

# Package: ROpenCVLite (via r-universe)

September 12, 2024

**Type** Package

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

**Version** 4.90.2

**Date** 2024-08-01

**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

**LazyData** TRUE

**Imports** utils, parallel

**SystemRequirements** cmake

**RoxygenNote** 7.3.2

**Biarch** false

**Encoding** UTF-8

**Depends** R (>= 4.0.0)

**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>

**Repository** <https://swarm-lab.r-universe.dev>

**RemoteUrl** <https://github.com/swarm-lab/ropencv-lite>

**RemoteRef** HEAD

**RemoteSha** db7fb528d4cc7d7ae9aa0ac452bbcc03931e5d22

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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**

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

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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(install_path = defaultOpenCVPath(), batch = FALSE)
```

**Arguments**

install_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 <code>R.version\$arch</code> will be used.

## Value

A concatenated character string (with `cat`) of the configuration options.

## Author(s)

Simon Garnier, <garnier@njit.edu>

## Examples

```
## Not run:
if (isOpenCVInstalled()) {
  opencvConfig()
  opencvConfig(output = "cflags")
  opencvConfig(arch = R.version$arch)
}

## End(Not run)
```

OpenCVPath

*Install Location of OpenCV*

---

**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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