R Studio®

Intro to Data Science with R and RStudio

Materials: github.com/nrohr/learn-r
Questions? financial-services@rstudio.com

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About this course

- Designed for brand new R users, still useful if you know a little
- Topics are independent, but build upon previous sessions
    - Session 1: data wrangling
    - Session 2: data visualization
    - Session 3: reports with R Markdown
    - Session 4: interactive applications with Shiny
- Materials: github.com/nrohr/learn-r
- Please *don't* try to run the code during our live sessions! Try running (and changing!) the code between sessions and reach out if you need help.

Questions? Email us: financial-services@rstudio.com

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What is R?

R

- An open-source statistical programming language that's [growing rapidly]!
- **open-source**: free to use, change, distribute
- **statistical**: born out *S*, built by statisticians at Bell Labs in 1970s
- **programming language**: requires writing code
- Maintained by R Development Core Team, supported by R Foundation, R Consortium, and tens of thousands of contributors
- To download R, go to https://cloud.r-project.org and then click on the link for either Mac, Windows or Linux depending on your computer

R Studio

What is RStudio?

RStudio

- An open-source **integrated development environment (IDE)** for writing R (and other) code
- A private company and public benefit corporation devoted to building tools for data science
- Many flavors: RStudio Desktop (Pro), RStudio Server (Pro), RStudio Cloud and other tooling (RStudio Connect, RStudio Package Manager)
- To install RStudio, go to http://www.rstudio.com/download
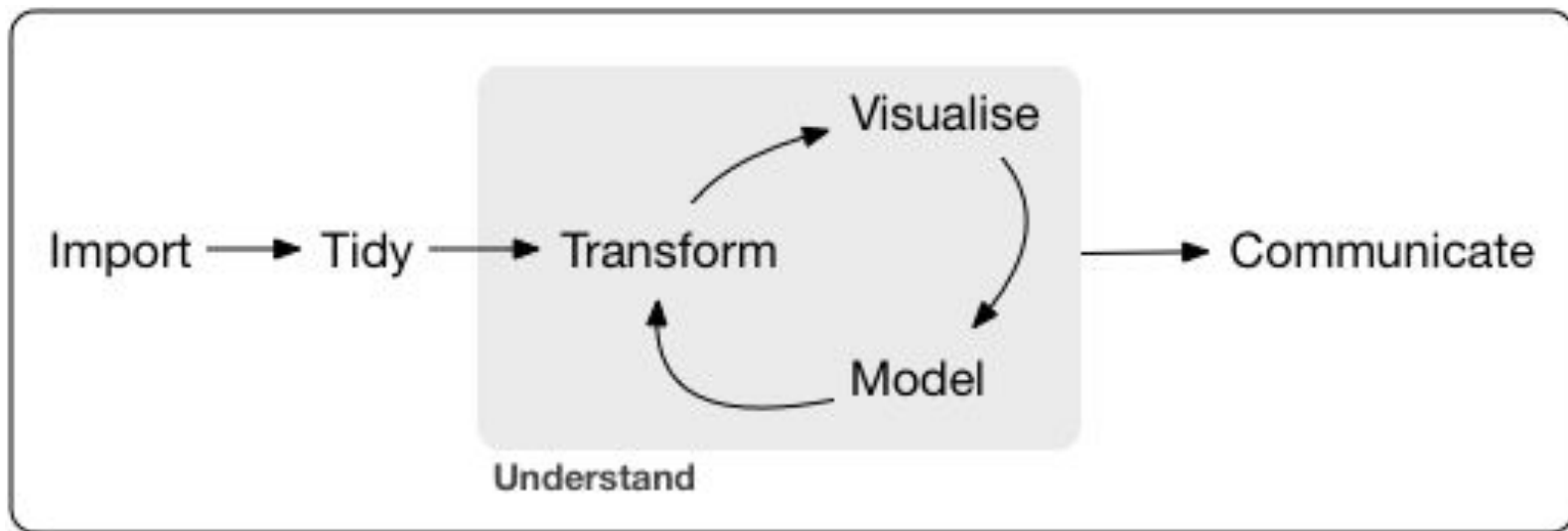
What are R packages?

R packages

- The R language consists of "base R" and additional packages
- When writing code, we call functions, which are like recipes for the computer to accomplish a task
- R packages add functions to let us do even more with our data
- Tens of thousands of packages on CRAN, the largest public *repository* of packages

What is Data Science?

What is Data Science?

- Applying the scientific method to understand and learn from data
- *My take:* doing something with data that makes a meaningful impact

From

More resources

- [RStudio's Education site](#)
- [*R for Data Science*](#)
- [RStudio Cloud tutorials](#)
- [RStudio Community](#)