

NASA: DATANAUTS 2018
SHINY

## Motivation for Shiny



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  - State of the art statistical power
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- R is a powerful platform for data analysis
  - State of the art statistical power
  - Excellent for visualization
  - Large and enthusiastic community
- But...
  - Output is usually in static formats or pre-determined calculations
  - Modern visualization is interactive, browser-based





Interactive web applications around your R analyses



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# http://shiny.rstudio.com



# Demos https://shiny.rstudio.com/gallery/



# Demo: A (really) simple app

> shiny::runExample("01\_hello")



#### Demo: Kmeans visualizer

http://shiny.rstudio.com/gallery/kmeans-example.html



#### Demo: Retirement simulator

#### http://shiny.rstudio.com/gallery/retirement-simulation.html

- Simulating wealth with random returns, inflation, and withdrawals
- By Michael Kapler



#### Demo: Super Zips

#### http://shiny.rstudio.com/gallery/superzip-example.html

- Inspired by a Washington Post interactive feature on the subject
- Built with leaflet
  - Interactive maps with data



#### Demo: Radiant

#### https://github.com/mostly-harmless/radiant

- Business analytics GUI using R and Shiny
- By Vincent Nijs
  - · (as far as I know) had minimal HTML/CSS/JavaScript experience



#### Links

- Slides
  - bit.ly/datanauts18-shiny
- Shiny
  - shiny.rstudio.com
- Example Gallery
  - shiny.rstudio.com/gallery
- Cheat Sheets
  - rstudio.com/resources/cheatsheets

