Package ‘xtensor’

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Type Package
Title Headers for the ‘xtensor’ Library
Version 0.11.1-0
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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
License BSD_3_clause + file LICENSE
Encoding UTF-8
Imports Rcpp
LinkingTo Rcpp
LazyData true
Biarch true
Suggests testthat
NeedsCompilation yes
Repository CRAN
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xtensor-r_example

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

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**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](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 RIunderline{side}.

**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](http://github.com/QuantStack/xtensor).

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**xtensor_r_example**  
*Simple function using xtensor-r*

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**Description**

Simple function using xtensor-r

**Usage**

```r
xtensor_r_example(tens)
```

**Arguments**

- `tens`  
The tensor to be processed
Examples

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

## End(Not run)
```
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