

Introduction to statistics - R prerequisite

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May 06, 2021

What is R

- R is both a scripted programming language and software environment for statistical computing.
- R is widely used for statistical analysis and creation of high-quality publishable graphics.
- It's open source, free to use and supported by a large community of users and developers.
- Flexible and highly scalable via user defined packages and functions.

Why R

- **Reproducibility** - one code; multiple users and projects .
- **Flexible** and easy to learn.
- **Scalability** - You can define/customize your own functions and/or packages.
- **Interoperability** - same code across platforms (mac, windows, linux etc).

Getting started - Installing R and Rstudio

- You can install the latest version of R from the [CRAN repository](#). CRAN stands for **C**omprehensive **R** **A**rchive **N**etwork
- The latest version of R is 4.0.5 as of time of the slide creation. This might change with time
- Rstudio is an IDE (Integrated Development Environment for R). You can install the latest version of Rstudio [here](#)
 - **NOTE:** You do not need Rstudio to use R, BUT it makes things easier. So I will highly recommend you to install Rstudio for easy and efficient coding in R.

Further Information

- History of R on [Wikipedia](#)
- Short video on [What's R](#)
- More about [Rstudio IDE](#)