

Computational Bootcamp 1: Software Installation

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August 14, 2023

What We'll Be Covering Overall

- 1 File management, software installation

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- ② Basics of R: writing code, creating objects, thinking in matrices
- ③ R: working with datasets
- ④ More R: data cleaning, visualization
- ⑤ LaTeX: producing documents with Markdown and Overleaf

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- 1 Intro to statistical programming

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- ➋ Good data analysis practices

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- ➊ Intro to statistical programming
- ➋ Good data analysis practices
- ➌ File Management
- ➍ Installing R, Stata, LaTeX

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- State of the discipline

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 - Michael Kremer wins the Nobel Prize.
 - Results disappear after correcting coding errors (Aiken et al. 2015).

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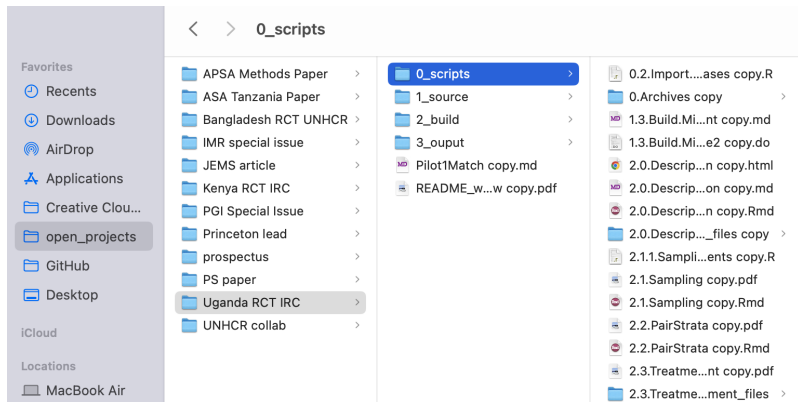
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- Relatively easy and non-technical

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- 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.

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- R and Stata both have ways to set and 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.

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- R Studio is relatively user-friendly, has a large user community

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

Download R

The Comprehensive R Archive Network

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



OS	Download	Size	SHA-256
Windows 10/11	RSTUDIO-2023.06.1-524.EXE	212.77 MB	A8325AD5
macOS 11+	RSTUDIO-2023.06.1-524.DMG	380.82 MB	184804EA
Ubuntu 20/Debian 11	RSTUDIO-2023.06.1-524-AMD64.DEB	145.85 MB	49E24A69
Ubuntu 22	RSTUDIO-2023.06.1-524-AMD64.DEB	146.82 MB	C030EC83

Installation: Stata

Georgetown Web Store

 **Student Software Webstore** [Home](#) [GU Free Software](#) [Paid Software](#)

Sign in using your
GU account first

Welcome to the University Software for Students.

This site allows students of Georgetown University to download software for free or at discounted prices.

We hope this site will be the first place you go to find software for use as a student of Georgetown University.

Thank You

- ArcGIS
- ChemDraw
- Cisco VPN
- JMP
- Mathematica
- Matlab
- Microsoft Azure
- Office 365
- Windows
- HyperChem
- Minitab
- SAS
- SPSS
- STATA**

Navigate using

Installation: Stata



Students are able to use the University Site License for Stata BE. Stata SE can be used on University machines in libraries, departmental machines, and the UIS Virtual Classroom when additional variables are needed.

[STATA License Request Link](#)

Note: At the end of the Google Form, license information will be provided.

Installation: Stata

[Home](#) > [Request New Service](#) > [Software](#) > Stata License Request



Stata License Request

Request for Stata by StataCorp

[Read more](#)

Affiliation *

Student

Installation: Stata

Hi Ankushi,

This software requires UIS to collect data in regards to usage and agreement to licensing terms of the software developer. At the completion of the Google Form you will receive download and license information.

Please complete the google form below to gain access to the software.

[Stata Data Collection and Vendor Agreement Form](#)

Thank you,

Georgetown University Service Center

Installation: Stata



SOFTWARE REQUEST

Stata License

In order to use a license for this software product we need to collect some data. Please fill out the form completely and then you will be provided details on how to obtain the software.

aam278@georgetown.edu [Switch account](#)



* Indicates required question

Email *



Installation: Stata

- Note your Serial Number, Code, and Authorization Key
- 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 (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()
```