Package 'cpp11armadillo'

July 4, 2024

Type Package

Title An 'Armadillo' Interface

Description Provides function declarations and inline function definitions that facilitate communication between R and the 'Armadillo' 'C++' library for linear algebra and scientific computing.

Version 0.2.8

Suggests cpp11, desc, knitr, mockery, rmarkdown, testthat (>= 3.0.0), withr

Depends R(>= 3.5.0)

License Apache License (>= 2)

BugReports https://github.com/pachadotdev/cpp11armadillo/issues

URL https://pacha.dev/cpp11armadillo/, https://github.com/pachadotdev/cpp11armadillo

LazyData true

RoxygenNote 7.3.1

Encoding UTF-8

VignetteBuilder knitr

Config/testthat/edition 3

NeedsCompilation no

Author Mauricio Vargas Sepulveda [aut, cre] (<https://orcid.org/0000-0003-1017-7574>)

Maintainer Mauricio Vargas Sepulveda <m.sepulveda@mail.utoronto.ca>

Repository CRAN

Date/Publication 2024-07-04 21:00:02 UTC

Contents

---

cpp_vendor *Vendor the cpp11 and cpp11armadillo dependency*

Description

Vendoring is the act of making your own copy of the 3rd party packages your project is using. It is often used in the go language community.

Usage

```
cpp_vendor(dir = NULL, subdir = "/inst/include")
```

Arguments

dir	The directory to vendor the code into.
subdir	The subdirectory to vendor the code into.

Details

This function vendors cpp11 and cpp11armadillo into your package by copying the cpp11 and cpp11armadillo headers into the ‘inst/include‘ folder and adding ’cpp11 version: XYZ’ and ’cpp11armadillo version: XYZ’ to the top of the files, where XYZ is the version of cpp11 and cpp11armadillo currently installed on your machine.

Vendoring places the responsibility of updating the code on you. Bugfixes and new features in cpp11 and cpp11armadillo will not be available for your code until you run ‘cpp_vendor()‘ again.

Value

The file path to the vendored code (invisibly).

Examples

```
# create a new directory
dir <- tempdir()
dir.create(dir)

# vendor the cpp11 headers into the directory
cpp_vendor(dir)
```

mtcars_mat *Mtcars dataset in matrix form*

Description

Reshaped dataframe to test Armadillo linear algebra functions with simple linear models of the form mpg_i = a + b cyl_i or mpg_i = b cyl_i + c_1 cyl4_i + c_2 cyl6_i + c_3 cyl8_i

Usage

```
mtcars_mat
```

Format

A list with two matrices: ‘y‘ and ‘x‘, where ‘y‘ is the ‘mpg‘ variable and ‘x‘ is a matrix with the rest of the dataset.

Source

R’s ‘mtcars‘ dataset.

pkg_template *Start a new project with the cpp11armadillo package template*

Description

Start a new project with the cpp11armadillo package template

Usage

```
pkg_template(path = NULL, pkgname = NULL)
```

Arguments

path	Path to the new project
pkgname	Name of the new package

Value

The file path to the copied template (invisibly).

Examples

```
# create a new directory
dir <- tempdir()
dir.create(dir)

# copy the package template into the directory
pkg_template(dir, "mynewpkg")
```

Index