

# Package: hellomojo (via r-universe)

May 23, 2026

**Title** An Example R Package that Uses 'mojo' Through the .Call Interface

**Version** 0.0.1.9000

**Description** This package demonstrates how to use the 'mojo' by calling shared library builds from R through its .Call interface.

**License** GPL (>= 3)

**Suggests** callme, bench

**SystemRequirements** mojo installation  
(<https://docs.modular.com/mojo/manual/install>) via pixi or python3-venv and python3-pip

**OS\_type** unix

**Encoding** UTF-8

**URL** <https://github.com/soukoku-bioinfo>

**BugReports** <https://github.com/soukoku-bioinfo/hellomojo/issues>

**Roxygen** list(markdown = TRUE)

**RoxygenNote** 7.3.3

**Config/pak/sysreqs** python3

**Repository** <https://soukoku-bioinfo.r-universe.dev>

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hellomojo	<i>Hello from Mojo Call the native 'hello' function from the Mojo shared library</i>
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### Description

Hello from Mojo Call the native 'hello' function from the Mojo shared library

### Usage

hellomojo()

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hellomojo_add	<i>Add two numbers using the native 'add' function from the Mojo shared library</i>
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### Description

Add two numbers using the native 'add' function from the Mojo shared library

### Usage

hellomojo\_add(a, b)

### Arguments

a	A numeric value
b	A numeric value

### Value

The sum of a and b

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hellomojo\_convolve     *1D convolution using the native Mojo function*

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**Description**

1D convolution using the native Mojo function

**Usage**

```
hellomojo_convolve(signal, kernel)
```

**Arguments**

signal	Numeric vector (signal)
kernel	Numeric vector (kernel)

**Value**

Numeric vector (convolution result)

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hellomojo\_device\_info     *Get system and GPU device information using Mojo Shows both CPU and GPU information when available*

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**Description**

Get system and GPU device information using Mojo Shows both CPU and GPU information when available

**Usage**

```
hellomojo_device_info(device_id = 0L, api_name = "cuda")
```

**Arguments**

device_id	Integer device ID (default: 0)
api_name	Character string specifying the GPU API ("cuda" or "hip", default: "cuda")

**Value**

Prints system and device information to console

mojo\_build\_package      *Build Mojo library for this package*

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**Description**

Compiles the Mojo source and installs it to inst/libs

**Usage**

```
mojo_build_package(  
  venv = ".venv/mojo",  
  source = "inst/mojo/hellomojo/hellomojo.mojo"  
)
```

**Arguments**

venv	Path to virtual environment with Mojo
source	Path to Mojo source file

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mojo\_check\_python\_requirements

*Check if system requirements for Mojo compilation are available*

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**Description**

Check if system requirements for Mojo compilation are available

**Usage**

```
mojo_check_python_requirements()
```

**Value**

Named logical vector with availability of requirements

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mojo_compile	<i>Compile Mojo code and create R wrapper functions</i>
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**Description**

Similar to `callme::compile()` but for Mojo code. Parses Mojo files, extracts export functions, compiles to shared library, generates C wrappers, compiles those, and creates R functions.

**Usage**

```
mojo_compile(  
  mojo_file,  
  venv = NULL,  
  PKG_LIBS = NULL,  
  env = parent.frame(),  
  verbosity = 0  
)
```

**Arguments**

<code>mojo_file</code>	Path to mojo file
<code>venv</code>	Path to Python virtual environment with Mojo installed
<code>PKG_LIBS</code>	Additional linker flags (e.g., for external libraries)
<code>env</code>	Environment to assign wrapper functions. Default: <code>parent.frame()</code>
<code>verbosity</code>	Level of output (0-4). Default: 0

**Value**

Invisibly returns named list of R wrapper functions

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mojo_find	<i>Find Mojo binary in virtual environment or system</i>
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**Description**

Find Mojo binary in virtual environment or system

**Usage**

```
mojo_find(venv = NULL)
```

**Arguments**

<code>venv</code>	Path to virtual environment. If NULL, searches system PATH.
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**Value**

Path to mojo binary, or NULL if not found

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mojo_info	<i>Get information about Mojo installation</i>
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**Description**

Get information about Mojo installation

**Usage**

```
mojo_info(venv = NULL)
```

**Arguments**

venv	Path to virtual environment
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mojo_install	<i>Create a Python virtual environment and install Mojo</i>
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**Description**

Create a Python virtual environment and install Mojo

**Usage**

```
mojo_install(venv = ".venv/mojo", nightly = TRUE, python = "python3")
```

**Arguments**

venv	Path where to create the virtual environment
nightly	If TRUE, install nightly build. If FALSE, install stable.
python	Python executable to use. Default is "python3".

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