

# Package ‘cpp11armadillo’

December 19, 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. This implementation is detailed in Vargas Sepulveda and Schneider Malamud (2024) <[doi:10.48550/arXiv.2408.11074](https://doi.org/10.48550/arXiv.2408.11074)>.

**Version** 0.4.1

**Imports** cpp11

**Suggests** 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>

**RoxygenNote** 7.3.2

**Encoding** UTF-8

**VignetteBuilder** knitr

**Config/testthat/edition** 3

**NeedsCompilation** no

**Author** Mauricio Vargas Sepulveda [aut, cre]  
(<<https://orcid.org/0000-0003-1017-7574>>),  
Jonathan Schneider Malamud [ctb],  
Conrad Sanderson [aut] (Armadillo library (C++))

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

**Repository** CRAN

**Date/Publication** 2024-12-19 17:00:02 UTC

## Contents

armadillo_version . . . . .	2
cpp_vendor . . . . .	2
pkg_template . . . . .	3

<b>Index</b>	<b>4</b>
--------------	----------

---

armadillo_version	<i>Get Armadillo version</i>
-------------------	------------------------------

---

### Description

Provides the Armadillo C++ library version name and number included in the package.

### Usage

```
armadillo_version()
```

### Value

A string with the Armadillo version name and number

### Examples

```
armadillo_version()
```

---

cpp_vendor	<i>Vendor the cpp11 and cpp11armadillo dependency</i>
------------	---

---

### 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)
```

---

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

<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")
```

# Index

`armadillo_version`, [2](#)

`cpp_vendor`, [2](#)

`pkg_template`, [3](#)