



# John Bernau

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## Data Visualization in R Workshop

You will become familiar with R's popular graphing capabilities as we spend time exploring the packages "ggplot2" and "plotly." No prior experience with R is necessary (a review of the R-Studio interface is included). We will use R's built-in datasets to explore scatterplots in ggplot2, while learning many of the versatile features that make R the leading statistical software for creating publication-ready graphs:

- expressing variables using color, shape, size, & opacity.
- editing axes, legends, and titles
- changing themes
- adding text labels
- adding lines to express trends
- "facet wrap" by other variables
- exporting graphs as JPG, PDF, PNG, etc.

Using ggplot2's "grammar of graphics" philosophy, these features are then easily transferred to other types of visualization (box plots, histograms, etc). We'll conclude we'll learn how to use plotly to convert these graphs to an interactive format suitable for websites, blogs, or presentations.

**Preparation:** You may bring a laptop with the latest version of R & R Studio software or use classroom computers.  
Download R: <https://cran.rstudio.com/>  
Download RStudio (Desktop Free version):  
<https://www.rstudio.com/products/rstudio/download/>  
If you need help installing, please go to the Student Tech Support desk (1st floor library).



February 17, 2017

1:00 pm – 5:00 pm

Woodruff Library  
Room 314

Please [RSVP](#). Seating is limited

*This workshop is a collaborative effort between the Institute for Quantitative Theory & Methods and the Emory Center for Digital Scholarship*



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