

# Package ‘cpp11armadillo’

May 14, 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** 0.2.5

**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

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**Repository** CRAN

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cpp_vendor	<i>Vendor the cpp11 and cpp11armadillo dependency</i>
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## 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.

**Note:** 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)
```

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`mtcars_mat`*Mtcars dataset in matrix form*

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**Description**

Reshaped dataframe to test Armadillo linear algebra functions with simple linear models of the form  $\text{mpg}_i = a + b \text{cyl}_i$  or  $\text{mpg}_i = b \text{cyl}_i + c_1 \text{cyl4}_i + c_2 \text{cyl6}_i + c_3 \text{cyl8}_i$

**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.

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

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**Description**

Start a new project with the cpp11armadillo package template

**Usage**`pkg_template(path = NULL, pkgname = NULL)`**Arguments**

<code>path</code>	Path to the new project
<code>pkgname</code>	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")
```

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