Current status and propsects of R-packages for the design of experiments

by Emi Tanaka

Abstract An abstract of less than 150 words.

#> `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.

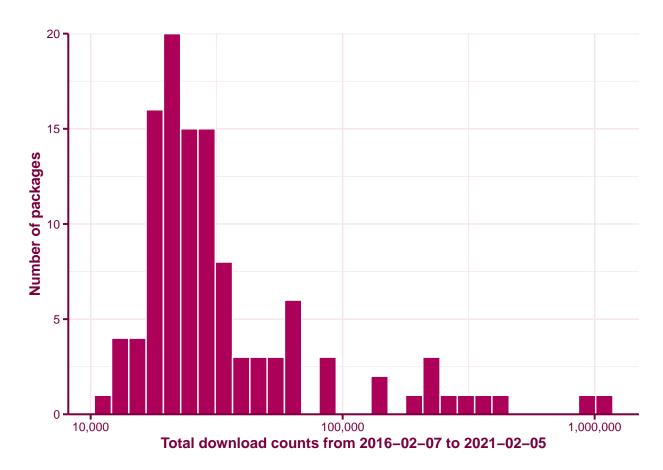
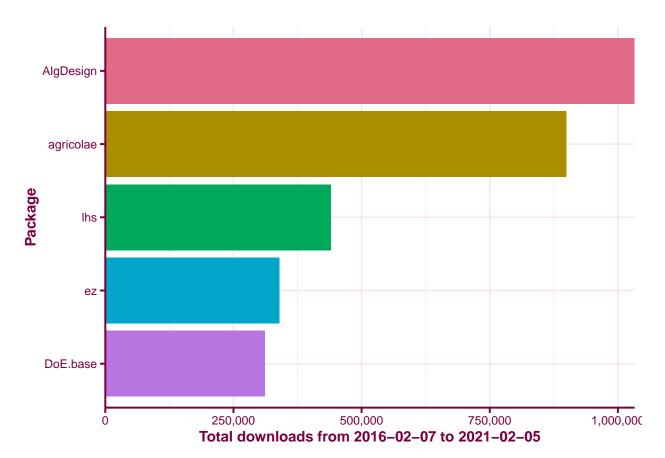


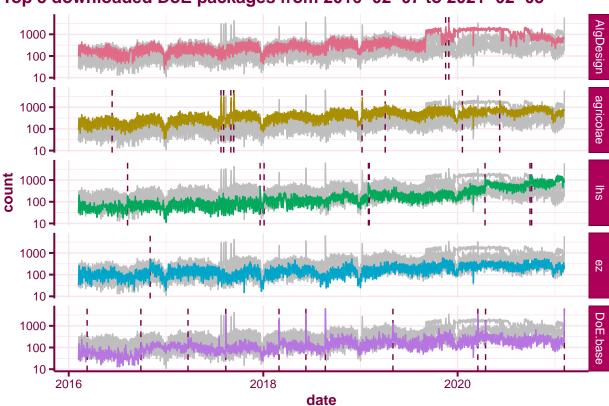
Table 1: The bigram of the R-package titles as provided in the DESCRIPTION file in CRAN.

Bigram	Count
optimal design	10
experimental design	8
clinical trial	5
dose finding	5
sequential design	5
block design	4
microarray experiment	4
response surface	4

Table 2: The bigram of the R-package descriptions as provided in the DESCRIPTION file in CRAN.

Bigram	Count
experimental design	11
optimal design	10
package provide	7
response surface	7
factorial design	6
graphical user	6
user interface	6
block design	5
contour plot	5
design based	5
effect model	5
fractional factorial	5
microarray experiment	5
mixed effect	5
provide function	5
sample size	5
sequential design	5





Top 5 downloaded DoE packages from 2016-02-07 to 2021-02-05

Introduction

test test

agricolae

Experimental Design Official Statistics

Helping info to get started

Introductory section which may include references in parentheses (R Core Team, 2012), or cite a reference such as R Core Team (2012) in the text.

Section title in sentence case

Let's check fi this works Figure @ref(fig:Rlogo).

This section may contain a figure such as Figure 1.



Figure 1: The logo of R.

Summary

This file is only a basic article template. For full details of *The R Journal* style and information on how to prepare your article for submission, see the Instructions for Authors.

About this format and the R Journal requirements

rticles::rjournal_article will help you build the correct files requirements:

- A R file will be generated automatically using knitr::purl-see https://bookdown.org/yihui/rmarkdown-cookbook/purl.html for more information.
- A tex file will be generated from this Rmd file and correctly included in RJwapper.tex as expected to build RJwrapper.pdf.
- All figure files will be kept in the default rmarkdown *_files folder. This happens because keep_tex = TRUE by default in rticles::rjournal_article
- Only the bib filename is to modifed. An example bib file is included in the template (RJreferences.bib) and you will have to name your bib file as the tex, R, and pdf files.

Bibliography

R Core Team. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria, 2012. URL http://www.R-project.org/. ISBN 3-900051-07-0. [p3]

Emi Tanaka Monash University Monash University Clayton campus, VIC 3800, Australia http://emitanaka.org/ ORCiD: 0000-0002-1455-259X emi.tanaka@monash.edu