

Package ‘idx2r’

February 20, 2018

Type Package

Title Convert Files to and from IDX Format to Vectors, Matrices and Arrays

Version 1.0.0

Date 2018-02-19

Author Erik Doffagne

Maintainer Erik Doffagne <erik.doffagne@gmail.com>

Description Convert files to and from IDX format to vectors, matrices and arrays.
IDX is a very simple file format designed for storing vectors and multidimensional matrices in binary format. The format is described on the website from Yann LeCun <<http://yann.lecun.com/exdb/mnist/>>.

License MIT + file LICENSE

URL <https://github.com/edoffagne/idx2r>

Suggests testthat

RoxygenNote 6.0.1

NeedsCompilation no

Repository CRAN

Date/Publication 2018-02-20 09:35:13 UTC

R topics documented:

idx2r-package	2
read_idx	2
write_idx	3

Index	4
--------------	----------

idx2r-package	<i>Convert Files to and from IDX Format to Vectors, Matrices and Arrays in R</i>
---------------	--

Description

Convert files to and from IDX format to arrays in R. IDX is a format to store vector and arrays in binary format. Reading IDX format is needed for instance to use the MNIST database of handwritten digits from <http://yann.lecun.com/exdb/mnist/> provided by Yann LeCun.

Author(s)

Erik Doffagne

See Also

Useful links:

- <https://github.com/edoffagne/idx2r>

Examples

```
m = matrix(1:16, nrow = 4)
file_name = file.path(tempdir(), "m.idx")
write_idx(m, file_name)
mr = read_idx(file_name)
```

read_idx	<i>Read an IDX file</i>
----------	-------------------------

Description

This function allows to read an IDX file

Usage

```
read_idx(file_name, endian = "big")
```

Arguments

file_name	character vector containing the name of the file to be read
endian	whether the file has "big" or "little" endian

Examples

```
m = matrix(1:16, nrow = 4)
file_name = file.path(tempdir(), "m.idx")
write_idx(m, file_name)
mr = read_idx(file_name)
```

write_idx	<i>Write an array into an IDX file</i>
-----------	--

Description

This function allows to write an array into an IDX file.

Usage

```
write_idx(x, file_name, endian = "big")
```

Arguments

x	must be a array or a matrix
file_name	character vector containing the name of the file to be created
endian	whether the file has "big" or "little" endian.

Examples

```
m = matrix(1:16, nrow = 4)
file_name = file.path(tempdir(), "m.idx")
write_idx(m, file_name)
```

Index

`idx2r (idx2r-package)`, [2](#)

`idx2r-package`, [2](#)

`read_idx`, [2](#)

`write_idx`, [3](#)