

# Package ‘ROpenCVLite’

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**Type** Package

**Title** Helper Package for Installing OpenCV with R

**Version** 4.70.0

**Date** 2022-12-28

**Maintainer** Simon Garnier <garnier@njit.edu>

**Description** Installs 'OpenCV' for use by other packages. 'OpenCV' <<https://opencv.org/>> is library of programming functions mainly aimed at real-time computer vision. This 'Lite' version installs the stable base version of 'OpenCV' and some of its experimental externally contributed modules. It does not provide R bindings directly.

**License** GPL-3

**Imports** utils, pkgbuild, parallel

**SystemRequirements** cmake, C++11

**RoxygenNote** 7.2.3

**Biarch** true

**Encoding** UTF-8

**Suggests** covr, knitr, rmarkdown

**VignetteBuilder** knitr

**URL** <https://swarm-lab.github.io/ROpenCVLite/>,  
<https://github.com/swarm-lab/ROpenCVLite>

**BugReports** <https://github.com/swarm-lab/ROpenCVLite/issues>

**NeedsCompilation** no

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**Repository** CRAN

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ROpenCVLite-package     *ROpenCVLite: A package to install OpenCV within R*

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### Description

This is a utility package that installs OpenCV within R for use by other packages. This Lite version does not contain any of the contributed modules of OpenCV.

### Author(s)

Simon Garnier, <garnier@njit.edu>

### See Also

Useful links:

- <https://swarm-lab.github.io/ROpenCVLite/>
- <https://github.com/swarm-lab/ROpenCVLite>
- Report bugs at <https://github.com/swarm-lab/ROpenCVLite/issues>

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defaultOpenCVPath     *Default Install Location of OpenCV*

---

### Description

This function returns the location at which OpenCV should be installed by default.

### Usage

```
defaultOpenCVPath()
```

**Value**

A character string.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

```
defaultOpenCVPath()
```

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installOpenCV	<i>Install OpenCV</i>
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**Description**

This function attempts to download, compile and install OpenCV on the system. This process will take several minutes.

**Usage**

```
installOpenCV(path = defaultOpenCVPath(), batch = FALSE)
```

**Arguments**

path	A character string indicating the location at which OpenCV should be installed. By default, it is the value returned by <code>defaultOpenCVPath</code> .
batch	A boolean indicating whether to skip (TRUE) or not (FALSE, the default) the interactive installation dialog. This is useful when OpenCV needs to be installed in a non-interactive environment (e.g., during a batch installation on a server).

**Value**

A boolean.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

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

---

`isCmakeInstalled`      *Check Cmake Installation*

---

**Description**

This function checks that Cmake is installed on the system.

**Usage**

```
isCmakeInstalled()
```

**Value**

A boolean.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

```
isCmakeInstalled()
```

---

`isOpenCVInstalled`      *Check OpenCV Installation*

---

**Description**

This function checks that OpenCV is installed and accessible.

**Usage**

```
isOpenCVInstalled()
```

**Value**

A boolean.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

```
isOpenCVInstalled()
```

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opencvConfig	<i>C/C++ configuration options</i>
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**Description**

This function returns the configuration options for compiling C/C++-based packages against OpenCV installed by [ROpenCVLite](#).

**Usage**

```
opencvConfig(output = "libs", arch = NULL)
```

**Arguments**

output	Either 'libs' for library configuration options or 'cflags' for C/C++ configuration flags.
arch	architecture relevant for Windows. If NULL, then R.version\$arch will be used.

**Value**

A concatenated character string (with [cat](#)) of the configuration options.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

```
if (isOpenCVInstalled()) {  
  opencvConfig()  
  opencvConfig(output = "cflags")  
  opencvConfig(arch = R.version$arch)  
}
```

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OpenCVPath	<i>Install Location of OpenCV</i>
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**Description**

This function returns the location at which OpenCV is installed.

**Usage**

```
OpenCVPath()
```

**Value**

A character string.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

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

---

opencvVersion

*OpenCV Version*

---

**Description**

This function determines the version of OpenCV installed within R.

**Usage**

```
opencvVersion()
```

**Value**

A character string.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

```
if (isOpenCVInstalled()) {  
  opencvVersion()  
}
```

---

removeOpenCV

*Remove OpenCV*

---

**Description**

This function removes OpenCV from the system.

**Usage**

```
removeOpenCV()
```

**Value**

A boolean.

**Author(s)**

Simon Garnier, <garnier@njit.edu>

**Examples**

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

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