

# Computational Bootcamp 1: Software Installation

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- ③ R: working with datasets
- ④ More R: data cleaning, visualization
- ⑤ LaTeX: producing documents with Markdown and Overleaf

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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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- Advanced data analysis
- Data visualization
- State of the discipline

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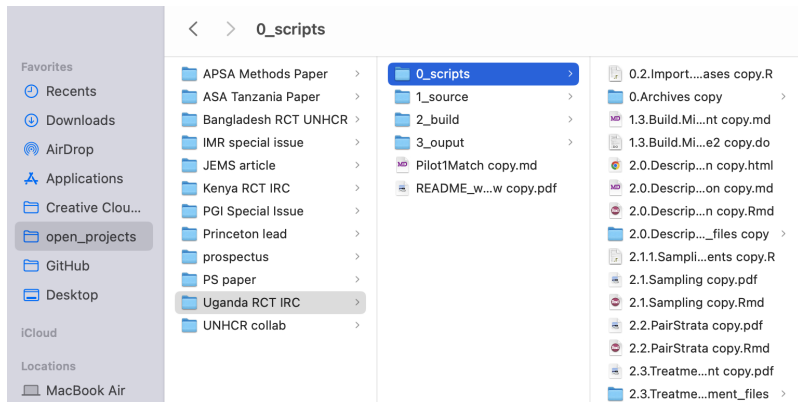
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- Relatively easy and non-technical

# 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.

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- Working Directory: a file path to a folder
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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

# Installation: R



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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	<a href="#">RSTUDIO-2023.06.1-524.EXE</a>	212.77 MB	<a href="#">A8325AD5</a>
macOS 11+	<a href="#">RSTUDIO-2023.06.1-524.DMG</a>	380.82 MB	<a href="#">184804EA</a>
Ubuntu 20/Debian 11	<a href="#">RSTUDIO-2023.06.1-524-AMD64.DEB</a>	145.85 MB	<a href="#">49E24A69</a>
Ubuntu 22	<a href="#">RSTUDIO-2023.06.1-524-AMD64.DEB</a>	146.82 MB	<a href="#">C030EC83</a>

# Installation: Stata

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- Windows
- HyperChem
- Minitab
- SAS
- SPSS
- STATA**

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# 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](https://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()
```