Package 'opencv'

April 1, 2019

Type Package

Title Bindings to 'OpenCV' Computer Vision Library

Version 0.1

Description Experimenting with computer vision and machine learning in R. This
package exposes some of the available 'OpenCV' vision algorithms, such as edge,
body or face detection. These can either be applied to analyze static images,
or to filter live video footage from a camera device.

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SystemRequirements OpenCV: libopencv-dev (Debian, Ubuntu) or
opencv-devel (Fedora)

URL https://github.com/ropensci/opencv

BugReports https://github.com/ropensci/opencv/issues

LinkingTo Rcpp

Imports Rcpp, magrittr

LazyData true

Encoding UTF-8

RoxygenNote 6.1.1

NeedsCompilation yes

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R topics documented:

ocv_face *OpenCV Computer Vision*

Description

Tools to experiment with computer vision algorithms. Use ocv_read and ocv_write to load/save images on disk, or use ocv_picture / ocv_video to use your webcam. In RSudio IDE the image objects will automatically be displayed in the viewer pane.

Usage

```
ocv_face(image)

ocv_facemask(image)

ocv_read(path)

ocv_write(image, path)

ocv_bitmap(image)

ocv_edges(image)

ocv_picture()

ocv_resize(image, width = 0, height = 0)

ocv_mog2(image)

ocv_knn(image)

ocv_hog(image)

ocv_blur(image, ksize = 5)

ocv_sketch(image, color = TRUE)

ocv_stylize(image)

ocv_markers(image)

ocv_info(image)

ocv_copyto(image, target, mask)

ocv_display(image)
```

```
ocv_video(filter)
```

Arguments

image	a ocv image object
path	image file such as png or jpeg
width	output width in pixels
height	output height in pixels
ksize	size of blurring matrix
color	true or false
target	the output image
mask	only copy pixels from the mask
filter	an R function that takes and returns an opecv image

Examples

```
# Silly example
mona <- ocv_read('https://jeroen.github.io/images/monalisa.jpg')

# Edge detection
ocv_edges(mona)
ocv_markers(mona)

# Find face
faces <- ocv_face(mona)

# To show locations of faces
#facemask <- ocv_facemask(mona)
#attr(facemask, 'faces')
```

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