

Intro to Data Science with R and RStudio



Materials

https://github.com/nrohr/2020-07-intro-r

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



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



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 <u>CRAN</u>, the largest public *repository* of packages

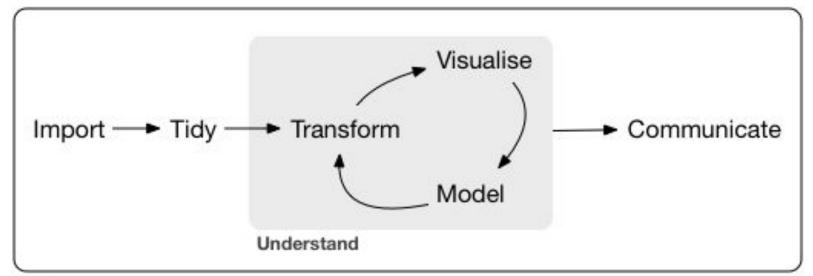


What is Data Science?



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



Program



More resources

- RStudio's Education site
- R for Data Science
- RStudio Cloud tutorials
- RStudio Community

