Computational Bootcamp 1: Software Installation

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8/15/22

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5. LaTex: producing documents with Markdown and Overleaf

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3. File Management
4. Installing R, Stata, LaTeX

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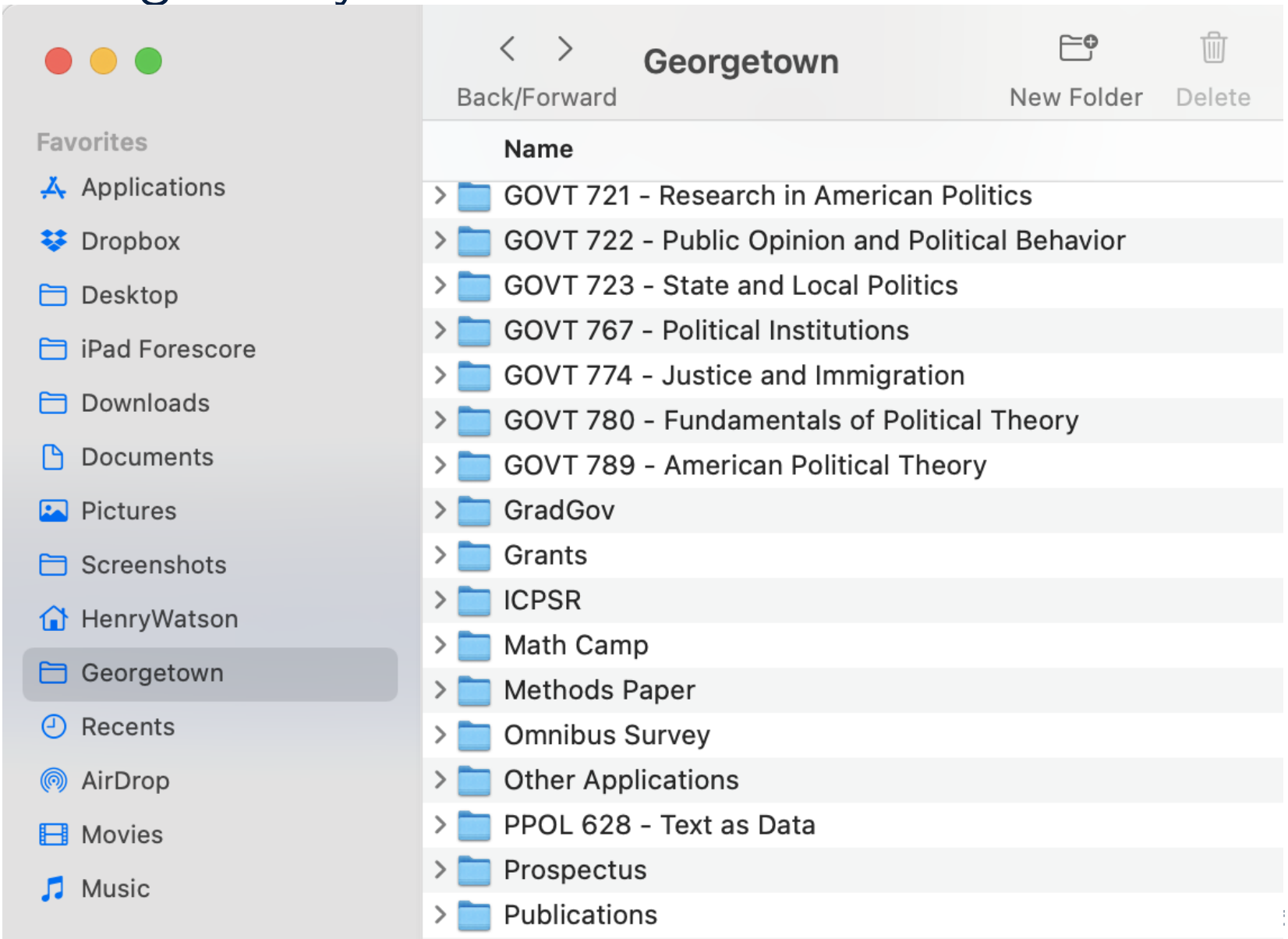
Organizing File Systems



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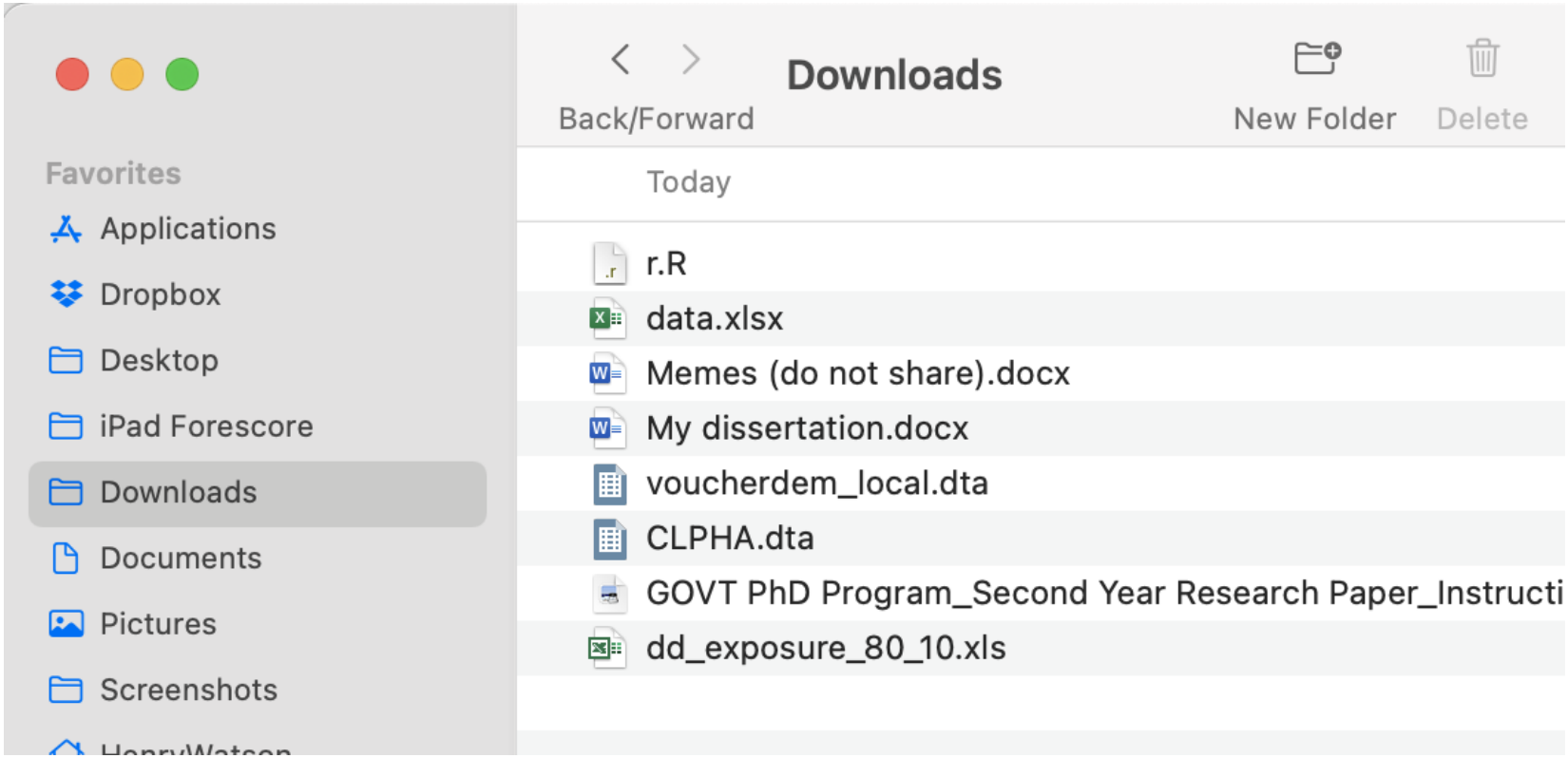
- This will make it easy to collaborate with others, post replication files, and type your filepaths into applications like Stata and R.
- Name your files consistently, and in ways that help you manage versions and trace your project
- Starting a project with an organized file system is much easier than cleaning it up afterward.

Don't Throw Everything in Downloads!



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  - Tells statistical software where to look for, and save, files
- R and Stata both have built-in, point-and-click ways to identify file paths!

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- Code: .r (R script) ; .rmd (R script with markdown) ; .do (Stata script)
- Not a comprehensive list! Just the main ones you'll be working with.

Installation: R

Download R

The Comprehensive R Archive Network

CRAN
Mirrors
What's new?
Search

About R
R Homepage
The R Journal

Software
R Sources
R Binaries
Packages
Task Views
Other

Documentation
Manuals
FAQs
Contributed

Mirrors: R is available to download from different locations. Pick the closest to you for a faster download.

Download and Install R

Precompiled binary distributions of the base system and contributed packages, **Windows and Mac** users most likely want one of these versions of R:

- Download R for Linux (Debian, Fedora/Redhat, Ubuntu)
- Download R for macOS
- Download R for Windows

R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

Source Code for all Platforms

Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!

- The latest release (2022-06-23, Funny-Looking Kid) R-4.2.1.tar.gz, read what's new in the latest version.
- Sources of R alpha and beta releases (daily snapshots, created only in time periods before a planned release).
- Daily snapshots of current patched and development versions are available here. Please read about new features and bug fixes before filing corresponding feature requests or bug reports.
- Source code of older versions of R is available here.
- Contributed extension packages

Questions About R

- If you have questions about R like how to download and install the software, or what the

Installation: R Studio

Download R Studio

Choose Your Version

The RStudio IDE is a set of integrated tools designed to help you be more productive with R and Python. It includes a console, syntax-highlighting editor that supports direct code execution, and a variety of robust tools for plotting, viewing history, debugging and managing your workspace.

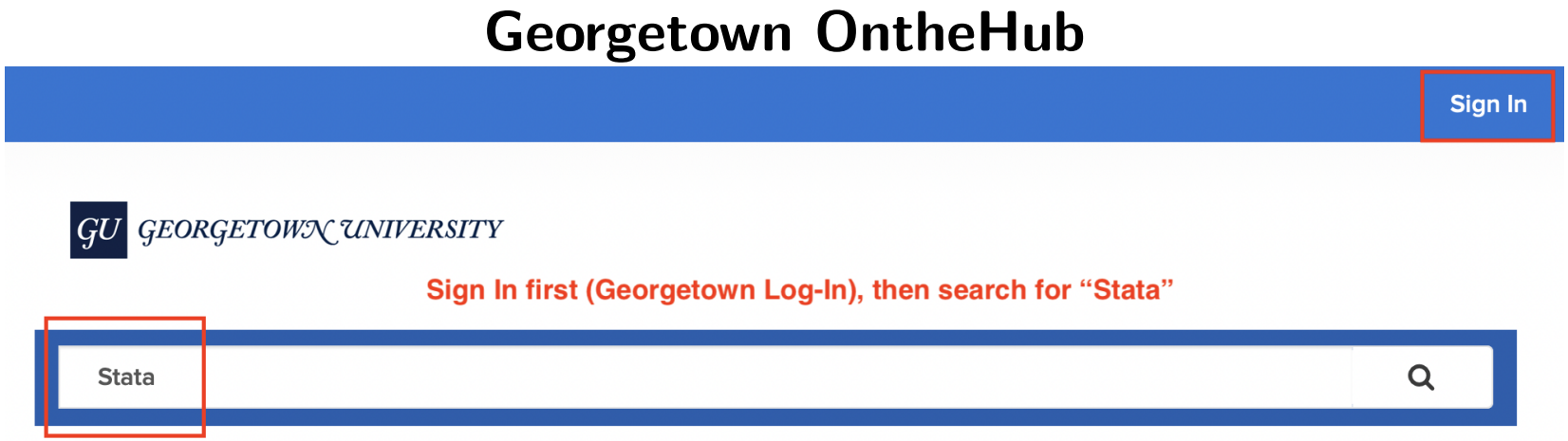
LEARN MORE ABOUT THE RSTUDIO IDE

RStudio's recommended professional data science solution for every team. RStudio Team is a bundle of RStudio's popular professional software for data analysis, package management, and sharing data products.

Learn more about RStudio Team

RStudio Desktop	RStudio Desktop Pro	RStudio Server	RStudio Workbench
Open Source License	Commercial License	Open Source License	Commercial License
Free	$995 /year	Free	$4,975 /year (5 Named Users)
DOWNLOAD	BUY	DOWNLOAD	BUY

Installation: Stata



Installation: Stata

Georgetown OntheHub

Stata/BE 17 ▲

Fast. Accurate. Easy to use. Stata is a complete, integrated software package that provides all your data science needs—data manipulation, visualization, statistics, and automated reporting.

Stata/BE is the basic version of Stata. Up to 2,147,583,647 observations and 2,048 variables are allowed, depending on memory. Statistical models may have up to 800 variables.

Choose a platform: Windows

Stata/BE 17 (Windows)

View Offering Restrictions

Choose your platform, Add to Cart, Check Out

Your "Use Case" is "Classwork"

Free

Add to Cart

STATA BE is provided under Georgetown University license with Stata Inc. and may be installed on Personal Machines by Students for University Business.

Installation: Stata

- Write down your Serial Number, Code, and Authorization Key (or take a screenshot)
- Click on the downloaded file and go through the InstallShield Installation Wizard
- Open Stata and enter your Serial Number, Code, and Authorization Key

Installation: LaTeX

- Installing LaTeX can take a long time
- You do not need to install LaTeX to use Overleaf (although you will need to make an account on www.overleaf.com)
- My preferred way to install LaTeX, if you want it primarily for RMarkdown, is to install it through R.

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- We'll go over this again on Friday once we're more comfortable with R!

Installation: LaTeX

```
install.packages("rmarkdown")

library(rmarkdown)

install.packages("tinytex")

tinytex::install_tinytex()
```