

Package ‘dlib’

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Type Package

Title Allow Access to the 'Dlib' C++ Library

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Description Interface for 'Rcpp' users to 'dlib' <<http://dlib.net>> which is a 'C++' toolkit containing machine learning algorithms and computer vision tools. It is used in a wide range of domains including robotics, embedded devices, mobile phones, and large high performance computing environments. This package allows R users to use 'dlib' through 'Rcpp'.

LinkingTo Rcpp

Copyright see file COPYRIGHTS

Imports Rcpp

Suggests inline, magick

RoxygenNote 6.0.1

NeedsCompilation yes

Repository CRAN

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Description

'Dlib' <<http://dlib.net>> is a 'C++' toolkit containing machine learning algorithms and computer vision tools. It is used in a wide range of domains including robotics, embedded devices, mobile phones, and large high performance computing environments. This package allows R users to use 'dlib' through 'Rcpp'.

See Also

[inlineCxxPlugin](#)

Examples

```
## Not run:
library(Rcpp)
library(inline)
library(dlib)

##
## Example adapted from http://dlib.net/surf\_ex.cpp.html
## Find the SURF (https://en.wikipedia.org/wiki/Speeded\_up\_robust\_features)
## features of an image

##
## Step 1:
## Register a function called dlib_surf to read and extract the FHOG features
## have a look at the file for how it is structured
f <- system.file("extdata", "rcpp_surf.cpp", package = "dlib")
cat(readLines(f), sep = "\n")
sourceCpp(f)

##
## Step 2:
## Convert image from jpeg to BMP3 format as in the dlib_surf function,
## we assume the file is in BMP3 format
library(magick)
f <- system.file("extdata", "cruise_boat.jpeg", package = "dlib")
img <- image_read(path = f)
img
f_bmp <- tempfile(fileext = ".bmp")
image_write(img, path = f_bmp, format = "BMP3")

##
## Step 3:
## Apply the function Rcpp function dlib_surf on the image
dlib_surf(f_bmp)
```

```
## End(Not run)
```

<code>inlineCxxPlugin</code>	<i>Rcpp plugin for dlib</i>
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Description

Rcpp plugin for dlib

Usage

```
inlineCxxPlugin()
```

Value

a list

Examples

```
library(Rcpp)
library(inline)
library(dlib)
getPlugin("dlib")
```

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