

Welcome!

Statistics with R
Basel R Bootcamp



April 2019

Welcome to the Basel R Bootcamp!



from [Wikipedia](#)

Schedule and Materials

Click the "Bootcamp running" link on our homepage!

www.therbootcamp.com



Aim

The aim of this workshop is enable you to thoughtfully and actively use R. You will learn the fundamentals of the R language, as well as cutting-edge packages for wrangling, analyzing, and communicating statistical data.



Schedule

We have an **ambitious schedule!**

- 2 days, 3-4 sessions per day, 1.5 - 2 hours per session, on a variety of topics.
- Each session contains a slide-based **introduction** and a hands-on **programming interactive or practical**

	Sat, 6 Apr	Sun, 7 Apr
0900	Welcome	Recap
0930	Intro to Statistics	Mixed-models +Practical
	R for Statistics +Interactive	
1200	Lunch	Lunch
1300	Linear models I +Practical	Robust Statistics +Practical
1500		New Statistics +Practical
1530	Linear models II +Practical	
1730		Look ahead
1800	Wrapup	Apero

Introduction

30 - 45 minutes slide based introduction to help you understand the basic concepts, including:

- 1 - Theory
- 2 - Code examples
- 3 - Live demonstrations

All available online. Follow along, and don't worry about memorizing

This is a [Link to our materials](#).

Be interactive! Ask questions!



from [Freepik.com](#)



from [Freepik.com](#)

Practicals

Write your own R scripts!

- 1 - Anywhere from 10 ~ 30 programming tasks.
- 2 - Starts easy, gets progressively more challenging
- 3 - Struggle, work together, ask questions and challenge yourself!
- 4 - Go at your own pace and finish as much as you can.
- 5 - We'll give you all the answers later

Linear Models I

Statistics with R

🔔 (https://therbootcamp.github.io/SwR_2019Apr/) 🏠 (https://therbootcamp.github.io/SwR_2019Apr/)



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Datasets

You will be working with many **diverse, real-world datasets** in the practicals

- 1 - Predicting baseball player salaries.
- 2 - Analysing the results from a real clinical trial on patients with AIDS.
- 3 - Analysing the "Tomatometer" movie ratings of raters who were either sober or under the influence of alcohol.
- 4 - Predicting the weekly price of avacados across the United States.
- 5 - Testing a real (and very influential) dataset exploring whether or not people can see into the future.
- 6 - And more!

hitters.csv



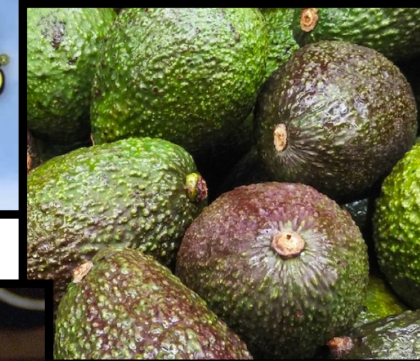
trial_ACTG175.csv



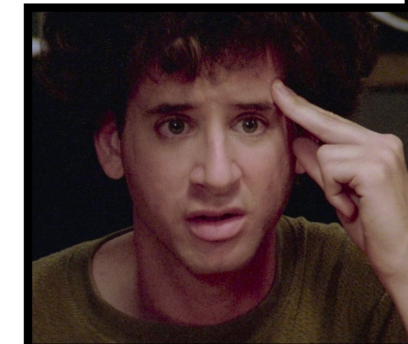
tomatometer.csv



avocado.csv



psi_exp1.csv



And more!

1-1 Coaching

Learning a computer language is **hard**.

Take breaks when you need them, and don't get discouraged!

Sometimes, you may find yourself in need of some **intensive help**. That's ok! We're here to help!

At any time, you can **request a 15 minute 1-1 intensive** coaching session. We'll grab a coffee and work through it together.

WHEN YOU HEAR THIS:

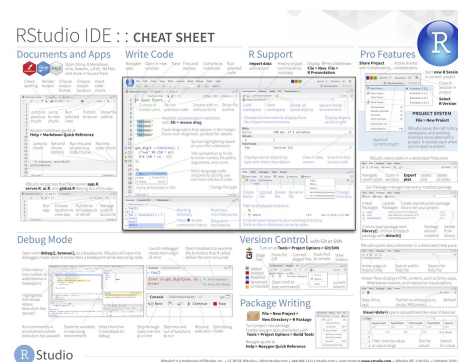


from geek-and-poke.com

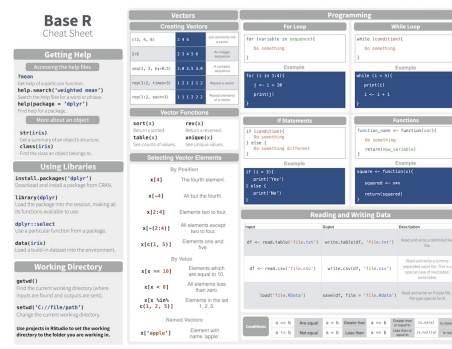
Cheatsheets

- Cheatsheets are great ways to help you **discover** new functions, and **remember** old ones.
- Don't feel overwhelmed (even we don't use half of these functions).
- The printed cheatsheets are **yours to keep!**

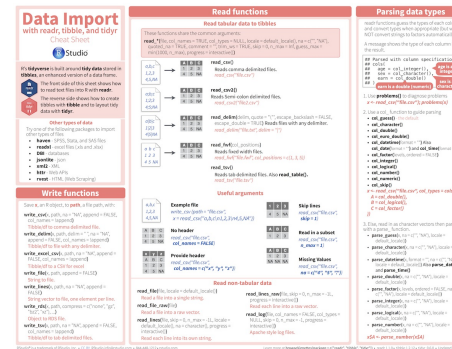
RStudio



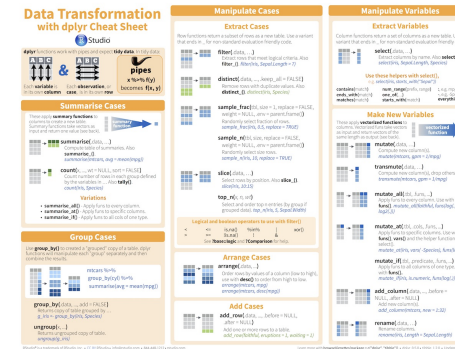
Base R



Data Import



Data Wrangling



Breaks

- Programming is exhausting! **Take breaks** when you need them!
- Help yourself to refreshments and as much coffee as you can drink.
- Lunch on your own or **walk with the group** to **Tibits** or the **Union Diner**
- Be back in the room at **13:00 sharp** so we can continue learning!



from [Tibits.ch](https://tibits.ch)

Photography



from [businessinsider.com](https://www.businessinsider.com)

Let us know,
personally or via
email, if you
don't want your
photos
published.

Introductions

1. What is your name?
2. Where are you from?
3. What is your current profession?
4. What is your programming experience?
5. Have you used R in the past?
6. What would you most like to do with R?
7. Coffee or tea?
8. Pizza or pasta?
9. Beer or wine?
10. Berlin or Paris?



from artofmanliness.com

Questions?
[Link to schedule](#)

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