THE ONE THAT REBOOTED

JOHANNESBURG R USER GROUP

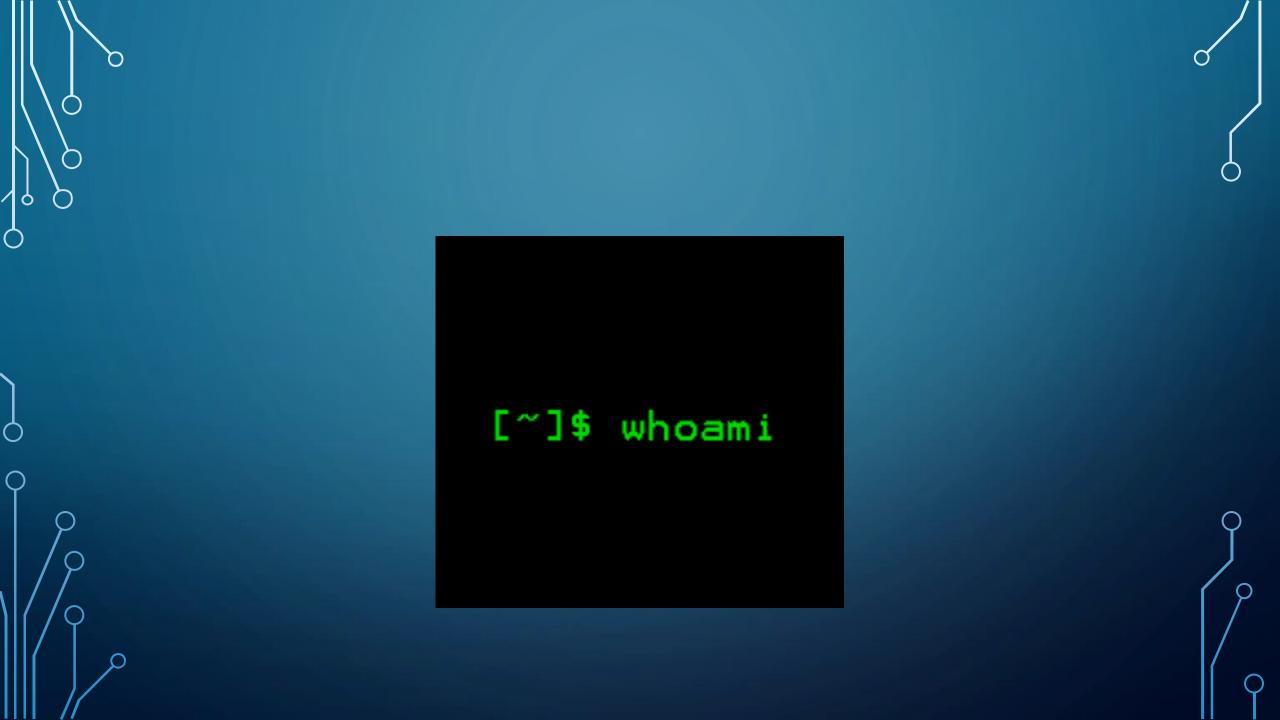
AGENDA

8:00 Networking and coffee

8:15 Introduction & R-Ladies

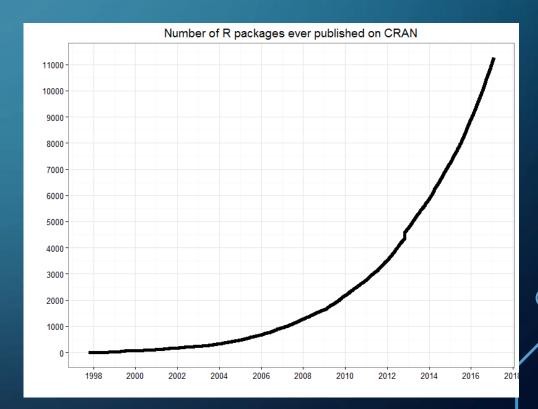
8:30 Robert Bennetto - Tidy geometries

9:30 Closing and next meeting



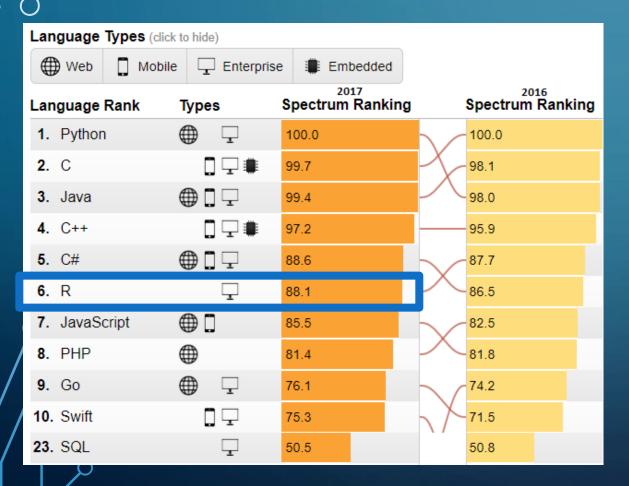
POWER OF R R LANGUAGE + PACKAGES

- R is an open source language and environment for statistical computing and graphics.
- R is an open source (GNU) version of the S language developed by John Chambers et al. at Bell Labs in 80's
- R was initially written in early 1990's by Robert Gentleman and Ross lhaka then with the Statistics Department of the University of Auckland



from: http://blog.revolutionanalytics.com/2017/01/cran-10000.html

IEEE SPECTRUM TOP PROGRAMMING LANGUAGES



Compare a ranking. Click a data source to toggle its inclusion in the ranking and drag its slider to reweight it.			
Use data from: 2017	2016 2015 2014		
Google (search)	50	Google (trends)	50
Github (active)	50	Github (created)	
Stack Overflow (?s)	30	Stack Overflow (views)	30
Reddit		Hacker News	
Career Builder	5	Dice	5
Twitter		IEEE Xplore	
		Cance	Save as Custom

POWER OF R R LANGUAGE + PACKAGES

CRAN: 11 000+ Add-on packages for R

CRAN Task Views

CRAN Task Views are guides to the packages and functions useful for certain disciplines and methodologies. Many long-serm R users I know have no idea they exist. As an effort to make them more widely known I thought I'd jazz up the index page. Images are free to use, and got from SXC stock photo site. Visual puns are mine. Task View links go to the cran r-project org site and not a mirror



Bayesian Inference

Applied researchers interested in Bayesian statistics are increasingly attracted to R. because of the ease of which one can coalgorithms to sample .. [more]



Natural Language Processing

rocessing [more]



Analysis of Spatial Data

Base R includes many functions that can b used for reading, vizualising, and analysing spatial data. The focus in this view is on geographical" spatial [more]



Chemometrics and Computational Physics

Chemometrics and computational physiare concerned with the analysis of data arising in chemistry and physics



Pharmacokinetic Data

The primary goal of pharmacokinetic (PK) data analysis is to determine the relationship between the dosing regime and the body's exposure to the drug more]



Clinical Trial Design, Monitoring, and Analysis

This task view gathers information on specific R packages for design, monitoring and analysis of data from clinical trials. It



Official Statistics & Survey Methodology

This CRAN task view contains a list of packages that includes methods typically used in official statistics and survey methodology. Many packages provide



Survival Analysis

Survival analysis, also called event history analysis in social science, or reliability analysis in engineering, deals with time until occurrence of an ... [more]



Cluster Analysis & Finite Mixture Models

This CRAN Task View contains a list of packages that can be used for finding groups in data and modelling unobserved



Phylogenetics, Especially Comparative Methods

The history of life unfolds within a phylogenetic context. Comparative phylogenetic methods are statistical oproaches for analyzing historical



Time Series Analysis

Base R ships with a lot of functionality useful for time series, in particular in the stats package. This is complemented by many packages on CRAN, which are



Probability Distributions

R provides probability distribution functions (n) density functions (d) quantile functions (q), and [more]



Multivariate Statistics

Base R contains most of the functionality for classical multivariate analysis. somewhere. There are a large number of packages on CRAN which extend this



Robust Statistical Method:

Robust (or "resistant") methods for atistics modelling have been available in S from the start, in R in package stats (e.g. median(), mean(*, trim = .)...[more]



Computational Econometrics

Base R ships with a lot of functionality useful for computational econometrics, i particular in the stats package. This



entimization problems. Although every

egression model in statistics...[more]

Optimization and

Mathematical Several add-on packages implement ideas Programming and methods developed at the borderline between computer science and statistics this field of research is usually... [more]



Environmental Data

using R to analyse ecological and

Machine Learning &

Statistical Learning

environmental data [more]

This Task View contains information abo

Statistics for the Social Sciences

Social scientists use a wide range of statistical methods. To make the burden carried by this task view lighter, I have



Design of Experiments (DoE) & Analysis of **Experimental Data**

This task view collects information on R. packages for experimental design and analysis of data from experiments. Please feel free to suggest enhancements, [more

Graphic Displays &

Dynamic Graphics &

R is rich with facilities for creating and

including coplots, mosaic...[more]

which each node is a random variable.

and [more]

developing interesting graphics. Base R.

ontains functionality for many plot type

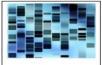
Graphic Devices &

Visualization



Empirical Finance

This CRAN Task View contains a list of packages useful for empirical work in nance, grouped by topic ... [more]



Great advances have been made in the field of genetic analysis over the last years. The availability of millions of single nucleotid polymorphisms (SNPs)...[more]



High-Performance and Parallel Computing with 1

This CRAN task view contains a list of packages, grouped by topic, that are useful for high-performance computing (HPC) with R. In this context, we are . [more]



Medical Image Analysis This task view is for input, output, and

analysis of medical imaging files ... [more



The goal of reproducible research is to tie gRaphical Models in R specific instructions to data analysis and experimental data so that scholarship can Wikipedia defines a graphical model as a be recreated, better [more] graph that represents independencies among random variables by a graph in



Psychometric Models and Methods

Psychometrics is concerned with the design and analysis of research and the measurement of human characteristics. Psychometricians have also worked.

from: CRAN Task View by Barry Rowlingson: http://www.maths.lancs.ac.uk/~rowlings/R/TaskViews/ More packages on GitHub and BioConductor project



R is for hippies! ...(Quote from a SAS user)

...or perhaps nerds with a quirky sense of humor using words such as Cran-tastic, Cranberries, and useRs



Activities and programs include:

- Promoting the growth and development of R as a leading platform for data science and statistical computing.
- Funding projects to enhance R and support its users.
- Fostering the continued growth of R community and the data science ecosystem.
- Enabling the use of R in commercial environments, and fostering collaboration between companies investing in R.

Microsoft

from: https://www.r-consortium.org/about

R Foundation Member



Platinum Members







Gold Members

Silver Members

















THE R ECOSYSTEM



R Core Group

#rstats

CRAN

R-bloggers



R User Groups





















CODE OF CONDUCT

A member of the R Community is:

Open: Members of the community are open to collaboration, whether it's on projects, working groups, packages, problems, or otherwise.

Considerate: Members of the community are considerate of their peers - other R users.

Respectful: Members of the community are respectful.

EVENTS

July 9-13: R Software Fundamentals with Applications to Statistical Analyses and Modelling. Wits, Johannesburg, South Africa.



HOW TO FIND US

• Website: https://www.rusergroup.co.za

Meetup: https://www.meetup.com/Joburg-R-Users-Group

• Github: https://github.com/rusergroupcoza