



Everything Else

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Setting up Your R

Installing R & RStudio



Need to install each version of R

- <https://mirrors.nics.utk.edu/cran/>

Then install RStudio independently

- <https://www.rstudio.com/products/rstudio/download/>

You need to have R installed BEFORE you can install RStudio. You also need to update them independently.

Local RStudio installation vs RStudio Cloud



Local

- Free
- May be restricted by IT
- Versioning dependent on user

Cloud

- Paid
- Access via web browser
- Standardized version/packages

R appearance



Tools > Global Options

- edit font, text size and color scheme

Code > Rainbow Parentheses

.Renviron and .Rprofile



.Renviron contains sensitive information or R environmental variables

- store API/GitHub keys
- specify RAM
- NOT R CODE - same code as used in the command line
- `usethis::edit_r_environ()`

.Rprofile is R code run every time R starts up

- Create welcome messages
- Load frequently used packages
- `usethis::edit_r_profile()`

- **Stack Overflow**
 - **R Community**
 - **R for Data Science**
 - Anything written by Hadley Wickham, Garret Grolemund, Yihui Xie, Jenny Bryan
 - **#rstats**

Cutting corners to meet arbitrary management deadlines



Essential

Copying and Pasting
from Stack Overflow

Best Coding Practices

Have you tried turning it off and then on again?



- Start with a new, clean session
- Re-start often

Naming things



Good names should be:

- machine readable
 - no spaces, strange punctuation, or odd cases
- human readable
 - name contains details on content
- works with default ordering
 - numbers first
 - standard dates (YYYY-MM-DD)
 - left pad numbers



Code Style



- Line length around 80 characters
- Object and data names should be informative
- Consistency is key - names, indents, spacing
- <https://style.tidyverse.org/>



GitHub

GitHub basics




What is GitHub?

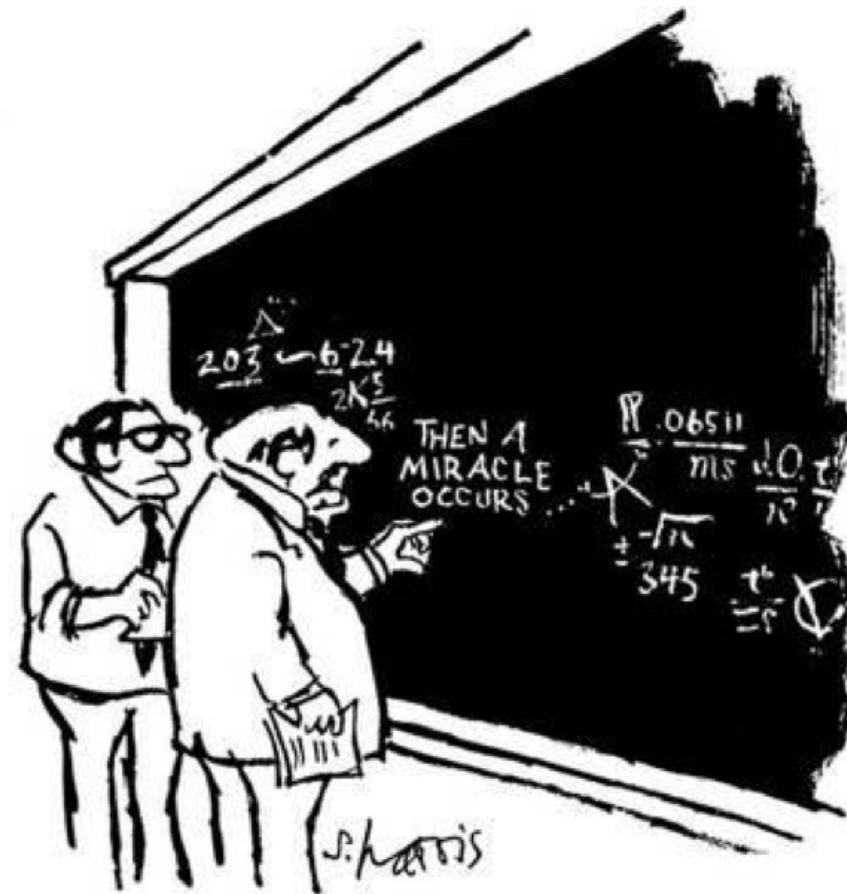
- Code hosting platform
- Used for version control
- GitHub, GitHub Enterprise, GitLab (😞)

Why do we care?

- Distribute R packages
- Collaborate on code
- Explore other projects
- Project manager
- Repos are **CITABLE**

 Paul Stewart of the Moffitt BioData Club does a Git training about once a year which I highly recommend if you are interested in learning more about Git

https://github.com/pstew/biodataclub/tree/master/meetings/2018-10_git



"I think you should be more explicit here in step two."