

## **R for Data Science**

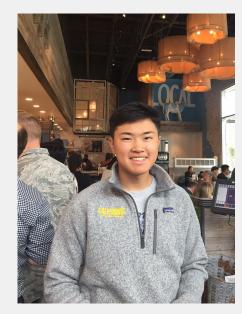
Workshop Series #4

## Data Science Society at Berkeley

## Instructors + TA's



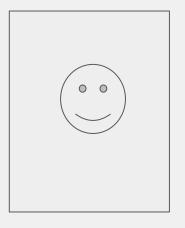
#### Instructors



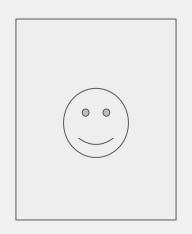
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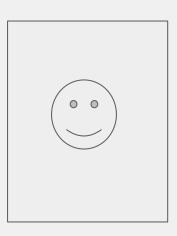
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## Data Science Society at Berkeley

## Lesson Plan

#### Lesson Plan

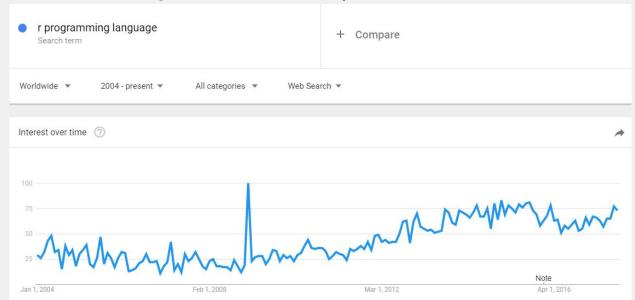
- 1. Overview
  - 1.1. History of R
  - 1.2. RStudio
  - 1.3. Tidyverse
- 2. Using R
  - 2.1. Basic syntax/RStudio
  - 2.2. Vectors/Matrices/Dataframes
  - 2.3. readr/dplyr/ggplot2
- 3. Mini-Project

R Workshop: 1

## Overview

#### 1.1 History of R

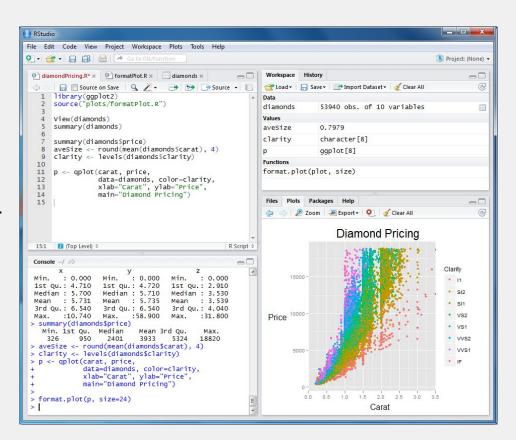
- Origins in S (developed by Bell Labs)
- Ported to open-source software in 1990s
- Gained traction following 2008 recession for open-source, OOP, well-documented environment



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#### 1.2 RStudio

- Primary IDE for R
- Built-in support for plots, packages, documentation, environment details, etc.
- Build dashboards with R Markdown files



### 1.3 Tidyverse

- Hadley Wickham
- ggplot2: Plotting data
- dplyr: Data manipulation
- readr: Reading data files
- tidyr: Create "tidy" data
  - Each observation is a row
  - Each variable is a column
- shiny: Interactive data dashboards







## Using R!!

http://tinyurl.com/f17-dss-r



# https://piazza.com/class/j7s01y165odq5 Data Science FAQs

