

Week 4 Notes

Warm up Activity:

- The visualization plot is trying to show the area relationship of your Facebook community.
- The method utilizes the computation of the community likelihood and try to do the statistical models in the United States. Different color shows various kinds of likelihood value. This intuitive way will help us to get the visualized concept.
- Strength: the visualization plot has intuitive interaction and you can simply use the mouse to track the trend of the Facebook community relationship.
Weakness: This visualization does not show the timeline relationship. It is hard for us to analyze and get the concept of when we start the Facebook relation with others.

Representations:

- The importance of data type examination
 - A. Geometric object – Take Toad, the mushroom head, for example, we can convert the geometric pattern to mathematical value in vector which represent the whole picture
 - B. Connection of data points – The data points need to be connected to each other. What is the order and how do they get connected to each other.
 - C. Categories – The similar data points should be arranged to the same group
 - D. Quantification – Take the example of the teapot, we transform the data points of the teapot angle into the real number and this will help the computer to build the teapot model
 - E. Dimension –
 - a. From the 2-dimension canvas, we can add the different kinds of variables such as, position, color, size, shape, relationship and motion to expand and define the dimension
 - b. Form the head scan pattern we can tell the importance of continuous data, this allows us to construct the high dimensional model
 - c. 3D Stacked Scatter Pie Column plot from Reddit
- Distribution
 - A. set of points -> yearly rain distribution(poor) -> curve distribution(too general and need large data set)
 - B. Draw the plot and make the line curve by the bar chart distribution
 - C. $\text{bin_id} = \text{floor}((\text{value} - \text{left_edge}) / \text{bin_width})$