-hour or another mutually good "third" day each week
- Thoughts??

Bonus scheduling things 🏆

- Discussion with Sam Green + attend performance of “32 SOUNDS” — January 18
- Social Impact Practicum (Climate Initiative) — January 25

Other stuff… 🤔

- Full outline of course + recorded lectures if you need to miss class: [LINK]
- Syllabus: [LINK]

Let’s dig in! 

- Up next: how can we know “truth” and how is truth informed by data?
- If time: telling effective stories

What’s something you know with nearly 100% certainty?

How do you know that “truth"?

What would it take to convince you otherwise?

Data science 

- Knowledge must come from **data**
- BUT:
  - There are many ways to analyze/interpret data
  - We usually don’t have quite the right kind of data, or enough of it
  - These are **fundamental** problems with understanding data, not simply challenges that occasionally arise

Data science 

- On the other hand, we're living in the Age of Big Data
- Big companies now collect huge amounts of data about billions of people
- At that scale, we can start to actually measure and track the entire population of earth, rather than drawing inferences from limited samples
- Scary? Promising? Still limited? Yes!

What are some strengths and weaknesses of using data to find truth?

Telling effective stories 📖

- Check out the “Story Spine” lesson on our GitHub page (Module 1)

  - ★ **Act 1**: introduce the main ideas, main character(s), and main antagonist or point of conflict

  - ★ **Act 2**: take the audience through the main conflict. Growth! Change! End at rock bottom.

  - ★ **Act 3**: Wrap it up. Starts with the climax of the story. Then resolve the plot and imply how things continue into the future. End with a clear message (direct or implied).

For your own stories…

- Use story spines as a guide, but you can break that mold
- Try lots of things out and make mistakes. You'll learn more if you can get out of your head and out of your comfort zone!

Assignment 1

- Tell your own story:
  - Doesn’t need to be about data (this time)
  - Create some sort of visual aid or another presentation format
  - End product is a 5ish-minute YouTube video that we’ll review as a class

Giving/receiving feedback 🙌

- The goal is to make your stories better, not to judge you personally. **You** are not your **idea**!
- When you **get** feedback, try to be as dispassionate as you can.
- When you **give** feedback, try to be **specific** and **constructive**. Remember that you don't own others' stories; you can only make recommendations. Pointing out strengths or weaknesses is better than suggesting specific "fixes"
- Sandwich: something you like, constructive criticism, end on a positive note

Workshopping time!

Submitting Assignment 1

- Upload your stories to the #your-stories Slack channel by midnight on Wednesday (or Monday if we're using our X-hour!)
- Try to watch other students' videos before class
- On Thursday (or Tuesday?) we'll go around the class and discuss each story.
    - It'll be helpful to have a quick summary to remind others what your story is about before we discuss.
    - Also jot down some notes about others' videos to facilitate efficient discussion