

# Frictionless onboarding to data science with



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Mine Çetinkaya-Rundel  
Duke University + RStudio

## don't start like this

- Install R
- Install RStudio
- Install the following packages
  - rmarkdown
  - tidyverse
  - shiny
- Load these packages
- install git

## start like this

- Go to [rstudio.cloud](https://rstudio.cloud)
  - Log in
- > hello R!

*tidy*

# what are R and RStudio?



statistical  
programming  
language

**R: Engine**



**Studio**<sup>®</sup> integrated  
development  
environment for R

**RStudio: Dashboard**

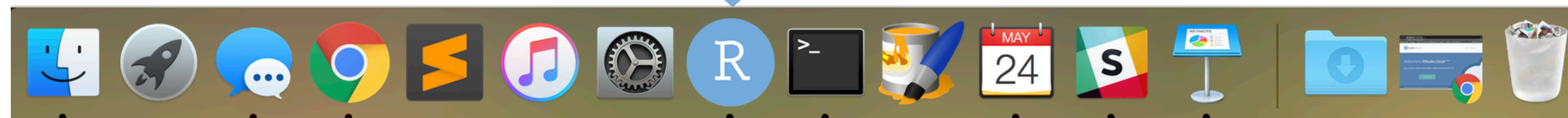
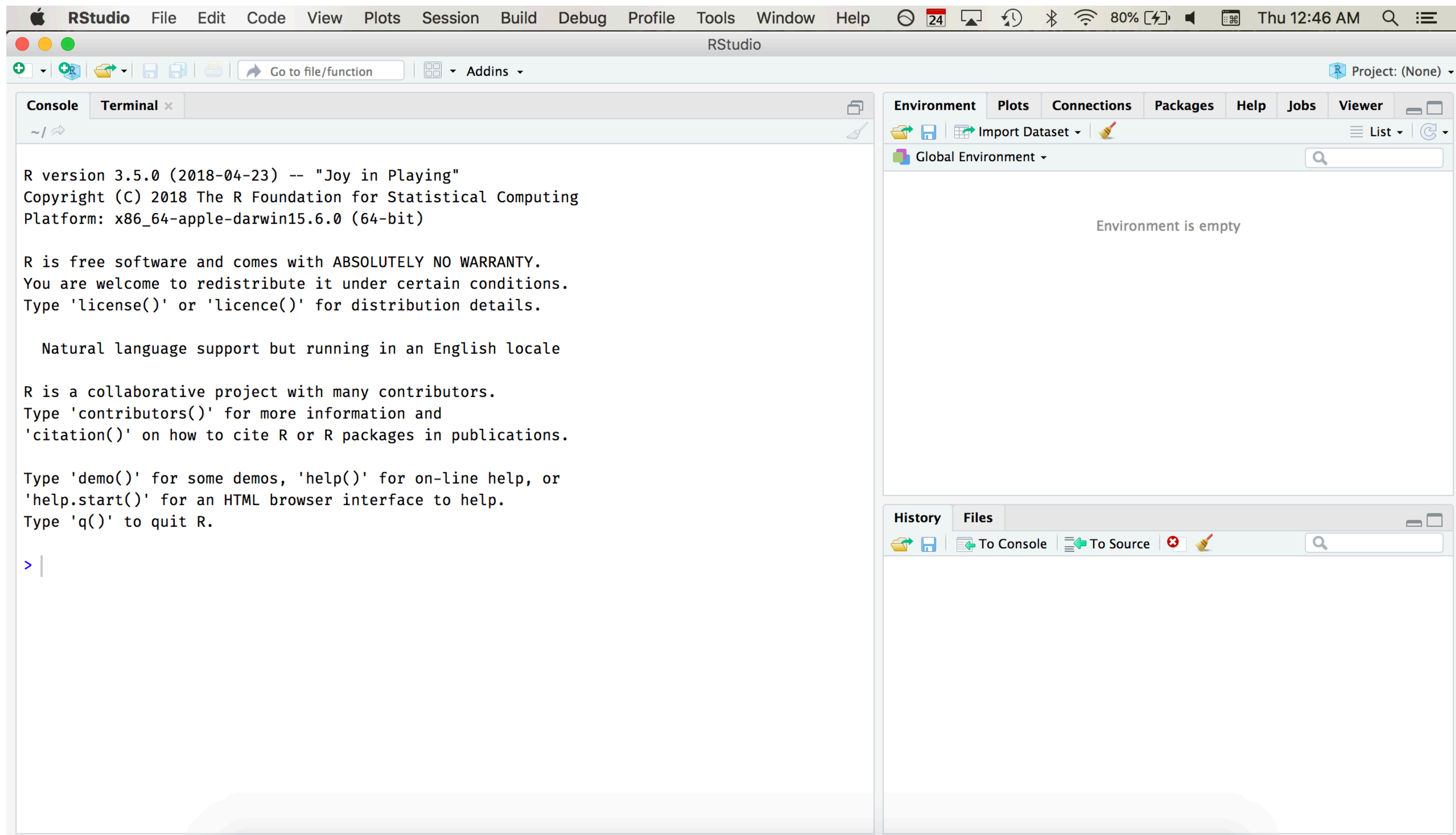


# what is RStudio Cloud?



makes it easy for professionals, hobbyists, trainers, teachers, and students to do, share, teach, and learn data science using R





Chrome File Edit View History Bookmarks People Window Help

Secure | <https://rstudio.cloud/project/38096>

Your Workspace / Untitled Project Click to name your project

Mine Çetinkaya-Rundel

File Edit Code View Plots Session Build Debug Profile Tools Help

Go to file/function Addins R 3.4.4

Console Terminal x

/cloud/project/

R version 3.4.4 (2018-03-15) -- "Someone to Lean On"  
Copyright (C) 2018 The R Foundation for Statistical Computing  
Platform: x86\_64-pc-linux-gnu (64-bit)

R is free software and comes with ABSOLUTELY NO WARRANTY.  
You are welcome to redistribute it under certain conditions.  
Type 'license()' or 'licence()' for distribution details.

R is a collaborative project with many contributors.  
Type 'contributors()' for more information and  
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or  
'help.start()' for an HTML browser interface to help.  
Type 'q()' to quit R.

>

Environment History Connections

Global Environment

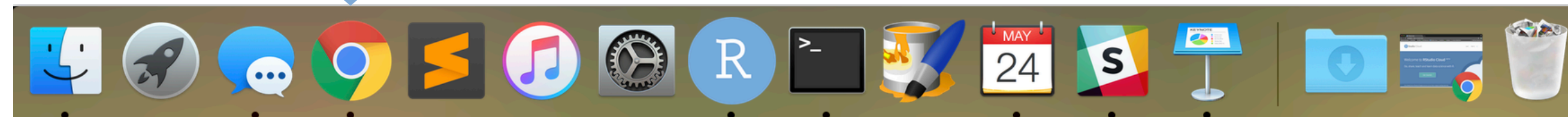
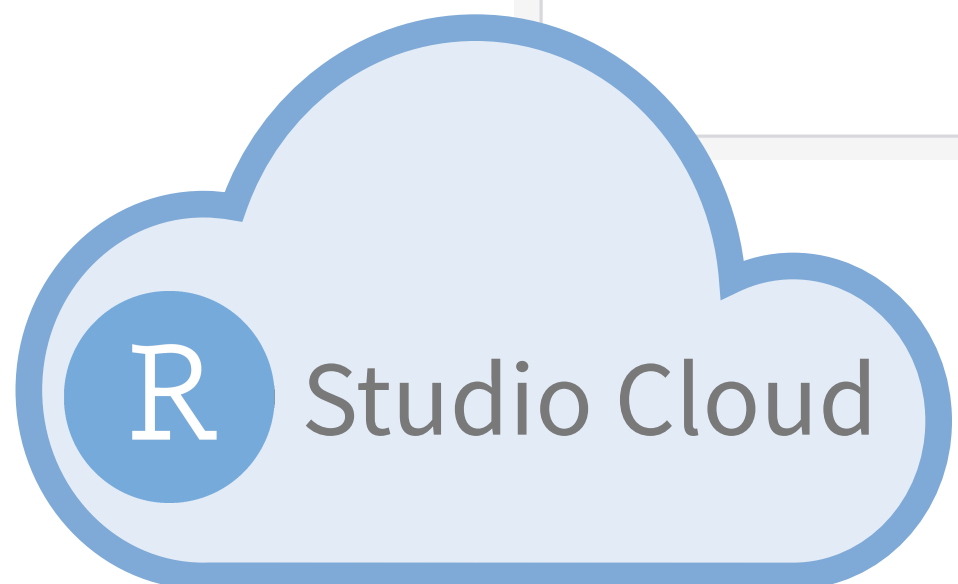
Environment is empty

Files Plots Packages Help Viewer

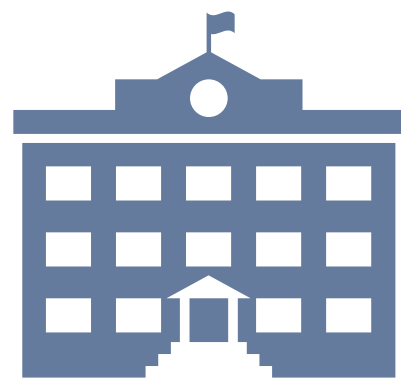
New Folder Upload Delete Rename More

/ > cloud > project

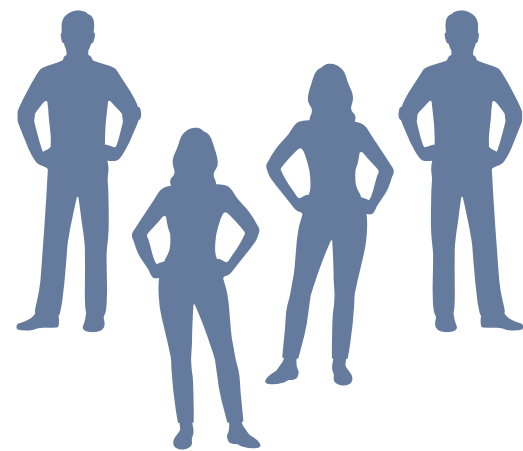
	Name	Size	Modified
↑	..		
📄	.Rhistory	0 B	May 24, 2018, 12:40 AM
📁	project.Rproj	205 B	May 24, 2018, 12:40 AM



# context



intro data science

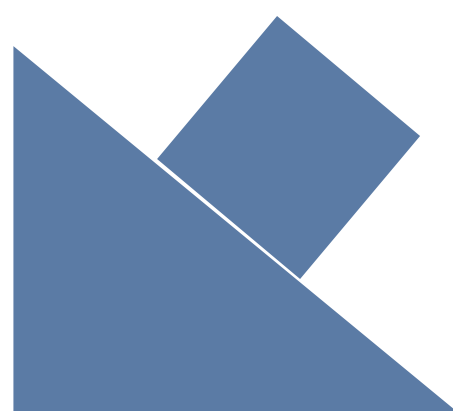


students with little to no background in stats,  
data science, programming



R as a data science (not programming) language

# why RStudio in the cloud?



reduce friction at first exposure to R



avoid local installation



install R and RStudio on a server and provide access to students:

- Centralized RStudio server
- Dockerized RStudio server
- RStudio Cloud

Çetinkaya-Rundel, Mine, and Rundel, Colin. "Infrastructure and tools for teaching computing throughout the statistical curriculum." The American Statistician (2018). Part of the Practical Data Science for Stats collection.

this talk 😊





# why RStudio Cloud?



does not require IT support



features designed for instructors:

# why RStudio Cloud?

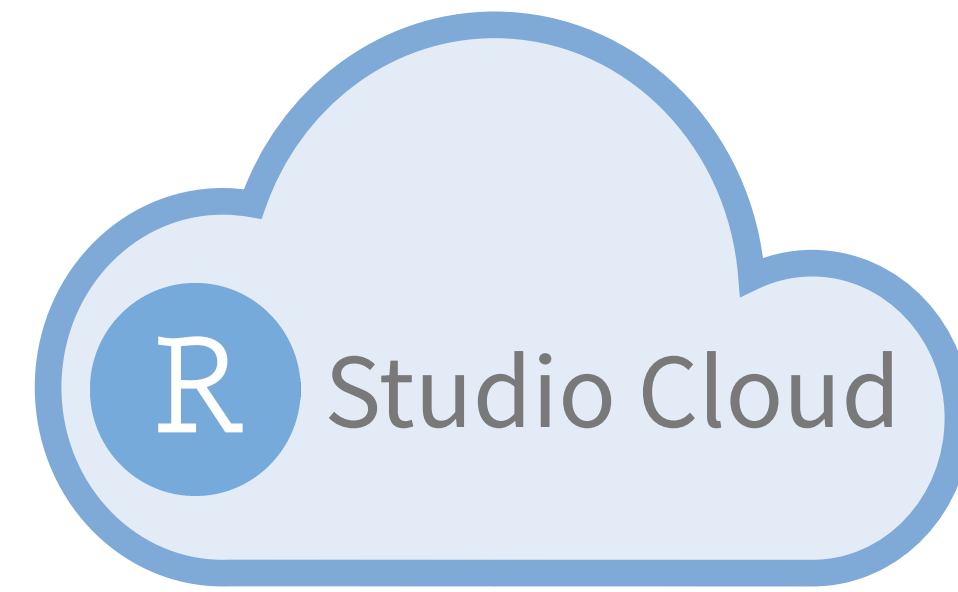


does not require IT support



features designed for instructors:

- classes can be organized in workspaces
- members can be assigned different roles: instructor, TA, student
- projects can be public or private
- students can make copies of projects created by instructor
- instructor can peek into student projects



**[bit.ly/ecots2018-cloud](https://bit.ly/ecots2018-cloud)**

# parting remark

A large, bold, orange alpha symbol (α) is positioned on the left side of the slide, indicating the 'alpha' stage of development.

## WORK IN PROGRESS

We're in alpha and still adding important features and improving performance, reliability and availability. Please reach out with any questions or feedback at <https://community.rstudio.com/c/rstudio-cloud>.





Thank  
you!



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