

Wrap Up - R Resources

Guy J. Abel

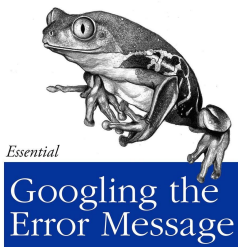
Online Help

- If you get stuck first investigate the help file
 - The help file (e.g. `?log`)
- Most of the topics covered in this course are described basic level in *R for Data Science* by Garrett Grolemund and Hadley Wickham.
 - Available for free online: <http://r4ds.had.co.nz/>
- If this fails use the internet...

Online Help

- R is very popular. A lot of people have learnt how to use R, so there is lots of help available.
 - More often than not someone else has had the same problem before and sought help on the internet.
- Google (search) error and warning messages if you do not understand them.

The internet will make those bad words go away



Online Help

- R-Help mailing list <https://stat.ethz.ch/mailman/listinfo/r-help>
 - Long history of discussions on R.
 - Archive at <https://stat.ethz.ch/pipermail/r-help/>
 - Reputation for aggressive responders.

CRAN Task Views

- CRAN Task Views provide regularly updated overview of packages for particular methods.

CRAN Task Views

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https://cran.r-project.org/web/views/

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CRAN Task Views

CRAN task views aim to provide some guidance which packages on CRAN are relevant for tasks related to a certain topic. They give a brief overview of the included packages and can be automatically installed using the [ctv](#) package. The views are intended to have a sharp focus so that it is sufficiently clear which packages should be included (or excluded) - and they are *not* meant to endorse the "best" packages for a given task.

- To automatically install the views, the [ctv](#) package needs to be installed, e.g., via

```
install.packages("ctv")
```

and then the views can be installed via `install.views` or `update.views` (where the latter only installs those packages are not installed and up-to-date), e.g.,

```
ctv::install.views("Econometrics")
ctv::update.views("Econometrics")
```
- The task views are maintained by volunteers. You can help them by suggesting packages that should be included in their task views. The contact e-mail addresses are listed on the individual task view pages.
- For general concerns regarding task views contact the [ctv](#) package maintainer.

Topics

[Bayesian](#)
[ChemPhys](#)
[ClinicalTrials](#)
[Cluster](#)
[Databases](#)
[DifferentialEquations](#)
[Distributions](#)
[Econometrics](#)
[Environmetrics](#)

Bayesian Inference
 Chemometrics and Computational Physics
 Clinical Trial Design, Monitoring, and Analysis
 Cluster Analysis & Finite Mixture Models
 Databases with R
 Differential Equations
 Probability Distributions
 Econometrics
 Analysis of Ecological and Environmental Data

CRAN Task Views

- CRAN Task Views provide regularly updated overview of packages for particular methods.

CRAN Task View: Statistics for Social Sciences

https://cran.r-project.org/web/views/SocialSci...

Analysis of Categorical and Count Data:

Binomial logit and probit models, as well as Poisson-regression and loglinear models for contingency tables (including models for "over-dispersed" binomial and Poisson data), can be fit with the `glm` function in the **stats** package. For over-dispersed data, see also the [aod](#) package, the [dispmo](#) package, and the `glm.nb` function in the recommended [MASS](#) package (associated with Venables and Ripley, *Modern Applied Statistics in S*, Fourth Ed., Springer, 2002), which fits negative-binomial GLMs. The [pscl](#) package includes functions for fitting zero-inflated and hurdle regression models to count data. The multinomial logit model is fit by the `multinom` function in the recommended [nnet](#) package, and ordered logit and probit models by the `polr` function in the [MASS](#) package. Also see the [mlogit](#) for the multinomial logit model, the [MNP](#) package for the multinomial probit model, and the [multinomRob](#) package for the analysis of overdispersed multinomial data. The [VGAM](#) package is capable of fitting a very wide variety of fixed-effect regression models within a unified framework, including models for ordered and unordered categorical responses and for count data.

There are other noteworthy facilities for analyzing categorical and count data.

- The `table` function in the R-base **base** package and the `xtabs` and `ftable` functions in the **stats** package construct contingency tables.
- The `chisq.test` and `fisher.test` functions in the **stats** package may be used to test for independence in two-way contingency tables.
- The `loglm` and `loglin` functions in the [MASS](#) package fit hierarchical loglinear models to contingency tables, the former as a front end to `glm`, the latter by iterative proportional fitting.
- See the [brglm](#) and [logistf](#) packages for bias-reduction in binomial-response GLMs (useful, e.g., in cases of complete separation); the [exactLoglinTest](#) package for exact tests of loglinear models; the `clogit` function in the [survival](#) package for conditional logistic regression; and the [vcd](#) package for graphical displays of categorical data, including mosaic plots.
- The [gnm](#) package estimates generalized *nonlinear* models, and can be used, e.g., to fit certain specialized models to mobility tables. The [logmult](#) package provides convenience functions based on [gnm](#) to fit log-multiplicative (e.g., UNIDIFF) and association (e.g., Goodman's RC) models. Also see the [catspec](#) package for estimating various special models for square tables.
- As previously mentioned, the [Multivariate](#) task view covers correspondence analysis of multivariate categorical data.
- See the [betareg](#) package for beta regression of data on rates and proportions, a topic closely associated with categorical data.

Other Regression Models:

It is possible to fit a very wide variety of regression models with the facilities provided by the base and recommended packages, and an even wider

Github

- Github open and closed issues for a particular package.
 - Many package developers used Github.
 - Can access latest version of package, before go onto CRAN.

The screenshot shows the GitHub web interface for the `tidyverse/readxl` repository. The browser address bar shows the URL `https://github.com/tidyverse/readxl/issues`. The repository page header includes the GitHub logo, navigation links (Why GitHub?, Enterprise, Explore, Marketplace, Pricing), a search bar, and 'Sign in' and 'Sign up' buttons. Below the header, the repository name 'tidyverse / readxl' is displayed, along with statistics: 54 Watchers, 518 Stars, and 153 Forks. The 'Issues' tab is selected, showing 33 open issues and 388 closed issues. A search bar contains the text 'is:issue is:open'. Below the search bar, there are filters for 'Labels' (18) and 'Milestones' (1), and a 'New Issue' button. The list of issues is displayed with columns for status, title, author, labels, projects, milestones, assignee, and sort. The first three issues are visible:

Status	Title	Author	Labels	Projects	Milestones	Assignee	Sort
33 Open	global path not working with excel_sheets() Error: libxls error: Unable to open file	#583 opened 15 hours ago by simowaves					
582	Include tibble < 1.4.2 message in package startup	opened 4 days ago by nlneas1					4
576	Error reading data in copy-made sheet with a graph	opened on Jun 20 by akikirinrin					3

The bottom of the list shows the start of a fourth issue: 'Note the existence of `vctrs::vec_as_names_legacy()`'.

Github

- Github open and closed issues for a particular package.
 - Issues page often the best place to contact the author and get a response.
 - Search open and closed issues before posting a new issue.

The screenshot shows the GitHub web interface for the `tidyverse/readxl` repository. The browser address bar shows the URL `https://github.com/tidyverse/readxl/issues`. The repository page header includes the repository name, a search bar, and links for 'Why GitHub?', 'Enterprise', 'Explore', 'Marketplace', and 'Pricing'. Below the header, the repository name is followed by statistics: 54 Watchers, 518 Stars, and 153 Forks. The 'Issues' tab is selected, showing a search bar with the query 'is:issue column name', 18 Labels, and 1 Milestone. A green 'New Issue' button is visible. The issues list shows 6 Open and 74 Closed issues. The first issue is titled 'Provide a convenient way to silence "New names" message when using col_names = FALSE' and was closed by wgrundlingh on Aug 9. The second issue is 'Use a named col_type' and was closed by llrs on May 25. The third issue is 'Error: Can't establish that the input is either xls or.xlsx'.

Issues · tidyverse/readxl · GitHub

Why GitHub? Enterprise Explore Marketplace Pricing Search Sign in Sign up

tidyverse / readxl

Watch 54 Star 518 Fork 153

Code Issues 33 Pull requests 3 Projects 1 Security Insights

is:issue column name Labels 18 Milestones 1 New Issue

Clear current search query, filters, and sorts

6 Open ✓ 74 Closed	Author	Labels	Projects	Milestones	Assignee	Sort
Provide a convenient way to silence "New names" message when using col_names = FALSE #580 by wgrundlingh was closed on Aug 9						5
Use a named col_type #571 by llrs was closed on May 25						1
Error: Can't establish that the input is either xls or.xlsx.						4



RStudio Community Discussion Board

- RStudio Community discussion board at <https://community.rstudio.com/>
 - Well maintained question and answer board for asking questions on tidyverse and beyond
 - More likely to get replies from people who work at RStudio

The screenshot shows the RStudio Community website interface. At the top, there's a navigation bar with 'Sign Up' and 'Log In' buttons. Below the navigation bar, there are filters for 'all categories' and 'all tags', and a 'Latest' button. The main content area displays a list of topics with columns for 'Topic', 'Replies', 'Views', and 'Activity'.

Topic	Replies	Views	Activity
<p> <input type="checkbox"/> Welcome to the RStudio Community!</p> <p>meta</p> <p>Welcome to community.rstudio.com — we're glad to have you! This welcome page will give you some advice on how to get the most out of the site if you're getting or giving help. We want this to be a friendly, inclusive com... read more</p>	0	6.7k	2018-07-22
<p><input checked="" type="checkbox"/> Use "bquote" in ggplot2 for subscript text</p> <p>General ggplot2</p>	2	35	35m
<p><input type="checkbox"/> how to update table variables depending on the data entry/input and submit button</p>	3	28	1h

Stackoverflow R tag

- Stackoverflow uses tag to (cross) categorize questions.
- A little more wild than RStudio discussion board but pretty reliable.
- If you ask a good question users respond very quickly.
 - How do I ask a good question 
 - How to make a great R reproducible example 
- All questions on R are tagged [r]
 - <http://stackoverflow.com/questions/tagged/r>

Stackoverflow R tag

Recently Active 'r' Questions

+

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🔍 <https://stackoverflow.com/questions/tagged/r>

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stackoverflow

[r]

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Questions tagged [r]

Ask Question

R is a free, open-source programming language and software environment for statistical computing, bioinformatics, visualization and general computing. Provide minimal, reproducible, representative example(s) with your questions. Use dput() for data and specify all non-base packages with library ...

👁 Watch Tag

🚫 Ignore Tag

[Learn more...](#) [Improve tag info](#) [Top users](#) [Synonyms \(2\)](#) [r jobs](#)

246,066 questions

Info

Newest

Featured

Frequent

Votes

Active

Unanswered

1 vote

1 answer

r

ggplot2

modified 27 secs ago

jay5f

2,628 2 11 32

16 views

2 votes

1 answer

r

rest

modified 51 secs ago

Hack-R

14.2k 7 37 74

19 views

1 vote

3 answers

r

date

dataframe

dplyr

modified 9 mins ago

G. Grothendieck

131k 8 118 217

21 views

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📄 We'd like your feedback on our new Code of Conduct!

📄 'Favorite Tags' is now 'Tag Watching'

HOT META POSTS

4 Am I being nice when I close this question as a dupe?

3 Should site-recommendations be on topic for MSO or be asked on MSE?

18 Your Answer to the question at the top of this page

5 Do we remove tags from a question when the tag is referenced but isn't relevant?

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👤 👤

Watch tags to curate your list of questions.

👁 Watch a tag

🚫 Ignored tags

Add an ignored tag

Search the stackoverflow R tag

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posts containing 'pyramid' - St: X

https://stackoverflow.com/search?q=[r]+pyramid

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3,552 1 28 61

[r] pyramid

Search Results

Advanced Search Tips

Ask Question

Hot Network Questions

results found containing pyramid tagged with **r** search options

[r] pyramid

search

86 results

relevance newest votes active

R is a free, open-source programming language and software environment for statistical computing, bioinformatics, visualization and general computing. Provide minimal, reproducible, representative example(s) with your questions. Use dput() for data and specify all non-base packages with library ...

Watch Tag Ignore Tag Learn more... Improve tag info Top users Synonyms (2) r jobs

37 votes

2 answers

Q: Simpler population pyramid in ggplot2

I want to create a population **pyramid** with ggplot2. This question was asked before, but I believe the solution must be far simpler. test <- (data.frame(v=morm(1000), g=c('M','F'))) require(ggplot2 ...) ggplot(data=test, aes(x=v)) + geom_histogram() + coord_flip() + facet_grid(~ g) Produces this image. In my opinion, the only step missing here to create a population **pyramid** is to ...

r ggplot2

asked Feb 4 '13 by dm1anna

13 votes

4 answers

Q: population pyramid density plot in r

I would like to create **pyramid** density plot like the following: The point that I can reach is just simple **pyramid** plot based on the following sample example: set.seed(123) xvar <- round(morm ... <- data.frame(table(myd\$xywt)) xvar.pop <- data.frame(table(myd\$xywt)) library(plotrix) par(mar=pyramid.plot(xvar.pop\$Freq,xvar.pop\$Freq, main="Population **Pyramid**",lxcol="blue",rxcol="pink", gap=0,show.values=F)) How can I achieve this ? ...

r graph plot ggplot2

asked Jan 9 '13 by rdorearn

0 votes

0 answers

Q: Pyramid chart in rCharts with Highcharts

What does a double arrow mean on a schematic?

Potting microSD card inserted in slot with epoxy resin

User Account with no password

When does doubling the size of a set multiply the number of subsets by an integer?

Senior asking out for coffee on weekend and running out of options to decline it politely

What is the most number of times someone has become leader of a European country?

Grant "pre-approval" issue

¶ being stuck to the next letter

How can I build reputation online as a programmer when my work is private

Is it possible to ruin one's career by failing the Kobayashi Maru?

Does Condensed Milk Contain Milk?

Replace old A/C before selling house?

How to talk to a teen daughter about her weight

I'm in a committed relationship and I'm being hit on in the workplace - how do I stop it without bringing it to HR?

What legitimate uses do browser proxies have?

Check all lines are unique

How can I merge a List of pairs with a List of data?

Humans are gone - what can I harvest from their cities 30M years later?


How do I encourage Drow players to not make Drizzt clones?

Typical Question

r - Simpler population pyramid X

+



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<https://stackoverflow.com/questions/14680075/simpler-population-pyramid-in-ggplot2>






 Search










Search...

 3,552 ● 1 ● 28 ● 61
 


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Simpler population pyramid in ggplot2

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37

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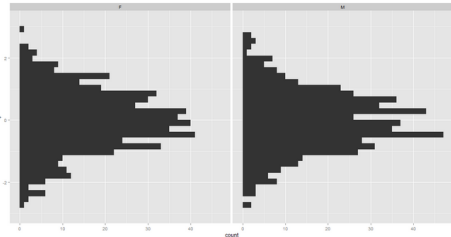
★

29

I want to create a population pyramid with ggplot2. This question was asked [before](#), but I believe the solution must be far simpler.

```
test <- (data.frame(v=rnorm(1000), g=c('M','F')))  
require(ggplot2)  
ggplot(data=test, aes(x=v)) +  
  geom_histogram() +  
  coord_flip() +  
  facet_grid(. ~ g)
```

Produces this image. In my opinion, the only step missing here to create a population pyramid is to invert the x axis of the first facet, so that is goes from 50 to 0, while keeping the second untouched. Can anyone help?



r

ggplot2

asked 5 years, 5 months ago

viewed 12,342 times


active 4 months ago

Ask Question

FEATURED ON META



We'd like your feedback on our new Code of Conduct!



'Favorite Tags' is now 'Tag Watching'

HOT META POSTS

4

Am I being nice when I close this question as a dupe?

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Should site-recommendations be on topic for MSE or be asked on MSE?

18

Your Answer to the question at the top of this page

5

Do we remove tags from a question when the tag is referenced but isn't relevant?

Linked

0

Unusual pyramid plot in R or matplotlib

21

drawing pyramid plot using R and ggplot2

13

population pyramid density plot in r

15


Two horizontal bar charts with shared axis in ggplot2 (similar to population pyramid)

R-bloggers

- R-Bloggers collects blog post of R users
 - <https://www.r-bloggers.com/>
 - Email list that can send you updates.

R-bloggers | R news and tutorials X +

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Dealing with heteroskedasticity; regression with robust standard errors using R

July 7, 2018
By Econometrics and Free Software

Dealing with heteroskedasticity; regression with robust standard errors using R

First of all, is it heteroskedasticity or heteroscedasticity? According to McCulloch (1985), heteroskedasticity is the proper spelling, because when transliterating Greek words, scientists use the Latin letter k in place of the Greek letter κ (kappa). κ sometimes is transliterated as the Latin letter c, but only when these words entered the English language through French, such as scepter. Now that this is out of...

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Convex Regression Model
A primer in using Java from R - part 2
Setting up RStudio Server, Shiny Server and PostgreSQL by @ellis2013nz

MOST VISITED ARTICLES OF THE WEEK

1. How to write the first for loop in R
2. Installing R packages
3. Using apply, sapply, lapply in R

R Weekly

- R Weekly rounds up submitted posts and interesting links
 - <https://rweekly.org/>
 - Email list that can send you updates.

The screenshot shows a web browser window with the address bar displaying <https://rweekly.org>. The page has a dark blue header with navigation links: [RWeekly.org](#), [Live](#), [Mail](#), [Feed](#), [Conf](#), [About](#), [All](#), [Draft](#), [Submit](#), and [Night](#). A search bar is located on the right side of the header.

On the left side, there is a sidebar menu with the following items: [R Weekly 2018-27](#), [Future, Function](#), [Highlight](#), [New Packages](#), [Package Releases](#), [Insights](#), [R in the Real World](#), [Resources](#), [R in Organizations](#), [Tutorials](#), [Upcoming Events in 3 Months](#), [Call for Participation](#), and [Quotes of the Week](#).

The main content area features a section titled **R Weekly 2018-27 Future, Function** dated 02 Jul 2018, with social media icons for GitHub, Facebook, and Twitter. Below this is a search bar with the placeholder text "type to filter".

Below the search bar is a section titled **Highlight** with two items:

- [future.apply 1.0.0](#) - Apply Function to Elements in Parallel using Futures (a milestone release) ([cran.r-project.org](#))
- [The rewrite of the Advanced R functions chapter](#) ([adv-r.hadley.nz](#))

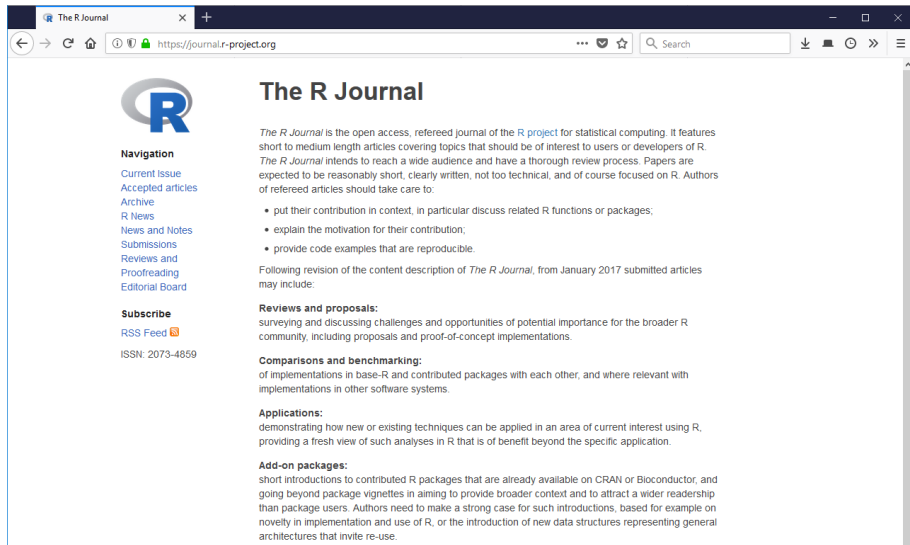
Below the highlight section is a section titled **New Packages** with a sub-header [Go Live for More New Pkgs](#) and a CRAN logo.

Below the CRAN logo is a section titled **CRAN** with one item:

- [cattonum](#) - a tidy one-stop shop for categorical encodings ([bgray3.github.io](#))

The R Journal

- The R Journal publishes articles on R packages and code snippets.
- <https://journal.r-project.org/>



The screenshot shows a web browser window with the address bar displaying <https://journal.r-project.org>. The page features the R logo and a navigation menu on the left. The main content area is titled "The R Journal" and contains several sections of text and lists.

The R Journal

The R Journal is the open access, refereed journal of the [R project](#) for statistical computing. It features short to medium length articles covering topics that should be of interest to users or developers of R. *The R Journal* intends to reach a wide audience and have a thorough review process. Papers are expected to be reasonably short, clearly written, not too technical, and of course focused on R. Authors of refereed articles should take care to:

- put their contribution in context, in particular discuss related R functions or packages;
- explain the motivation for their contribution;
- provide code examples that are reproducible.

Following revision of the content description of *The R Journal*, from January 2017 submitted articles may include:

Reviews and proposals:
surveying and discussing challenges and opportunities of potential importance for the broader R community, including proposals and proof-of-concept implementations.

Comparisons and benchmarking:
of implementations in base-R and contributed packages with each other, and where relevant with implementations in other software systems.

Applications:
demonstrating how new or existing techniques can be applied in an area of current interest using R, providing a fresh view of such analyses in R that is of benefit beyond the specific application.

Add-on packages:
short introductions to contributed R packages that are already available on CRAN or Bioconductor, and going beyond package vignettes in aiming to provide broader context and to attract a wider readership than package users. Authors need to make a strong case for such introductions, based for example on novelty in implementation and use of R, or the introduction of new data structures representing general architectures that invite re-use.

Navigation

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ISSN: 2073-4859

Journal of Statistical Software

- Journal of Statistical Software often includes articles on R packages
- <https://www.jstatsoft.org/>

Journal of Statistical Software

Published by the Foundation for Open Access Statistics Editors-in-chief: Bettina Grün, Torsten Hothorn, Edzer Pebesma, Achim Zeileis ISSN 1548-7660; CODEN JSSOBK

Journal of Statistical Software

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Established in 1996, the Journal of Statistical Software publishes articles, book reviews, code snippets, and software reviews on the subject of statistical software and algorithms. The contents are freely available online. For both articles and code snippets the source code is published along with the paper.



Statistical software is the key link between statistical methods and their application in practice. Software that makes this link is the province of the journal, and may be realized as, for instance, tools for large scale computing, database technology, desktop computing, distributed systems, the World Wide Web, reproducible research, archiving and documentation, and embedded systems. We attempt to present research that demonstrates the joint evolution of computational and statistical methods and techniques. Implementations can use languages such as C, C++, S, Fortran, Java, PHP, Python and Ruby or environments such as Mathematica, MATLAB, R, S-PLUS, SAS, Stata, and XLISP-STAT.

Announcements

Changes in editorial team

In response to the continuing success of JSS we have expanded our editorial team aiming to further enhance the quality of publications and lower reviewing times and publication delays. First, Torsten Hothorn has joined as the fourth editor-in-chief. Second, we now have four editorial assistants who help with managing submissions, work flows, editing, technical checks, web services, etc.: Aaron Danielson,

Recent Publications

Articles

[hergm: Hierarchical Exponential-Family Random Graph Models](#) [PDF](#)
Michael Schweinberger, Pamela Luna

[RRreg: An R Package for Correlation and Regression Analyses of Randomized Response Data](#) [PDF](#)
Daniel W. Heck, Morten Moshagen

[SAP-MATLAB Package for Sensitivity Analysis of High-Dimensional Stochastic Chemical Networks](#) [PDF](#)
Weilong Hu, Yannis Pantazis, Markos A. Katsoulakis

[blavaan: Bayesian Structural Equation Models via Parameter Expansion](#) [PDF](#)
Edgar C. Merkle, Yves Rosseel

[R Package DoE base for Factorial Experiments](#) [PDF](#)
Ulrike Grömping

[Bayesian Linear Mixed Models with Polygenic Effects](#) [PDF](#)
Jing Hua Zhao, Jian'an Luan, Peter Congdon

[beanz: An R Package for Bayesian Analysis of Heterogeneous Treatment Effects with a Graphical User Interface](#) [PDF](#)
Chenguang Wang, Thomas A. Louis, Nicholas C. Henderson, Carlos O. Weiss, Ravi Varadhan

[randomizeR: An R Package for the Assessment and Implementation of Randomization in Clinical Trials](#) [PDF](#)
Dion Hechner, David Schindler, Ralf Dieter Hilgert, Nicole Hausman

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Final tips

- Copy and pasting code is done.
 - I do it all the time
 - It is not a bad way to get initial results.
- BUT, try and form a habits to
 - Read the help files for the function you are using.
 - Type code out yourself.
- You will gain a better understanding of what you are programming.
 - Allow you to tweak for your context
 - Will avoid using unsuitable settings in functions that might give a wrong answer (when copy and pasted)

Contact Details

- Contact Details
 - ✉ `guy.abel@shu.edu.cn`
 - 🐦 `guyabelguyabel`
- Thank You!