

Package ‘xtensor’

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Type Package

Title Headers for the 'xtensor' Library

Version 0.11.0-0

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Description The 'xtensor' C++ library for numerical analysis with multi-dimensional array expressions is provided as a header-only C++14 library. It offers an extensible expression system enabling lazy broadcasting; an API following the idioms of the C++ standard library; and tools to manipulate array expressions and build upon 'xtensor'.

URL <https://github.com/QuantStack/xtensor>

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Encoding UTF-8

Imports Rcpp

LinkingTo Rcpp

LazyData true

Biarch true

Suggests testthat

NeedsCompilation yes

Repository CRAN

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xtensor-package *R bindings for the xtensor C++ multi-dimensional array library.*

Description

xtensor is a C++ library for multi-dimensional arrays enabling numpy-style broadcasting and lazy computing. xtensor-r enables inplace use of R arrays in C++ with all the benefits from xtensor

- C++ universal functions and broadcasting
- STL - compliant APIs.
- A broad coverage of numpy APIs (see the numpy to xtensor cheat sheet at <http://xtensor.readthedocs.io/en/latest/numpy.html>).

xtensor-r can be used either to author C++ extensions for R with Rcpp, or applications that embed the R interpreter with RInside.

Details

This section should provide a more detailed overview of how to use the package, including the most important functions.

Author(s)

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See Also

Development for **xtensor** can be followed via the GitHub repository at <http://github.com/QuantStack/xtensor>.

xtensor_r_example *Simple function using xtensor-r*

Description

Simple function using xtensor-r

Usage

```
xtensor_r_example(tens)
```

Arguments

tens The tensor to be processed

Examples

```
## Not run:  
xtensor_r_example()  
  
## End(Not run)
```

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