Data Visualization Basics & Tools

Agenda

1:00PM – 1:15PM Introduction

* + Name
  + Where are you from?
  + Why you choose this workshop?
  + Do you currently use Data Viz?
    - If so, what software/tools?

1:15PM – 1:45PM Story-Boarding Activity

* + In teams of 1-2 explore the USA WC data
  + Think about what story you would like to tell
  + Draw your story using any data viz. your prefer
    - Charts, Graphs, Graphics, etc.

1:45PM – 2:45PM Introduction to Data Visualization and Best Practices

2:45PM – 3:00PM Break

3:00PM – 3:30PM Data Visualization with Tableau

* Brief tutorial of Tableau Public using UFO Data
  + Import data
  + Explore interface
  + Create Visualizations
    - **Bar Chart**
      * Col = States
      * Row = Number of Records
    - **Line Graph**
      * Col = Date Time
      * Row =Number of Records
    - **Multi-Line** 
      * Col = Date Time
      * Row = UFO Shape & Number of Records
    - **Multi-Line Colored**
      * Col = Date Time
      * Row = Number of Records
      * Col = UFO Shape
    - Filter Date:1994 + (Right click YEAR > Filter)
    - Filter UFO Shape: Select 3 shapes
    - **Map** 
      * Col = Long
      * Rows = Lat
      * Detail = Country & State
      * Col = Number of Records
    - Edit Color (Right Click legend top right corner)
    - **Tree Map**
      * Size = Number of Records
      * Color = Number of Records
      * Detail = UFO Shape
      * Text = UFO Shape
    - **Tree Map Multi**
      * Size = Number of Records
      * Color = Number of Records
      * Detail = UFO Shape & State
      * Text = State
    - Filter UFO Shape to Fireball & Triangle

3:30PM – 4:00PM Computational Data Visualization Activity