



**Highlights from the Shiny Developer  
Conference 2016**

# So what is shiny?

CDC Data Visualization

Disease Plots

Inf. Reported Diseases

CDC Pneumonia and Influenza Mortality

More Information

## CDC Weekly Case Count

**Disease Name**  
Salmonellosis

**Choose date range**  
2015-01-01 to 2016-02-22

**Location Type**

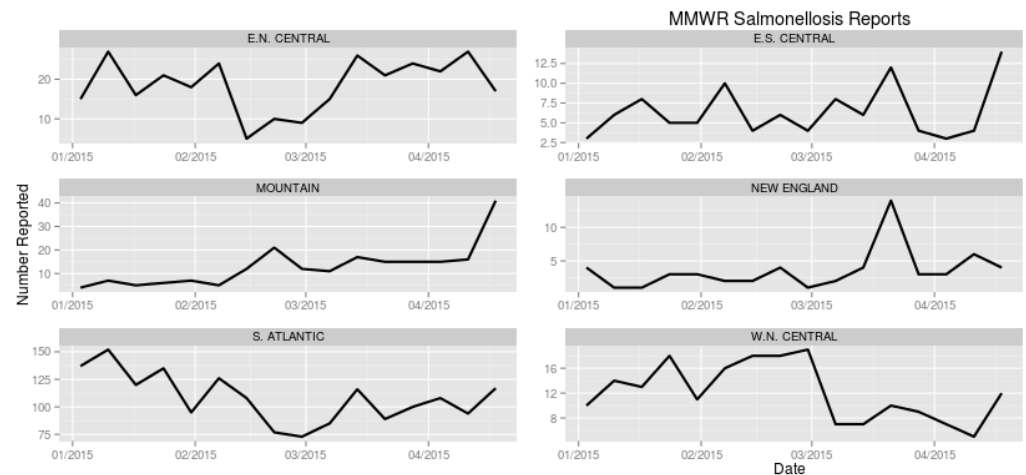
- State
- Single region
- All states within a region
- All regions
- Country

**Plot Type**

- Weekly data
- Weekly data by year
- Cumulative data by year

**Plot Options**

- Include alert thresholds (experimental)
- Force same scale for y-axis



CDC Disease Monitor, Shiny User Showcase

# Web Applications for R

- Written entirely from R
  - No need to learn JavaScript or other web technologies
- Gives the power of R to non-R users
  - Really easy to share the results of your analysis



# Shiny

Developers Conference  
2016

"there's a huge difference between using Shiny and using it *well*, and we want to start getting serious about helping people use Shiny most effectively"

Joe Cheng

Shiny Developer Conference Announcement

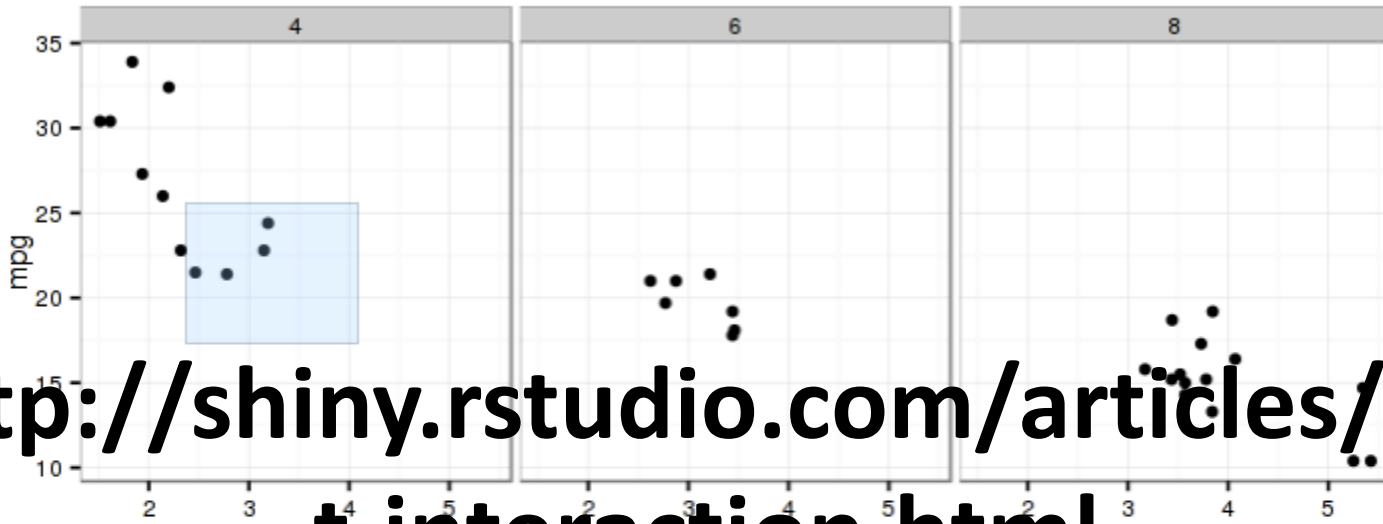
# What was covered?

- Reactivity
- Linked Brushing
- Gadgets (& addins!)
- UI
- Dashboards
- DT for data tables
- Profiling
- Debugging
- And much more!!

# React or Observe?

Use reactive expressions for calculations  
Use observers for side effects

<http://shiny.rstudio.com/articles/plot-interaction.html>



	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
Merc 240D	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
Merc 230	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2
Toyota Corona	21.5	4	120.1	97	3.70	2.465	20.01	1	0	3	1
Volvo 142E	21.4	4	121.0	109	4.11	2.780	18.60	1	1	4	2

# LINKED BRUSHING



[github.com/mangothecat/tidyshiny](https://github.com/mangothecat/tidyshiny)

Tidy Data

Choose data: messyData

Key: Treatment

Value: Observed

Remove and print rows whose value is NA

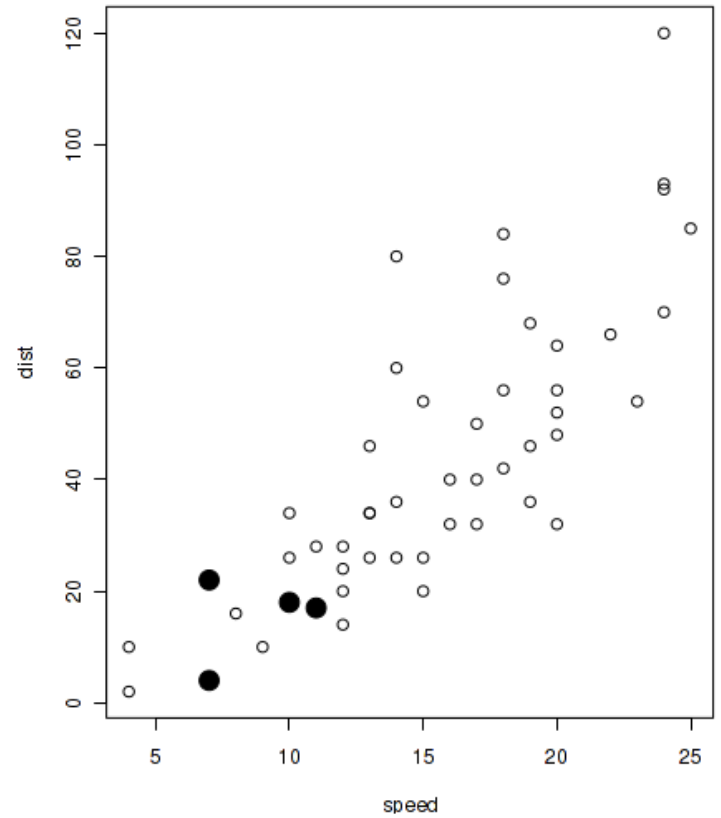
	Subject	Drug2.1	Drug2.2	Treatment	Observed
1	1	51.00	37.00	Placebo.1	45.00
2	2	47.00	49.00	Placebo.1	56.00
3	3	40.00	32.00	Placebo.1	39.00
4	4	43.00	26.00	Placebo.1	42.00
5	5	38.00	31.00	Placebo.1	50.00
6	6	33.00	46.00	Placebo.1	47.00
7	7	37.00	43.00	Placebo.1	51.00
8	8	54.00	45.00	Placebo.1	50.00
9	9	44.00	43.00	Placebo.1	52.00

**GADGETS!**

Search:

	speed ▾	dist ▾
1	4	2
2	4	10
3	7	4
4	7	22
5	8	16
6	9	10
7	10	18
8	10	26
9	10	34
10	11	17

Previous 1 2 3 4 5 Next



# DT: DATA TABLES

# EXTENDING DATA TABLES

Copy CSV Excel PDF Print

Search:

	Sepal.Length	Sepal.Width	Petal.Length	Petal.Width	Species
1	5.1	3.5	1.4	0.2	setosa
2	4.9	3	1.4	0.2	setosa
3	4.7	3.2	1.3	0.2	setosa
4	4.6	3.1	1.5	0.2	setosa
5	5	3.6	1.4	0.2	setosa
6	5.4	3.9	1.7	0.4	setosa
7	4.6	3.4	1.4	0.3	setosa
8	5	3.4	1.5	0.2	setosa
9	4.4	2.9	1.4	0.2	setosa
10	4.9	3.1	1.5	0.1	setosa

[rstudio.github.io/DT/](https://rstudio.github.io/DT/)

Showing 1 to 10 of 150 entries

Previous **1** 2 3 4 5 ... 15 Next

## Choose an R expression

info(R.Version())

toggle("btn")

delay(500, toggle("btn"))

hide("btn")

show("btn")

reset("expr")

info(R.Version())

onclick("btn", info(date()))

toggle(selector = "a")

toggle("btn" TRUE "slide" 2)

[github.com/daattali/shinyjs](https://github.com/daattali/shinyjs)

# SHINYJS

# HTML Templates

# Shiny Modules

# Profiling with profvis

# EARL Workshops 2016

## New to Shiny?

Introduction to shiny  
Mango Solutions

Half day workshop

## More Advanced User

Advanced shiny\*\*  
RStudio

Full day workshop

# Questions?

<http://shiny.rstudio.com/articles/>



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[github.com/daattali/shinyjs](https://github.com/daattali/shinyjs)