Pre-camp materials for information visualization

Welcome to the LEADA pre-camp! In this section of the pre-camp, we will be discussing a few key papers in information visualization and get started with visualizing data using a free and easy-to-use online tool RAW. These experiences will help us get an easy start on the boot camp. There are three activities for the pre-camp:

First, please read the three papers in this folder:

- 1. The five most influential data visualizations of all time;
- 2. The eyes have it: A task by data type taxonomy for information visualizations;
- 3. Structural holes and good ideas.

Second, you will use RAW (https://rawgraphs.io/), a web-based interactive data visualization tool, to get familiar with a few common types of visualizations for tabular data, hierarchical data, and text. RAW provides a few sample data. You can use these sample data to generate visualizations that you think will best communicate the value of a given data set. The reason we use RAW for the pre-camp is that it is so sample to use so we can focus more the design of the visualizations (but not the tool itself from which we create the visualizations). One key criterion for evaluating the designs is that does it make sense to you. Simply because the tool creates a visualization does not mean that it is sensible to the audience.

What are the specific tasks?

- 1. Explore the datasets with RAW: pick one or two sample data sets that you'd like to work with.
- 2. For your chosen data sets, generate at least 5 types of visualizations with RAW out of the 21 layouts.
- 3. For each type of visualizations, explore and interact with it, observe what kind of information it tells you about the data, and take notes of what you learned about the dataset from the particular visualization.
- 4. For the data sets, recommend the best visualization option based on your findings in step #2. Justify your recommendation with whatever arguments you can come up with.

Third, check out this resource: https://www.data-to-viz.com/caveats.html It summarizes common caveats of visualization designs.

In the boot camp, we will be using Tableau which you can download it from https://www.tableau.com/academic for free. It is a good idea to download it before our boot camp.