R Community and Free Resources

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R Community

AfricaR

Our mission is to achieve improved representation by encouraging, inspiring, and empowering the African population of all genders who are underrepresented in the global R community.



So far:

- Connect R Users from different regions
- Established several R User Groups
- Organized 2 satRday conferences

Follow on Twitter @AfricaRUsers.

Leadership Team

Leadership team expanded for 2020

- Shelmith Kariuki Kenya
- Denis Irorere Nigeria
- Mohammed Ali Egypt
- Ahmadou Dicko Senegal
- Anicet Ebou Ivory Coast
- Nelda Uganda
- Vebashini Naidoo South Africa



Plans for 2020

- Write governing documents (mission statement, CoC)
- Rotating curator Twitter account
- Tutorials in French
- Website (events calendar, blog)
- Package(s) to address African needs, e.g. NLP library that supports Arabic, Swahili, etc.

Forwards

R Foundation taskforce to widen participation of underepresented groups

- Social media
 - Twitter: @R_Forwards
 - Blog: https://forwards.github.io/blog/
- Community
- Conferences
- On-ramps
- Surveys
- Teaching

Why R? Foundation

Initiated to support Why R? Conference in Poland

Money raised also supports

- pre-meetings in Europe
- support grant for women in data science

Extending support to other regions including Africa

R Foundation and R Consortium

The R Foundation is a not-for-profit organization to support R.

- Provides financial support to CRAN, R Core and R Foundation members
- Publishes The R Journal
- Oversees the useR! conference series

The R Consortium is a group of business that support R.

- Provide financial support to R User Groups and Conferences
- Funds coding and community projects

R User Groups

In Africa: Senegal, Ivory Coast, Nigeria, Kenya, Tanzania, Eswatini, South Africa - new group starting in Botswana!

Typical meetups

- Talks, e.g.
- Tutorial, e.g. Importing data into R, ggplot2 for data visualisation

R User Groups

Other types of meetup

- Remote talk Dar es Salaam User Group
- Watch party rstudio::conf (live)
- Videos e.g. from useR! conference
- Work through book e.g. R for Data Science
- Tidy Tuesday Workshop
- Hackathon e.g. Open Data Day or Zindi machine learning challenge
- Informal meetup to help each other lunchR or TalkRs

R-Ladies

R-Ladies is a worldwide organization whose mission is to promote gender diversity in the R community.

- Meetup groups: Benin, Ethiopia, Nigeria, South Africa
- R-Ladies Remote (@RLadiesRemote)
 - reading group (~1/month): Next up, Agile Data Science with R
 - coffee chat (~1/month): guided 1 hour chat about R topics
- Abstract review for conferences
- R-Ladies community slack sign up
 - many channels: where in the world, events, r-help

R4DS Online Learning Community

https://www.rfordatasci.com/

Originally to work through R 4 Data Science, now a general learning community.

Join Slack to get help as you learn.

Tidy Tuesday

https://github.com/rfordatascience/tidytuesday

Practice your R skills on a new data set (designed for beginners)

- New data set released each week (Monday)
- Practice data wrangling and data visualisation
- Get help on R4DS or R-Ladies community slack

RStudio Community

https://community.rstudio.com/

Online discussion forum (sign-up but no installation required)

Discussion topics

- (tidyverse) packages: dplyr, ggplot2
- R markdown
- RStudio IDE
- Machine Learning and Modelling

Stackoverflow

https://stackoverflow.com/

Q&A site for programming questions.

R questions shold be tagged with [r] plus relevant package/topic tags.

Questions must have a reproducible example (reprex), the reprex R package helps with this.

Best to search for answers to begin with.

See the tour for more information: https://stackoverflow.com/tour.

Twitter

The main hashtag is #rstats.

Accounts to follow

- @EswatiniUseR
- @AfricaRUsers
- @R_Forwards
- @RLadiesGlobal
- @_R_Foundation
- @RConsortium
- @WeAreRLadies

It is so useful there is a book about it! www.t4rstats.com

Other

- Facebook: used by some user groups
- LinkedIn: main group: "The R Project for Statistical Computing"

Conferences

Johannesburg satRday (https://joburg2020.satrdays.org/)

tutorials and talks

Various international conferences have diversity scholarships:

- useR! (https://www.r-project.org/conferences/)
- rstudio::conf (https://rstudio.com/conference/)

Forwards tips on applying for scholarships

List of R conferences: https://jumpingrivers.github.io/meetingsR/events.html.

Free Resources

Conference videos/material

Many R conferences put talk videos and tutorial material online

useR! 2019

- talks: useR! 2019 Toulouse Talks on YouTube
- tutorials: https://www.user2019.fr/tutorials/

rstudio::conf

- talks: https://resources.rstudio.com/rstudio-conf-2020
- tutorials: https://github.com/rstudio-conf-2020

More conference videos/material

satRday_zaf

• talks: Joburg 2019

Ihaka lecture series

 https://www.auckland.ac.nz/en/science/about-the-faculty/department-ofstatistics/ihaka-lecture-series.html

Blogs

Many useful blog posts on new and existing packages, how to do X in R

- R-bloggers (https://www.r-bloggers.com/): use RSS reader like feedly, inoreader
- RWeekly (https://rweekly.org/): can get RSS feed/follow on Twitter
- rladies-blogs channel on R-Ladies Community Slack

Podcasts

Sina Rüeger highlights several R/data science podcasts

https://sinarueeger.github.io/post/podcasts/

She links to this list: https://jumpingrivers.github.io/podcasts/technical-podcasts.html

There is also the Women in Data Science podcast

https://www.widsconference.org/podcast.html

Online books

Books created with the **bookdown** package: https://bookdown.org/. In particular

- R for Data Science
- R Graphics Cookbook
- Fundamentals of Data Visualization

Some (all?) Manning books can be read online for free, e.g.

- Build a career in data science
- Practical Data Science with R

More online books

Several R books on leanpub can be bought for a price you choose, from free

- Introduction to Data Science
- Exploratory Data Analysis with R

Other

- Modern Statistics for Modern Biology
- ggplot2

Workshop materials

- The R-Ladies groups share their material online and you can search for material via this great shiny app: https://yabellini.shinyapps.io/RLadiesLesson/
- Coding Club (a group at the University of Edinburgh) have developed many tutorials: https://ourcodingclub.github.io/ on data handling, visualisation, modelling and spatial data.
- Free interactive tutorials, including the R Bootcamp (https://github.com/flor14/tutorials).
- List of materials: https://github.com/Chris-Engelhardt/data_sci_guide, often free if don't want certificate.
- R Studio education page: resources for beginners/intermediate/advanced (https://education.rstudio.com/learn/)
- Swirl, learn R in R (https://swirlstats.com/)

Courses

- Chromebook Data Science course (https://jhudatascience.org/chromebookdatascience) covering the fundamentals of data science, materials on leanpub from free.
- Data Science in a Box: https://datasciencebox.org/
- eR-Biostat R/statistics courses (https://er-biostat.github.io/Courses/)

Machine Learning

Workshops:

- Introduction to Machine Learning with R
- Introduction to Machine Learning with the Tidyverse (rstudio::conf 2020)

Online book: An Introduction to Machine Learning with R

Interactive tutorial: Supervised machine learning case studies in R

Infographics

Some blog posts

- https://www.listendata.com/2019/06/create-infographics-with-r.html
- http://nandeshwar.info/data-visualization/how-to-create-infographics-in-r/

Infographiq package: https://marinebon.org/infographiq/

BBC Visual and Data Journalism cookbook for R graphics: https://bbc.github.io/rcookbook/

R for Data Journalism, tutorials for publication quality graphics: https://rddj.info/#publication-quality-graphics