



THE UNIVERSITY OF  
CHICAGO

# R Programming Workshop

## Feb 20<sup>th</sup>, 2016

Materials by Naveen Venkataraman

# Introductions

- Your Name
- Background

# Workshop Objectives

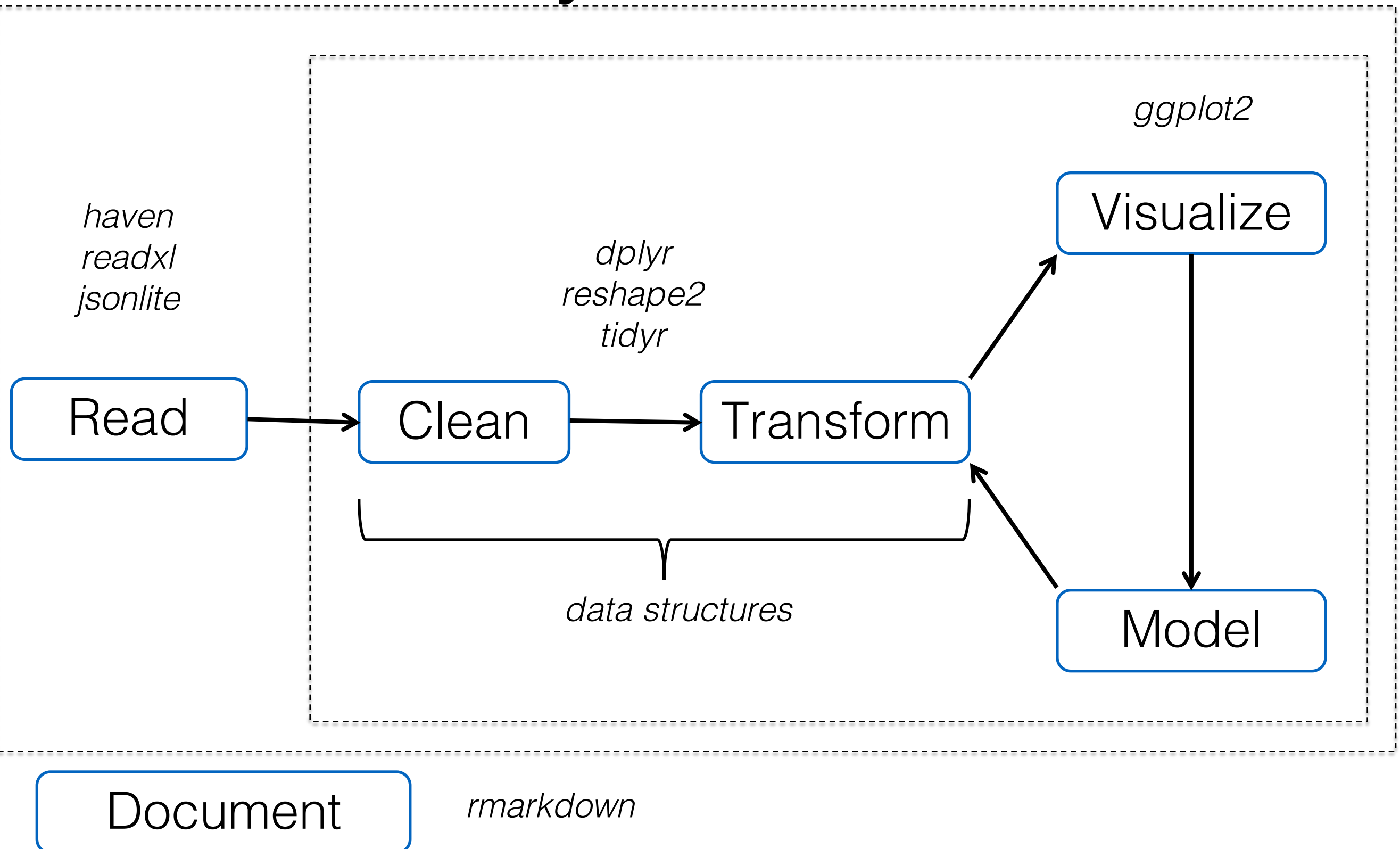
- Get Comfortable with R
  - For Your Classes
  - Individual Projects
- Learn to
  - Setup and Customize RStudio
  - Work with R packages
  - Import data into R
  - R data structures – vectors, matrices, dataframes, lists
  - R control structures – loops, apply functions
  - R graphics

# Resources

- Stackoverflow - <http://stackoverflow.com/>
- R Bloggers - <http://www.r-bloggers.com/>
- Rdocumentation – <http://rdocumentation.org>

Why ?

# Data Analysis Value Chain



# Setup RStudio

# Installing Packages



# Installing Packages from CRAN

- Installing

**> install.packages("packagename")**

- Loading

**> library(packagename)**

# Installing Packages From CRAN

- **devtools**
- **rmarkdown**
- **knitr**

# Installing Packages From Github

```
> library(devtools)
```

```
> install_github("dgrtwo/broom")
```

# Finding Help in R

- ? – Exact match
- ?? – Fuzzy match

# Recap

- Customizing RStudio
- Setting up an RStudio Project
- Overview of Data Analysis Value Chain
- Installing and Updating Packages
- Finding Help