

WHY USE R?

Simone Rebora – University of Mainz

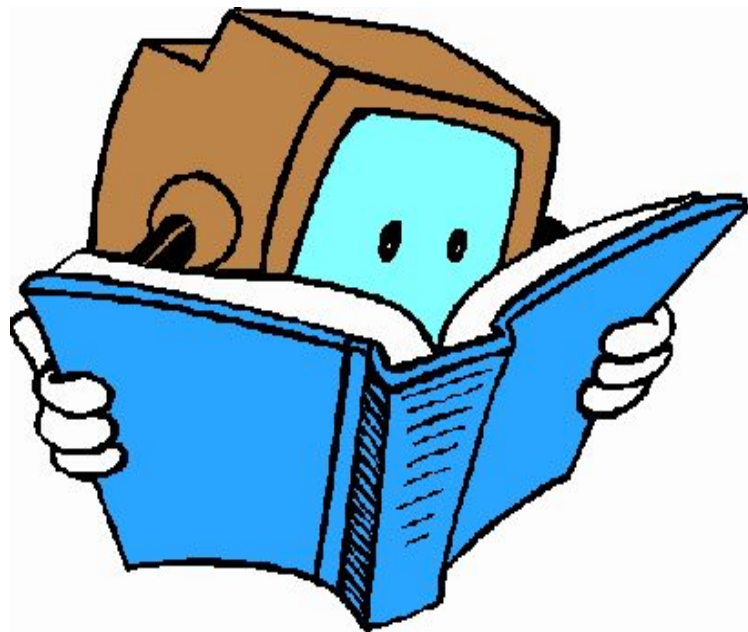
TOOLS FOR DISTANT READING

Graphical interfaces

<https://voyant-tools.org/>

VS.

Programming languages



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VS.

Programming languages

```
rsimone@rsimone-Inspiron-13-5378:~$ R
```

```
R version 3.4.4 (2018-03-15) -- "Someone to Lean On"  
Copyright (C) 2018 The R Foundation for Statistical Computing  
Platform: x86_64-pc-linux-gnu (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.
```

```
> a <- 1:10  
> a  
[1] 1 2 3 4 5 6 7 8 9 10  
> for(i in 1:10)  
+ print(i:10)  
[1] 1 2 3 4 5 6 7 8 9 10  
[1] 2 3 4 5 6 7 8 9 10  
[1] 3 4 5 6 7 8 9 10  
[1] 4 5 6 7 8 9 10  
[1] 5 6 7 8 9 10  
[1] 6 7 8 9 10  
[1] 7 8 9 10  
[1] 8 9 10  
[1] 9 10  
[1] 10  
>
```

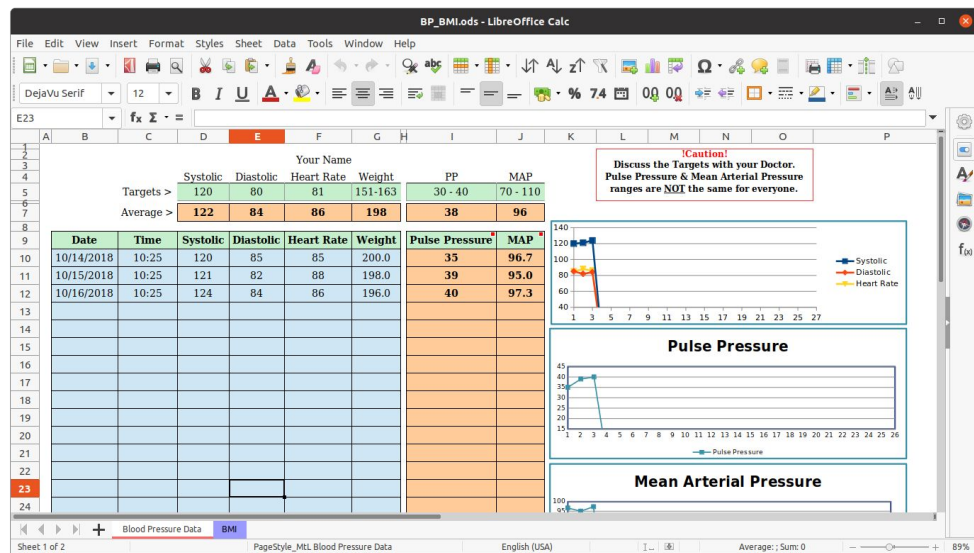
TOOLS FOR DISTANT READING

Spreadsheets

<https://www.libreoffice.org/discover/calc/>

VS.

Programming languages



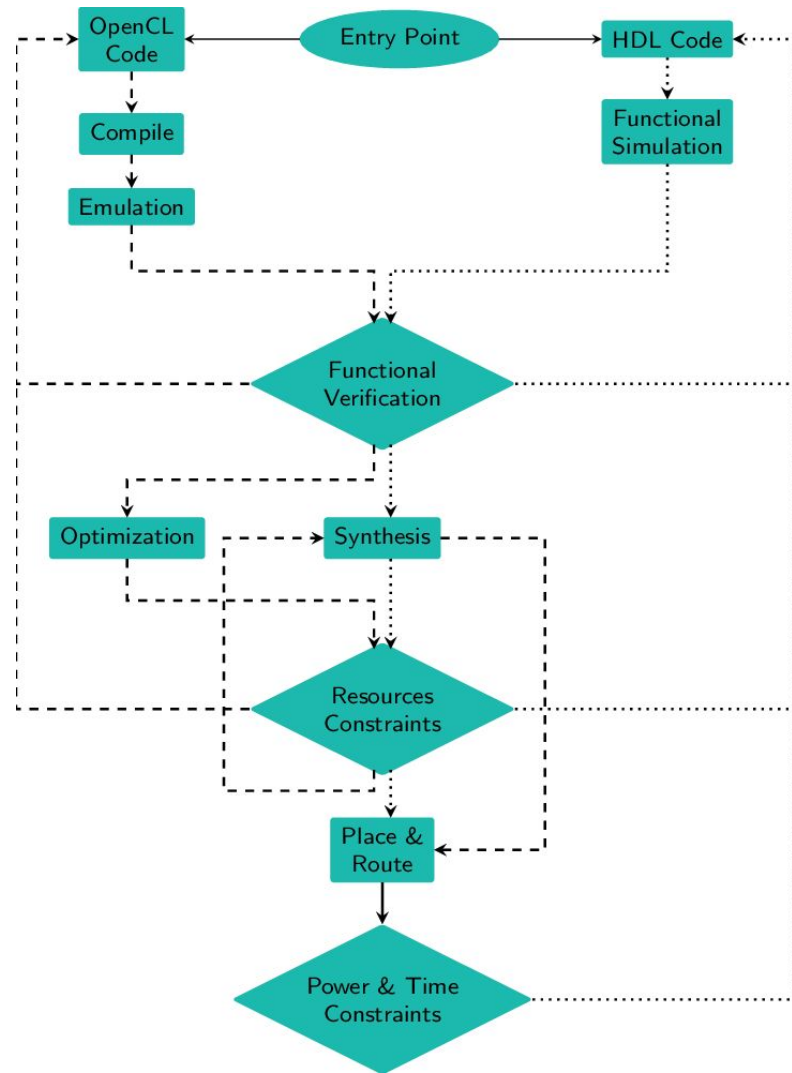
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```
1  ##### Intro Notes & Comments #####
2  invisible( expression( `
3  { <= put the brace here to reset the auto indenting...-
4  -
5  Base <- function()-
6  {
7  <~~~~~ Use the function as a header and nesting marker for the comments-
8  that show up in the jump-menu.-
9  ---->B-----
10 -
11 External <- function()-
12 {-
13 If we used a function similar to:-
14 api_idea <- function() {-
15 -
16 some_api_example <- function( nested ) {-
17 stopifnot( some required check here )-
18 }-
19 -
20 print("Cut and paste this into RStudio to see the code-chunk quick-jump structure.")-
21 return converted object-
22 }-
23 -
24 ##### Code. #####
25 ^~~~~~ <= Notice that this comment section isnt in the jump menu!-
26 Putting an apostrophe in isn't causes RStudio to parse as text-
27 and needs to be matched prior to nested structure working again.-
28 api_idea2 <- function() {-
29 -
30 } # That isn't in the jump-menu, but the one below is...-
31 -
32 api_idea3 <- function() {-
33 -
34 }-
35 -
36 }-
37 -
38 # Just to show api_idea isn't really there...-
39 print( api_idea )-
40 } } )-
41 #####
42 -
43 ##### Code. #####
44 foo <- function() {-
45 print( "The above did not evaluate and cause an error!" )-
46 }-
47 -
48 foo()-
49 }
```

Intro Notes & Comments

Base

External

api_idea

some_api_example

api_idea3

Code.

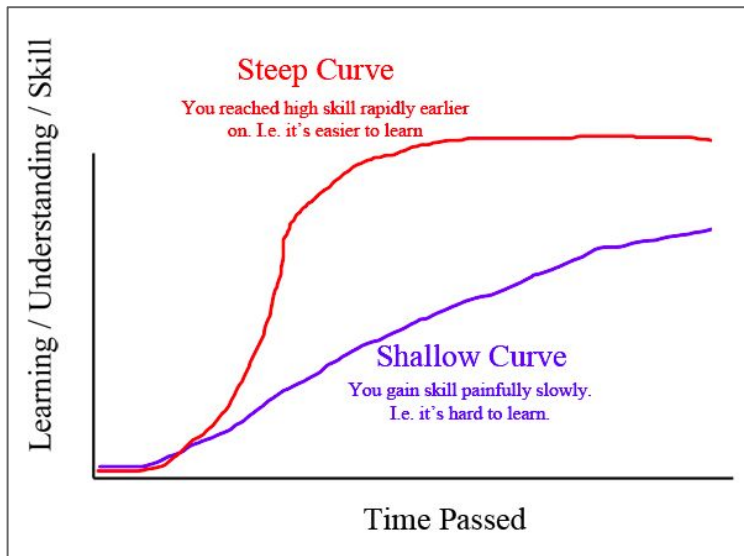
foo

PROGRAMMING LANGUAGES

Steep learning curve!

...but then...

- full freedom in doing what you like
- possibility to fully document complex workflows



PROGRAMMING LANGUAGES

R VS. Python

...and many others!

It's a matter of community

...more than of intrinsic qualities



RSTUDIO CLOUD

Instructions:

1. Connect to <https://rstudio.cloud/>
2. Create a new account (Cloud Free Plan; Sign Up with Google)
3. Create a new project from Git Repository
4. Copy-paste the link:
<https://github.com/zurich-sommerschule22/zurich-sommerschule22.github.io.git>
5. Click on OK!



Log In

Sign Up

A screenshot of a dialog box titled 'New Project from Git Repository'. It has a close button (X) in the top right corner. Below the title, there is a label 'URL of your Git Repository' and an information icon (i). A text input field contains the URL 'https://github.com/SimoneRebora/LitDH2022'. At the bottom right, there is a blue button labeled 'OK'.A screenshot of a dropdown menu titled 'New Project'. It lists three options: 'New RStudio Project' with the RStudio logo, 'New Jupyter Project' with the Jupyter logo, and 'New Project from Git Repository' with the GitHub logo. A large grey arrow points from the 'New Project from Git Repository' option to the dialog box on the left.