Welcome to a GCDI Workshop!

Introduction to R and RStudio

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GC Digital Initiatives

THE GRADUATE CENTER
CITY UNIVERSITY OF NEW YORK

What is GCDI?

GCDI offers different types of ***support for digital scholarship*** such as evening **workshops**, **one-on-one consultations** for faculty and students, **working groups** based around common tools or data sources, special **events** such as our annual Digital Showcase and Sound Series, and **online resources**.

Whether you have participated in our workshops before or your idea of the perfect software is a paperback edition, there is something for you! Our offerings are open to scholars at all levels of digital experience and at all stages of graduate research. Whether you are digitally driven, curious, or defiant, we are prepared to help.

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OK, so how can I get involved with GCDI?

- Join the **GCDI Group** on the CUNY Academic Commons for updates on how to be involved. **cuny.is/group-gcdi**
- Check the Event Calendar for upcoming **events** and **workshops**. **cuny.is/workshops**
- Request a **one-on-one consultation**. **cuny.is/gcdfconsults**
- Join the **R Users Group (RUG)** at **cuny.is/rug**
- Join the **GIS Working Group** at **cuny.is/group-gis-working-group**
- Join the **Data Visualization Group** at **: cuny.is/dvg**
- Join the **Python Users Group (PUG)** at **cuny.is/pug**

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Today's workshop

Introduction to R and RStudio

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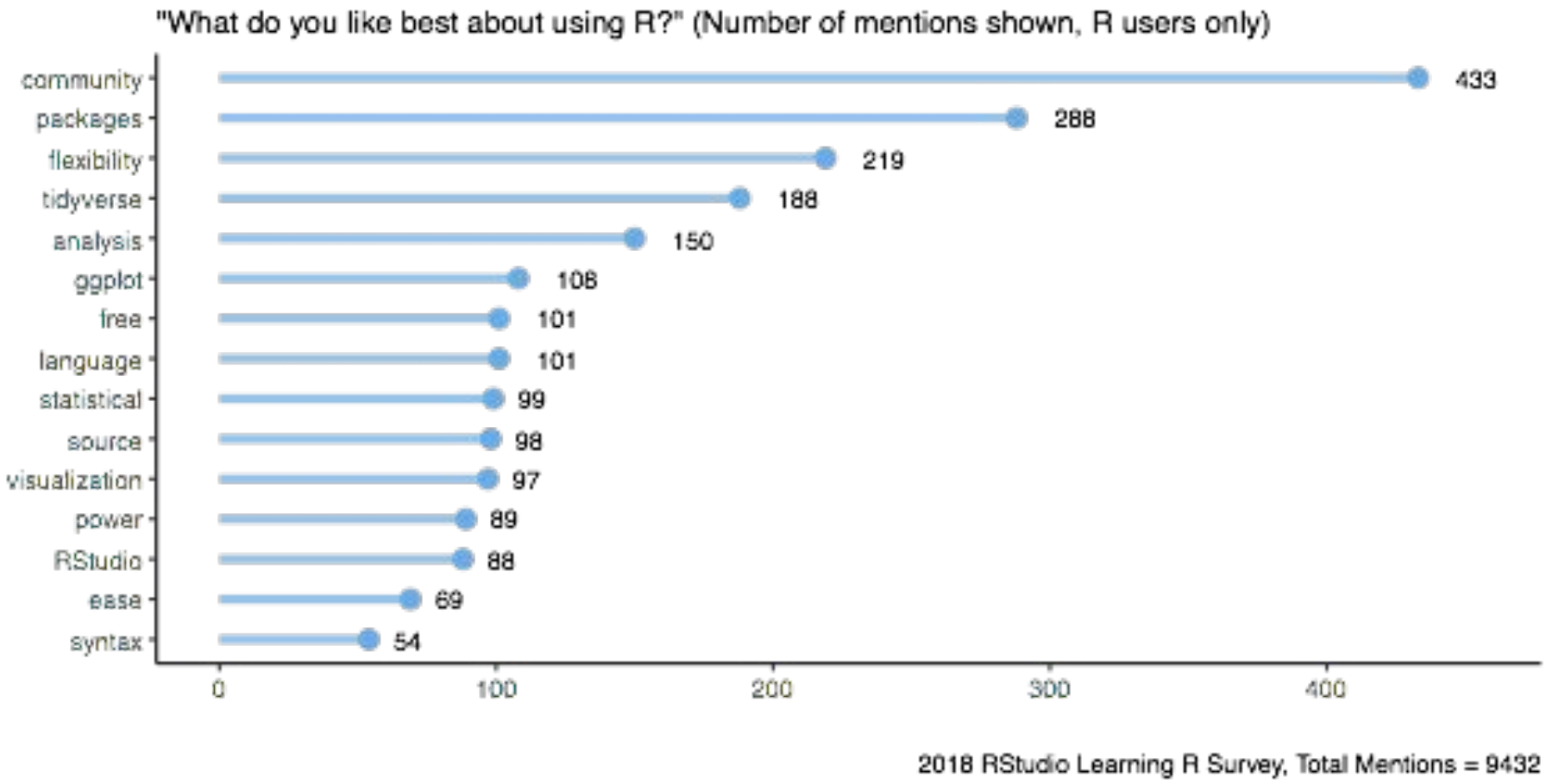
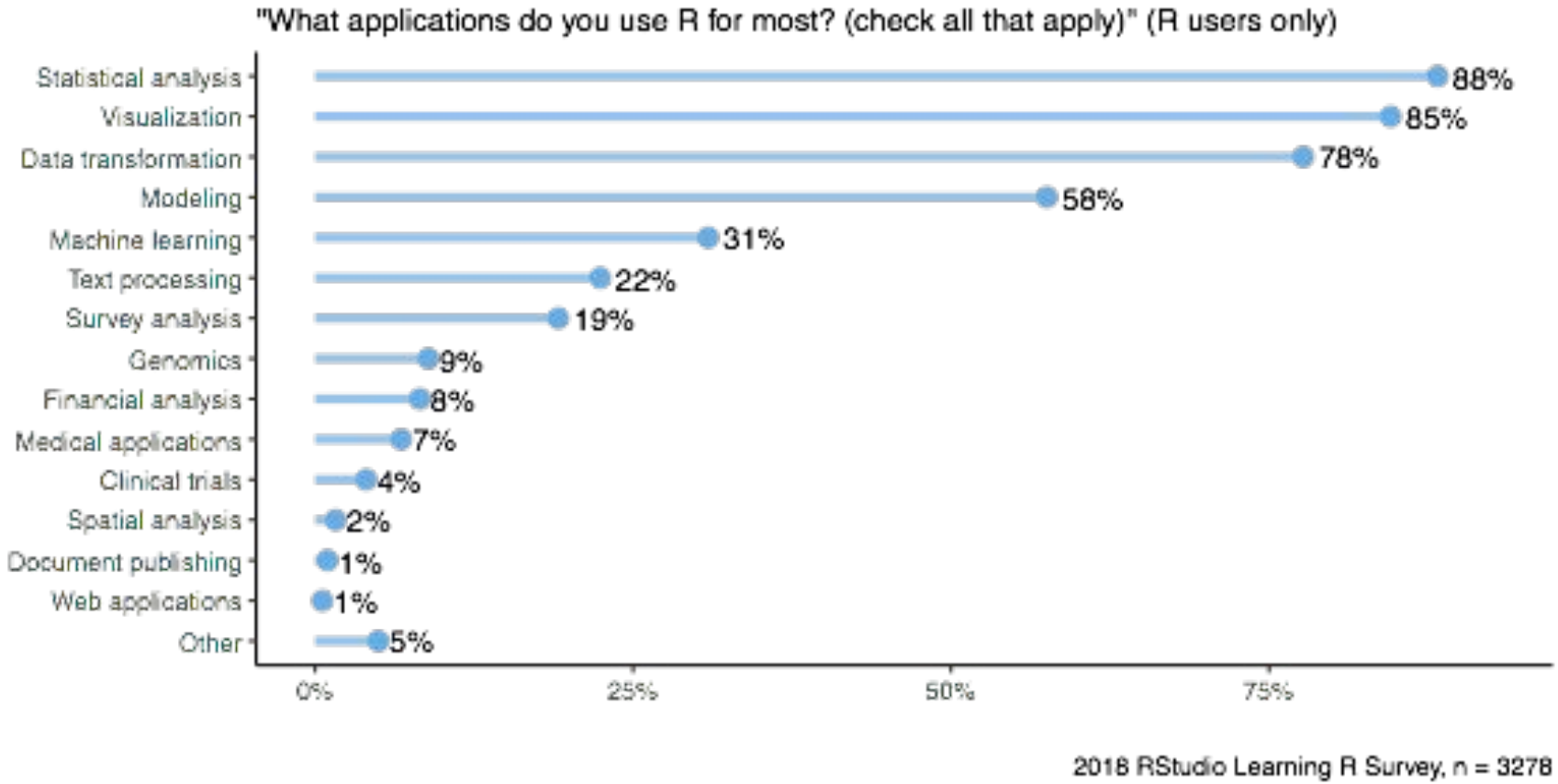
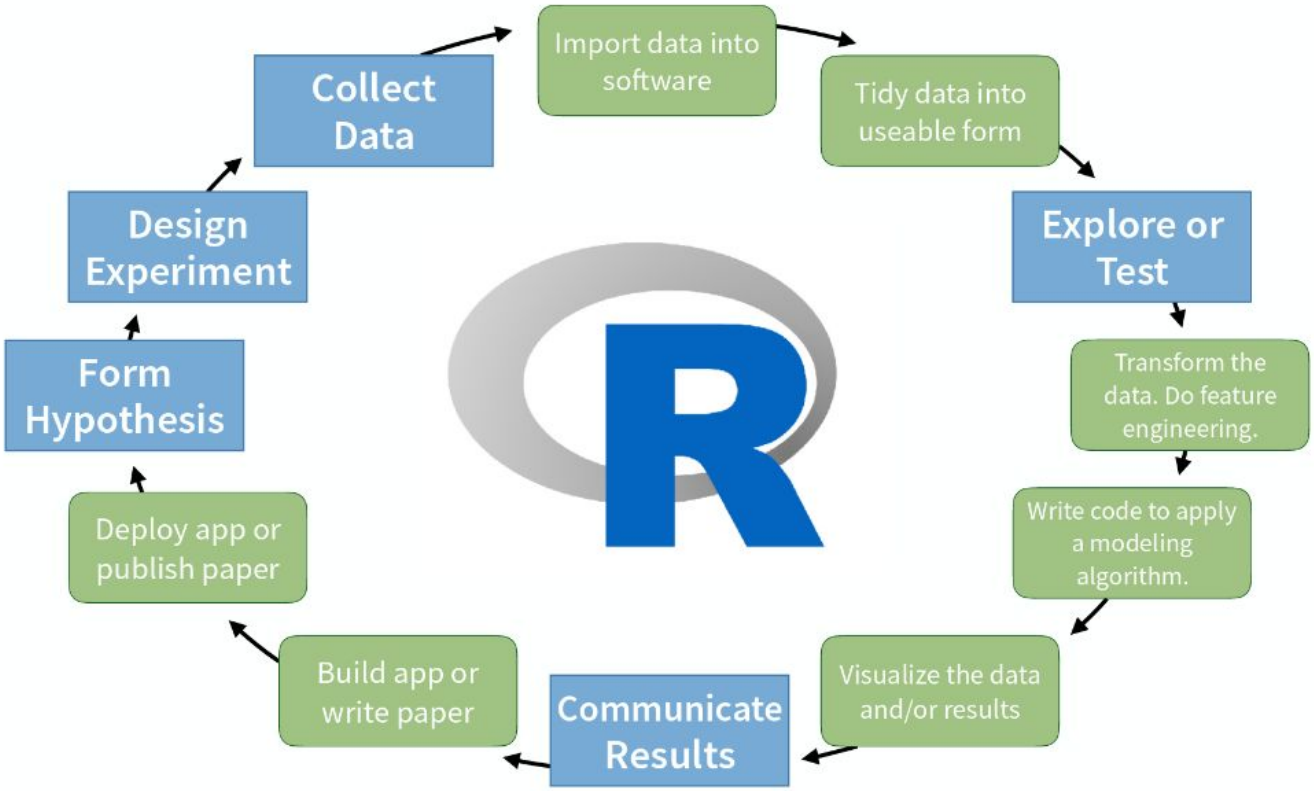
Why is R great?

- Amazing, accessible community
- You can do (nearly) everything with it
- Optimized for performing data analysis and reports
- It’s FREE


"What do you like best about using R?" (Number of mentions shown, R users only)
community
packages
flexibility
tidyverse
analysis
ggplot
free
language
statistical
source
visualization
power
RStudio
ease
syntax
433
288
219
188
150
108
101
101
99
98
97
89
88
69
54
0
100
200
300
400
2018 RStudio Learning R Survey, Total Mentions = 9432


"What applications do you use R for most? (check all that apply)" (R users only)
Statistical analysis
Visualization
Data transformation
Modeling
Machine learning
Text processing
Survey analysis
Genomics
Financial analysis
Medical applications
Clinical trials
Spatial analysis
Document publishing
Web applications
Other
88%
85%
78%
58%
31%
22%
19%
9%
8%
7%
4%
2%
1%
1%
5%
0%
25%
50%
75%
2018 RStudio Learning R Survey, n = 3278



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R: Engine

RStudio: Dashboard

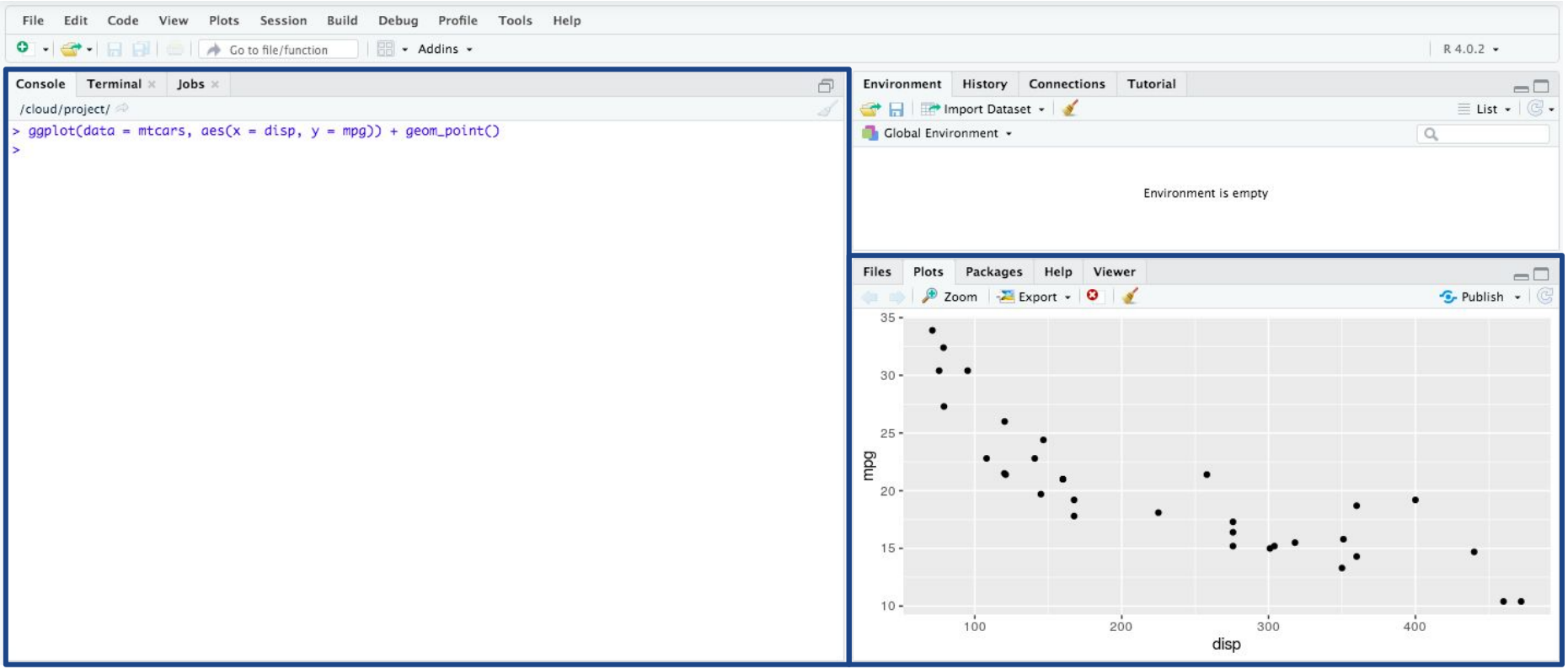
https://moderndive.com/1-getting-started.html

What we’re covering

- R/RStudio basics
- Loading data

This is a chance to get your feet wet

- Don’t worry if you don’t understand everything right now
- All programming languages take time to understand
- I’ll give you plenty of resources to have a successful journey!



Coding console

Output

R: A new phone

R Packages: Apps you can download

https://moderndive.com/1-getting-started.html

Time to get familiar with RStudio!

Connect with the R community!

cuny.is/rug

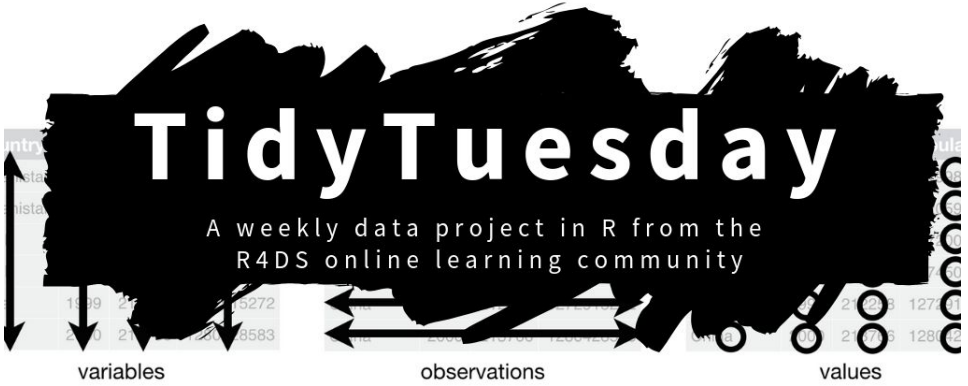
cuny.is/dvg

#rstats

#tidyverse

#r4ds

#rspatial

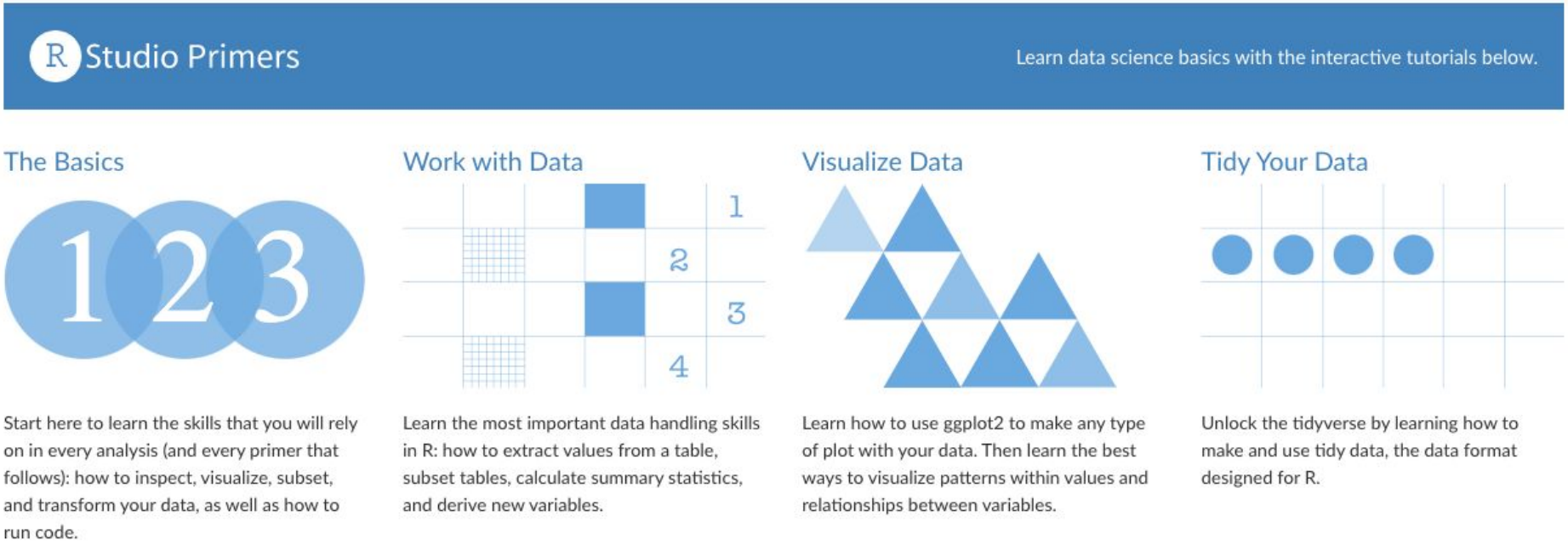


https://github.com/rfordatascience/tidytuesday

https://rladies.org/

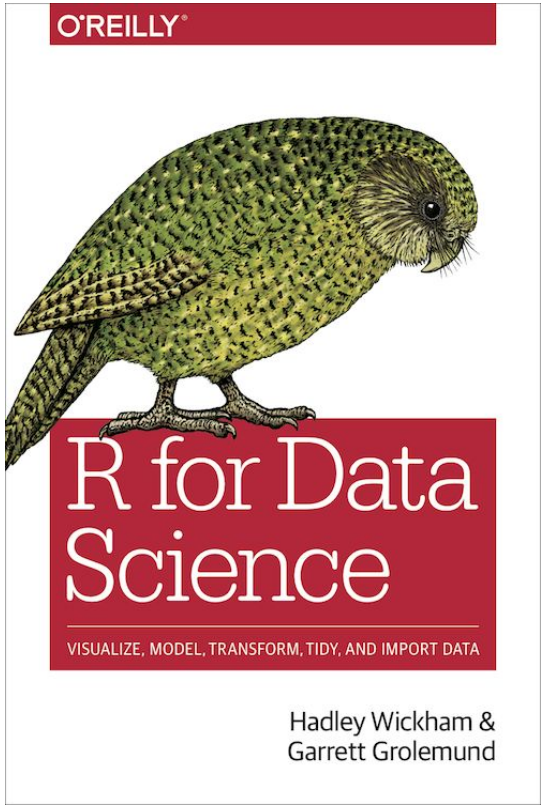
https://www.rfordatasci.com/

Learn more!



https://rstudio.cloud/learn/primers

Learn more!



https://r4ds.had.co.nz/

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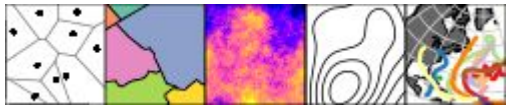
http://cuny.is/gcdi

R Studio Community

https://community.rstudio.com/

r-spatial



https://www.r-spatial.org/

stackoverflow

https://stackoverflow.com/

What next?

Before you leave, **please fill out a workshop evaluation** so we can improve our programming! **cuny.is/GCDI-webevals**

- Need more support about what you just learned? Request follow-up individual consultations at **cuny.is/gcdfconsults**
- Join the GCDI Group on the CUNY Academic Commons for all GCDI-related updates! **cuny.is/group-gcdi**

Thank you for attending and being involved! The *#DigitalGC* is you!

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