

CSSS 569: Visualizing Data and Models

INTRODUCTION TO INTERACTIVE VISUALIZATION WITH R AND SHINY

Christopher Adolph

Department of Political Science
and
Center for Statistics and the Social Sciences
University of Washington, Seattle



An interactive introduction to interactive visualization

Review Shiny Tutorial: <https://shiny.rstudio.com/tutorial/written-tutorial/lesson1>

Explore Example Interactives

Investigate Example Code

Ask questions throughout!

Life Expectancy**Model calibration****A “first useful Shiny”**

Package: faculty.washington.edu/cadolph/vis/lifeExpectancy.zip

Background: faculty.washington.edu/cadolph/index.php?page=102&loc=vis&pdf=Rgraphics

Shiny Example	Use Case	Notable Features
Life Expectancy	Model calibration	A “first useful Shiny”
<i>Package:</i> faculty.washington.edu/cadolph/vis/lifeExpectancy.zip		
<i>Background:</i> faculty.washington.edu/cadolph/index.php?page=102&loc=vis&pdf=Rgraphics		
Pangram Checker	Text only	Custom html UI
<i>Interactive:</i> cadolph.shinyapps.io/pangrams		
<i>Package:</i> faculty.washington.edu/cadolph/vis/pangrams.zip		

Shiny Example	Use Case	Notable Features
Life Expectancy	Model calibration	A “first useful Shiny”
<i>Package:</i> faculty.washington.edu/cadolph/vis/lifeExpectancy.zip		
<i>Background:</i> faculty.washington.edu/cadolph/index.php?page=102&loc=vis&pdf=Rgraphics		
Pangram Checker	Text only	Custom html UI
<i>Interactive:</i> cadolph.shinyapps.io/pangrams		
<i>Package:</i> faculty.washington.edu/cadolph/vis/pangrams.zip		
Graduate Recruitment	Data-driven decision making	Simplified output

Shiny Example	Use Case	Notable Features
Life Expectancy	Model calibration	A "first useful Shiny"
<i>Package:</i> faculty.washington.edu/cadolph/vis/lifeExpectancy.zip <i>Background:</i> faculty.washington.edu/cadolph/index.php?page=102&loc=vis&pdf=Rgraphics		
Pangram Checker	Text only	Custom html UI
<i>Interactive:</i> cadolph.shinyapps.io/pangrams <i>Package:</i> faculty.washington.edu/cadolph/vis/pangrams.zip		
Graduate Recruitment	Data-driven decision making	Simplified output
Economic Inequality	Exploration of conditional relationships in longitudinal data	Conditional inputs Extendability

Shiny Example	Use Case	Notable Features
Life Expectancy	Model calibration	A "first useful Shiny"
<i>Package:</i> faculty.washington.edu/cadolph/vis/lifeExpectancy.zip <i>Background:</i> faculty.washington.edu/cadolph/index.php?page=102&loc=vis&pdf=Rgraphics		
Pangram Checker	Text only	Custom html UI
<i>Interactive:</i> cadolph.shinyapps.io/pangrams <i>Package:</i> faculty.washington.edu/cadolph/vis/pangrams.zip		
Graduate Recruitment	Data-driven decision making	Simplified output
Economic Inequality	Exploration of conditional relationships in longitudinal data	Conditional inputs Extendability
Winter Olympics	Exploration of alternative measures Narrative presentation	Custom html UI Multi-panel output Text generation
<i>Interactive:</i> cadolph.shinyapps.io/olympics <i>Package:</i> faculty.washington.edu/cadolph/vis/olympics.zip		