### Advanced Topic Presentation (Weeks 8 and 9) (8 points)

Presenting information on slides is a kind of information visualization. These are **11- to 12-minute** presentations on an advanced visualization topic. Each student should sign up for one of the topics (see below) to present. Note: presentation time noted previously may change due to the number of students enrolled in a class. You will be notified as to the exact amount of time you have.

Check with the section instructor about how they want you to sign up. But sign up early! No duplicate topics accepted.

#### Rubric

1 point: Your name is clear and bold on the title and closing slide. 1 points: Your presentation is within the allotted time.

4 points: You must teach us something about selected visualization tool via examples you created vs vendor created sample. You might want to consider using one of the data sets used in async or sync lectures ie sales, art, to demonstrate package capability

* + Features - summary
  + Functions / Capability– use a data set to demonstrate
  + Your assessment of learning curve

1 point: Presentation is practiced—not too fast, smooth delivery, no technical glitches. 1 point: Slides are well designed without too much text.

#### Note:

* You can earn from 1 to 5 NEGATIVE POINTS on your own presentation for talking during others' presentations.
* You will lose 5 points automatically if you are not ready on the day you are assigned.
* Turn in a PDF file of your slides, but you can present using a Power Point slide deck.

IMPORTANT:

* Demos are risky. They often don't work as planned, and the time counts against you. They often take more time than expected. They are one more moving part that can go wrong in so many ways! Avoid demos when possible.
* If you are showing us a web page, try it out on multiple machines, particularly on a lab machine. Generally avoid.
* No videos. No videos. No videos. Unless you made it. This is about your work, not someone else’s.
* A single slide takes about 1 minute to present. After the title slide, plan to have seven or eight slides of content and one "Thank You" slide (which takes 0 minutes).
* Practice your presentation at least three times, out loud. Better if you do in front of others or a mirror.
* Avoid too much text on a slide. Better to use a few small images that remind you what to talk about.

List of topics (others may be approved by the instructor)

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| Type | **Topic** | **Example** |
| Code/ Community | GitHub |  |
| Data/ Community | Kaggle |  |
| Data/Viz | Google Fusion Tables | [http://www.mulinblog.com/google-maps-tutorial-part-1-](http://www.mulinblog.com/google-maps-tutorial-part-1-what-fusion-tables-is-and-does/)  [what-fusion-tables-is-and-does/](http://www.mulinblog.com/google-maps-tutorial-part-1-what-fusion-tables-is-and-does/) |
| Easy Viz | Fusion Charts |  |
| Easy Viz | Plotly |  |
| Easy Viz | Excel Power Map |  |

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| --- | --- | --- |
| Easy Viz | Tableau |  |
| Easy Viz | qlikview bi |  |
| Easy Viz | Watson |  |
| Easy Viz | Power BI |  |
| GIS in R | ggplot Maps |  |
| Hard, but Impressive | D3 |  |
| Nondata Viz | Info Graphics |  |
| Nondata Viz | Mind Maps |  |
| R 3-D Viz  Package | RGL Package |  |
| R Package | gganimate Package for R |  |
| R Package | Rmarkdown |  |
| R Package | dplyr Package for R |  |
| R Viz Package | Leaflet R Package |  |
| R Viz Package | R riverplot Package |  |
| R Viz Package | alluvial Diagram in R |  |
| R Viz Package | R googleviz Package |  |
| R Viz Package | Tree Map in R |  |
| R Viz Package | Unusual Plots in the Lattice R Package |  |
| R Viz Package | dygraph R Package |  |
| R Viz Package | RworldMaps R Package |  |
| R Viz Package | Ternary Package in R |  |
| R Viz Package | Waffle Package in R |  |
| Resource | Data-to-Viz | <https://www.data-to-viz.com/>(See the plot decision tree) |
| Resource | RBloggers | <https://www.r-bloggers.com/> |
| Social Networks | iGraph | Network Analysis and Visualization |
| Social Networks | Gephi |  |
| Technical Topic | R Packages for Opening Excel Data |  |
| Technical Topic | Apply Functions in R | sapply, lapply, and so on |
| Technical Topic | Star/Spider/Radar Plots in R |  |
| Technical Topic | Lubridate R Package |  |

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| --- | --- | --- |
| Unusual | Physical Data Visualization | <http://dataphys.org/list/> |
| Unusual | Data Viz Color Blind |  |
| BI tool | Alteryx\* | [https://www.alteryx.com/solutions/analytics-need/bi-](https://www.alteryx.com/solutions/analytics-need/bi-visualization/visualytics)  [visualization/visualytics](https://www.alteryx.com/solutions/analytics-need/bi-visualization/visualytics) |