

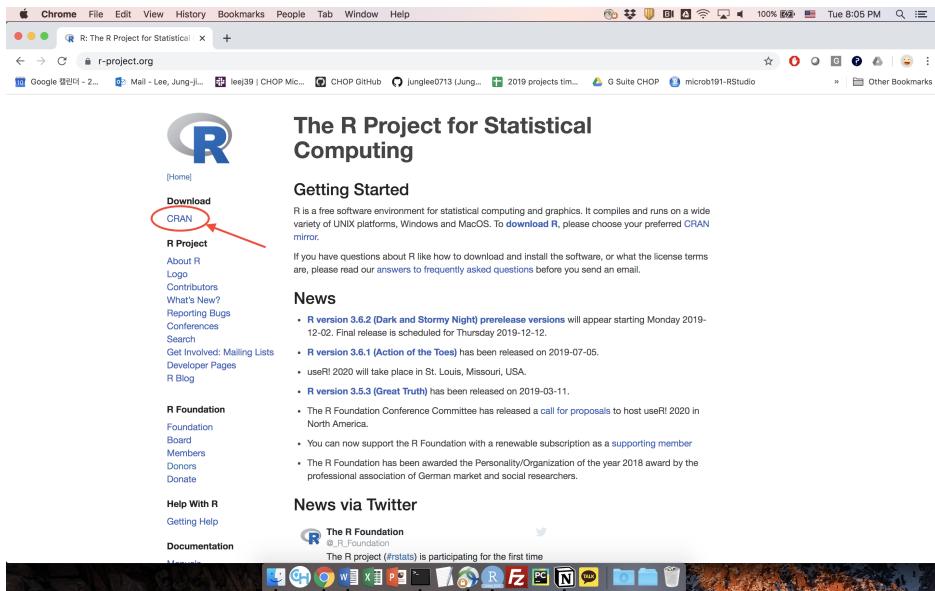
R/RStudio Installation Guide

Jung-Jin Lee

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Part I: Install R

1. Using your web browser, go to <http://www.r-project.org/>
2. Click on CRAN under Download on left (see below)



3. Choose any mirror site (usually closer sites tend to be better), e.g. <http://lib.stat.cmu.edu/R/CRAN/> (see below)

Google 請 찾기 - 2... Mail - Lee, Jung-ji... lee39 | CHOP Mic... CHOP GitHub junglee0713 | Jung... 2019 projects tim... G Suite CHOP microb191-RStudio Other Bookmarks

Spanish National Research Network, Madrid

Academic Computer Club, Umeå University

ETH Zürich

Department of Computer Science and Engineering, Yuan Ze University

National Taiwan University, Taipei

Prince of Songkla University, Hatyai

Pamukkale University, Denizli

Middle East Technical University Northern Cyprus Campus, Mersin

University of Bristol

Imperial College London

University of California, Berkeley, CA

Iowa State University, Ames, IA

Indiana University

University of Kansas, Lawrence, KS

Michigan Technological University, Houghton, MI

MBNI, University of Michigan, Ann Arbor, MI

Washington University, St. Louis, MO

Duke University, Durham, NC

Case Western Reserve University, Cleveland, OH

Oregon State University

Statlib, Carnegie Mellon University, Pittsburgh, PA

Hobby Classifieds, Pittsburgh, PA

National Institute for Computational Sciences, Oak Ridge, TN

Revolution Analytics, Dallas, TX

Facultad de Derecho, Universidad de la República

<https://cran.cnr.berkeley.edu/>

<https://mirror.las.iastate.edu/CRAN/>

<https://ftp.usc.iu.edu/CRAN/>

<https://rweb.emrald.ku.edu/cran/>

<https://cran.mtu.edu/>

<https://repo.miserver.it.umich.edu/cran/>

<https://cran.wustl.edu/>

<http://archive.linux.duke.edu/cran/>

<https://cran.case.edu/>

<https://ftp.osuosl.org/pub/cran/>

<http://lib.stat.cmu.edu/R/CRAN/>

<http://www.mirrors.babylonia.com/>

<https://mirrors.nics.ukr.edu/cran/>

<https://cran.revolutionanalytics.com/>

Uruguay

<https://espejito.fder.edu.uy/cran/>

4. Choose a package corresponding to your operating system (see below). R supports Windows, Mac, and Linux. Follow instructions and install 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](#)
- [Download R for Mac or OS X](#)
- [Download R for Windows](#) If you are a PC user

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 (2019-07-05, Action of the Toes) [R-3.6.1.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 license terms are, please read our [answers to frequently asked questions](#) before you send an email.

What are R and CRAN?

R is 'GNU S', a freely available language and environment for statistical computing and graphics which provides a wide variety of statistical and graphical techniques: linear and nonlinear modelling, statistical tests, time series analysis, classification, clustering, etc. Please consult the [R project homepage](#) for further information.

CRAN is a network of ftp and web servers around the world that store identical, up-to-date, versions of code and documentation for R. Please use the CRAN [mirror](#) nearest to

Part II: Install RStudio (Do it only after Part I is complete)

1. Using your web browser, go to <https://rstudio.com/products/rstudio/download/>
2. Choose free RStudio desktop version (see below)

The screenshot shows the RStudio download page. It compares four versions: RStudio Desktop (Free), RStudio Desktop (Commercial License \$995/year), RStudio Server (Free), and RStudio Server Pro (\$4,975/year). The RStudio Desktop (Free) section is highlighted with a red arrow pointing to the 'DOWNLOAD' button. Below this, a comparison chart lists features like Integrated Tools for R, Priority Support, Access via Web Browser, Enterprise Security, Project Sharing, Manage Multiple R Sessions & Versions, Admin Dashboard, and Load Balancing, each marked with a green checkmark.

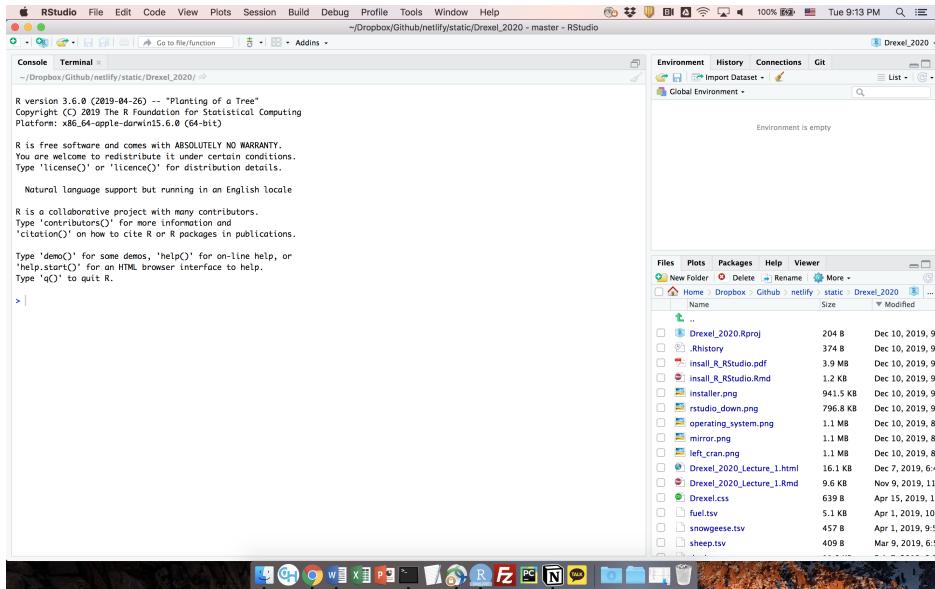
3. Choose an installer for your operating system and follow instructions (see below)

The screenshot shows the RStudio download page for Windows 10/8/7. It displays a table of download links for various operating systems. The 'Windows 10/8/7' row is highlighted with a red arrow pointing to the 'RStudio-1.2.5019.exe' link. The table includes columns for OS, Download link, Size, and SHA-256 hash.

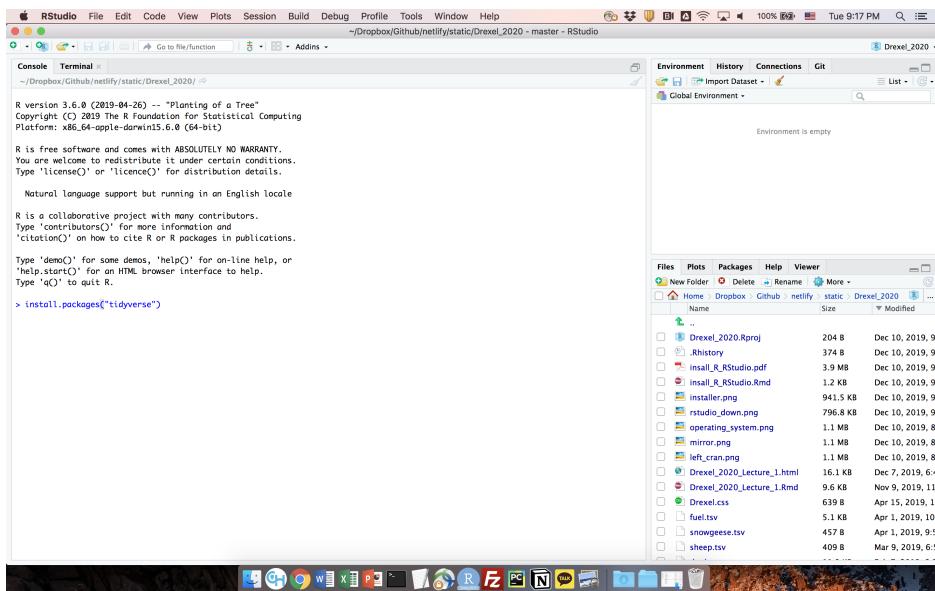
OS	Download	Size	SHA-256
Windows 10/8/7	RStudio-1.2.5019.exe	149.82 MB	7c6a943c
macOS 10.12+	RStudio-1.2.5019.dmg	126.88 MB	00cf7d64
Ubuntu 14/Debian 8	rstudio-1.2.5019-amd64.deb	96.93 MB	a0f43062
Ubuntu 16	rstudio-1.2.5019-amd64.deb	104.91 MB	24Ead367
Ubuntu 18/Debian 10	rstudio-1.2.5019-amd64.deb	106.04 MB	e819293c
Fedor 19/Red Hat 7	rstudio-1.2.5019-x86_64.rpm	120.26 MB	c4fb97ce
Fedor 28/Red Hat 8	rstudio-1.2.5019-x86_64.rpm	120.89 MB	06ed9379
Debian 9	rstudio-1.2.5019-amd64.deb	106.39 MB	cd8a2413
SLES/OpenSUSE 12	rstudio-1.2.5019-x86_64.rpm	99.04 MB	87190f72
OpenSUSE 15	rstudio-1.2.5019-x86_64.rpm	107.09 MB	e4929a16

Part III: Install essential packages

1. Open RStudio – you should be able to see something similar to the following:



2. Install a package called `tidyverse` by typing `install.packages("tidyverse")` and hitting enter (see below). This may take a while.



3. Install a package called `tinytex` by typing `install.packages("tinytex")` and hitting enter (see below. Your screen may look different). This also may take a while.

```
R version 3.6.0 (2019-04-26) -- "Planting of a Tree"
Copyright (C) 2019 The R Foundation for Statistical Computing
Platform: x86_64-apple-darwin15.6.0 (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.

Natural language support but running in an English locale

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.

> install.packages("tinytex")
```

The screenshot shows the RStudio interface with the console tab active. The console window displays the R command `> install.packages("tinytex")`. The rest of the screen shows the file browser and environment panes.

4. Type `tinytex::install_tinytex()` (note the double colons :: between `tinytex` and `install_tinytex()`) and hit enter (see below. Your screen may look different)

```
R version 3.6.0 (2019-04-26) -- "Planting of a Tree"
Copyright (C) 2019 The R Foundation for Statistical Computing
Platform: x86_64-apple-darwin15.6.0 (64-bit)

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> tinytex::install_tinytex()
```

The screenshot shows the RStudio interface with the console tab active. The console window displays the R command `> tinytex::install_tinytex()`. The rest of the screen shows the file browser and environment panes.

5. From RStudio menu, choose Tools → Global Options. Click on Sweave on the left and change PDF generation options to `knitr` (see below. Your screen may look different).

