R RESOURCES

Cleo Falvey | Filip Stefanovic | 8.14.2020

## Did R pique your interest? Here’s where to go for more!

Obviously, we can’t cover everything in a six-hour workshop – we’ve both been coding in R for several years now! R is a very powerful software that can be used to build lots of fantastic models, graphs, packages, interactive dashboards (Shiny), and more. Here are some good places to get started!

|  |  |
| --- | --- |
|  | Teacups, Giraffes, and Statistics: <https://tinystats.github.io/teacups-giraffes-and-statistics/index.html> |

This is an incredibly cute website where you can learn more about how to code in R. It was developed by an RStudio intern and it’s so well designed, informative, and adorable!

|  |  |
| --- | --- |
|  | Swirl: <https://swirlstats.com/> |

This is an R package that teaches you how to learn R straight from the console. Download it onto your computer by typing:

install.packages(“swirl”)

Into your R console. Then load it by using:

library(swirl)

This package will interactively teach you how to use R, directly in R/RStudio.

|  |  |
| --- | --- |
|  | R for Data Science: <https://r4ds.had.co.nz/> |

Hadley Wickham is the lead developer of the Tidyverse and Chief Scientist at RStudio. He has written this excellent open-source book that teaches the basics of using Tidy code to import, clean, and visualize data!

|  |  |
| --- | --- |
|  | R for Data Science: <https://rstudio.com/resources/cheatsheets/> |

RStudio cheat sheets made for top Tidyverse packages. Some of these cheat sheets are attached in the folder.

|  |  |
| --- | --- |
|  | How to install packages in R: <http://www.sthda.com/english/wiki/installing-and-using-r-packages> |

Here’s a good link that teaches you how to install different packages in R if there’s one that you want that’s not on CRAN and it is on GitHub or Bioconductor or something else.

|  |  |
| --- | --- |
|  | Stat545: <https://stat545.com/> |

Developed by Jenny Bryan, who works at RStudio. It’s a whole book for a whole class and it’s all about Tidy data!

## There are many more free resources and courses in R out there!

## Community Resources

One of the greatest strengths of R is its user base and community. We highly recommend you check out these groups / communities if you are looking to get more involved!

|  |  |
| --- | --- |
|  | R Meetups: <https://www.meetup.com/Boston-useR/> |

Boston Area UseR group is very welcoming and has been doing virtual meetups. The in-person meetups are also great (when it’s safe), there’s always an excellent talk and free food.

|  |  |
| --- | --- |
|  | R Ladies Boston: <https://www.meetup.com/rladies-boston/> |

R Ladies Boston is an excellent group focused on diversity and inclusivity in coding. You don’t have to be a woman to attend and the environment is always very welcoming!

|  |  |
| --- | --- |
|  | *RStudio Community:* <https://community.rstudio.com/> |

This website is like StackOverflow, but specifically for R. (There are plenty of R questions on StackOverflow as well!

|  |  |
| --- | --- |
|  | *TidyTuesday:* <https://github.com/rfordatascience/tidytuesday> |

Every week there is a new data set that the R community plays around with in an incredibly informal way. The hashtag on Twitter is #tidytuesday and it’s always a good way to see a new visualization and implementation of using R, and there’s no pressure to make something but beginners are always highly encouraged!

## Miscellaneous Tips We Wish We Knew When We Started Using R:

1. R can sometimes have a high learning curve. Don’t be frustrated if you don’t pick it up right away!
2. R is very particular. Missed parentheses, spelling, capitalizations, commas, and quotation marks all matter. Listen to the IDE (RStudio)! It is there to help you.
3. Keep your projects organized and start each one in a new folder with an R project or R Markdown script. That way it is easy to find and read in your data.
4. Googling the error message is totally OK (and seriously, half of programming is knowing what to Google). StackOverflow will become your best friend!
5. Use the *str()* or *head()* command on data, and try to plot as soon as you can so you can figure out what you need to do with your data.
6. Sometimes cleaning your data is the hardest part. For that, we always recommend a Tidy approach, and *dplyr* is always a great choice!
7. Reach out for help! There are a lot of people in the R community who are friendly to beginners and lots of resources. (including us!) Please reach out to [cleo.falvey001@umb.edu](mailto:cleo.falvey001@umb.edu) if you have additional questions!