Package ‘bigsimr’

February 21, 2024

Title Fast Generation of High-Dimensional Random Vectors

Version 0.12.0

Description Simulate multivariate data with arbitrary marginal distributions. 'bigsimr' is a package for simulating high-dimensional multivariate data with a target correlation and arbitrary marginal distributions via Gaussian copula. It utilizes the Julia package 'Bigsimr.jl' for its core routines.

URL https://github.com/SchisslerGroup/r-bigsimr

BugReports https://github.com/SchisslerGroup/Bigsimr.jl/issues

Depends R (>= 3.6.0)

License GPL-3

Encoding UTF-8

SystemRequirements Julia (>= 1.7), Bigsimr.jl, Distributions.jl

RoxygenNote 7.3.1

Imports JuliaCall

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

NeedsCompilation no

Author Alex Knudson [aut, cre],
Grant Schissler [aut],
Duc Tran [ctb]

Maintainer Alex Knudson <alexk.706@gmail.com>

Repository CRAN

Date/Publication 2024-02-21 08:00:06 UTC

R topics documented:

`bigsimr_setup` *Setup bigsimr*

Description

This function initializes Julia and the Bigsimr.jl package. The first time will be longer since it includes precompilation. Additionally, this will install Julia and the required packages if they are missing.

Usage

```
bigsimr_setup(pkg_check = TRUE, ...)
```

Arguments

`pkg_check`	logical, check for Bigsimr.jl package and install if necessary
`...`	Parameters are passed down to JuliaCall::julia_setup

Value

Return the imported wrapper of Bigsimr.jl Julia package

`distributions_setup` *Setup Distributions.jl*

Description

This function initializes the Distributions package that many of the Bigsimr functions work with.

Usage

```
distributions_setup()
```

Value

Return the imported wrapper of Distributions.jl Julia package

Index