### Introduction to R

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### **Overview**

Introduction

## Introduction

### What R is?

## The R Project for Statistical Computing

- R is a free software environment for statistical computing and graphics
- Open source and cross platform (UNIX platforms, Windows and MacOS)
- Extensive graphics capabilities
- Diverse range of add-on packages
- Active community of developers
- Thorough documentation

## The R Project for Statistical Computing

You can find R here: https://www.r-project.org



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# The R Project for Statistical Computing

### **Getting Started**

R is a free software environment for statistical computing and graphics. It compiles and runs on a wide variety of UNIX platforms, Windows and MacOS. To download R, please choose your preferred CRAN mirror.

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.

#### News

- R version 3.3.1 (Bug in Your Hair) prerelease versions will appear starting Saturday 2016-06-11.
   Final release is scheduled for Tuesday 2016-06-21.
- R version 3.3.0 (Supposedly Educational) has been released on 2016-05-03.
- R version 3.2.5 (Very, Very Secure Dishes) has been released on 2016-04-14. This is a rebadging of the quick-fix release 3.2.4-revised.
- Notice XQuartz users (Mac OS X) A security issue has been detected with the Sparkle update
  mechanism used by XQuartz. Avoid updating over insecure channels.
- The R Logo is available for download in high-resolution PNG or SVG formats.
- useR! 2016, will take place at Stanford University, CA, USA, June 27 June 30, 2016.
- The R Journal Volume 7/2 is available.
- R version 3.2.3 (Wooden Christmas-Tree) has been released on 2015-12-10.
- R version 3.1.3 (Smooth Sidewalk) has been released on 2015-03-09.

## The R Project for Statistical Computing

- R version 3.3.1 (released 2016-06-21)
- Currently, the CRAN (Comprehensive R Archive Network) package repository features 8609 available packages
  - https://cran.r-project.org/web/packages/available\_packages\_by\_name.html
- Currently, the Bioconductor repository features 1211 available packages
  - http://www.bioconductor.org
- Executed using command line, or a graphical user interface (GUI)
- On this course, we use the RStudio GUI
  - www.rstudio.com

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