

KNOWING YOUR RS FROM YOUR ELBOW

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Star of presentations such as “the LaTeX show”!

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What's this about Rs?

R is an open source language, made out of the ashes of S

It started off stats

Now has excellent graphics, .js, & doc facilities

Why should you know your Rs from your elbow?

Markdown!

Interactive data viz via js libraries

Fully CI/CD capable

Tons of non-web uses

Easier payloads from analytical teams

What does R look like? | Basics

```
#Define a variable
```

```
a<-25
```

```
#Call a variable
```

```
a
```

```
## [1] 25
```

```
#Do something to it
```

```
a+1
```

```
## [1] 26
```

What does R look like? | Functions

#Define a function

```
inflateAudienceFigs<-function(x) x*100
```

#Call a function

```
inflateAudienceFigs(a)
```

```
## [1] 2500
```

What does R look like? | Extensions

#Get a package

```
install.packages("commonmark")
```

#Activate a package

```
library(commonmark)
```

What does R look like? | OO

```
# Orig OO (s3): cyclismo.org/tutorial/R/s3Classes.html
library(R6)
Loan<-R6Class("Loan",
              public=list(term=NA
                           ,initialize=function(term){
                               if(!missing(term)){
                                   self$term<-term
                               }}
                           ,extendBy=function(ext){
                               self$term<-self$term+ext
                           })))
```


What does R look like? | OO

```
acc<-Loan$new(36)
acc$extendBy(6)
acc$term
```

```
## [1] 42
```

What does R look like? | Piping

```
library(magrittr)
```

#Typical

```
pairs(iris)
```

#Pipe

```
iris %>% pairs
```

```
iris %>% tail(.) %>% pairs
```

```
iris %>% {tail(.,nrow())/5} %>% pairs
```

Let's do some JS stuff!

Find out more

Online

- Modern R DataCamp

- Statistics R Coursera

- R-bloggers

- Advanced R programming

- Writing R packages

In-person

- R user groups e.g. CaRdiff

- Conferences e.g. EARL and My training day @ SQLSaturday

Get this presentation

This presentation is available on github.com/stephlocke/Rtraining.
All the code is available for you to take a copy and play with to
help you learn on the go.

If you have any questions, contact me!

itsalocke.com | github.com/StephLocke | [@SteffLocke](https://twitter.com/SteffLocke)