Data Storytelling Workshop

December 5, 7, 12, 14 2023
3:00pm to 5:00pm

Instructor office hours will also be provided from 5:00-5:30pm after each session.

Summary

Why tell stories with data? How can we communicate quantitative work and research? And how can we do this effectively?

This multi-day workshop will cover the building blocks of data storytelling (e.g., charts, maps, interactive elements, animations, text, etc.) and how these elements can be used and combined to create effective visual narratives, websites, and dashboards. The workshop will consist of a mix of short presentations, group discussions, hands-on data visualization and mapping tutorials (using Observable), and story-boarding activities. By the end of this workshop, participants will have increased their understanding about how to communicate effectively with data, create clear data visualizations and maps, and craft data stories.

Agenda

1) Overview of Data & Data Storytelling (December 5)
   a) Introductions. Overview of workshop. Short presentation and discussion on the how and why of telling stories with data. (45 min)
   b) **Activity:** Group show and tell (and critique) of examples of data stories. (30min)
   c) Overview of common data structures. Querying and summarizing data. Working with 'messy' data. (15 min)
   d) **Activity:** Introduction to exploratory data analysis using Observable (30 min)

2) Data Visualization (December 7)
    a) Brief lecture on data visualization fundamentals as well as thinking about biases and uncertainty in data and data visualizations. Group discussion on the elements of what makes a 'good' chart (45 min)
    b) **Activity:** Tutorial on designing charts and graphs using Plot.js including bar charts, scatter plots, line and area charts. (75 min)

3) Cartography & Narratives (December 12)
    a) Short presentation and group discussion on working with geographic data and how to design and create effective maps. (30 min)
    b) **Activity:** Technical tutorial on creating thematic data maps (60 min)
    c) Short presentation and group discussion on creating a narrative and outlining a data story, tailoring content to specific audiences, and providing supporting information and technical details. (30 min)

4) Crafting a Data Story (December 14)
    a) **Activity:** In small groups or individually, work on outlining or 'story-boarding' a data-driven visual essay. (This can be based on data that attendees bring to the workshop or using an example dataset). At the end of the session, each group will present back what they've created. (120 min)

About The Instructor

Jeff Allen is a cartographer and urban data scientist, currently working as Lead, Data Visualization at the School of Cities. He has a BASc in civil engineering and an MA and PhD in geography from the University of Toronto. He has worked as a data science and visualization consultant for public and non-profit organizations and has published a number of peer-reviewed journal articles and public reports. He has also taught several courses and workshops in data visualization, GIS, spatial analysis, urban geography, and transportation planning.