R for Exploratory Data Analysis

Jim Crozier

Stratusfy: Data Science and Cloud Technology.

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Overview I

Quick Notes

Code and documentation available at github/jimcrozier/r-meetup-rattle

Topics

Three topics for data exploration:

- rattle package
- knitr package
- shiny application

Bonus:

Bonus: R + javascript for geomapping

rattle I

rattle Overview

rattle is a free gui available from Togaware for R

- I am not a rattle expert
- Loads of example available online
- Covering the very basics here

Getting started

Install and load gui

install.packages(rattle, dependencies=T)

- This takes some time due to the large number of dependencies

rattle II

rattle()

Make it work

Live demo

data(iris)

knitr I

Overview

knitr is a single best tool that you can learn

Overview

copy and paste rattle log into block

- Convert crs and crv to list()
- Still working out kinks with plots

Overview

Tip: use cat() to write out .tex and looping to create integrated EDA

"Intelligence is the faculty of making artificial objects, especially tools to make tools." - Henri Bergson

shiny I

Make it work

Interactivity is where data science is headed. shiny is easy way to interact your models and your views.

Make it work

Live demo

Javascript with R I

Make it work

Use R, JSON and javascript (here the leaf package) to create interactive elements

Make it work

Live demo Rickshaw

Make it work

Live demo Leaf