Package: nativeORT (via r-universe)

May 17, 2026

Type Package

Title Native R 'ONNX' Runtime

Version 1.0.1

Description Provides R native 'ONNX' model inference without requiring 'Python', 'reticulate' bindings, or 'TensorFlow'. This package directly binds the 'ONNX Runtime' C API via 'Rcpp', enabling real-time inference for '.onnx' engines, all within R. Standard CPU execution is supported as well as the 'CoreML' Execution Provider (CEP) for Apple Silicon, all without external bindings. This package handles OS detection, linking 'ONNX' libraries, and inference. For more information about 'ONNX Runtime' see <https://onnxruntime.ai/>.

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Language en-US

Encoding UTF-8

LazyData true

LinkingTo Rcpp

Imports Rcpp, digest, glue

Config/roxygen2/version 8.0.0

SystemRequirements libonnxruntime (>= 1.20)

Suggests ggplot2, knitr, rmarkdown

VignetteBuilder knitr

URL https://github.com/calebmcarr/nativeORT

BugReports https://github.com/calebmcarr/nativeORT/issues

Repository https://calebmcarr.r-universe.dev

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RemoteUrl https://github.com/calebmcarr/nativeort

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Contents

`ort_binary_url` *ort_binary_url*

Description

ort_binary_url

Usage

```
ort_binary_url()
```

Value

string where to download onnxruntime from

Examples

```
## Not run: ort_binary_url()
```

`ort_codesign` *ort_codesign*

Description

for macs, signs the downloaded binaries

Usage

```
ort_codesign(lib_dir)
```

Arguments

`lib_dir`	where the libraries are

Value

invisible lib path

Examples

```
## Not run: ort_codesign(file.path(ort_install_dir(), "lib"))
```

---

ort_detect_os *ort_detect_os*

Description

ort_detect_os

Usage

```
ort_detect_os()
```

Value

str - platform

Examples

```
## Not run: ort_detect_os()
```

---

ort_download *ort_download*

Description

ort_download

Usage

```
ort_download(url, dest_dir)
```

Arguments

url	where to download from
dest_dir	where to download to

Value

invisible dest_dir

Examples

```
## Not run: ort_download(ort_binary_url(), ort_install_dir())
```

`ort_infer_raw` *ort_infer_raw*

Description

ort_infer_raw

Usage

```
ort_infer_raw(session, input)
```

Arguments

`session`	ORT session
`input`	tensor to infer on

Value

ORT output

Examples

```
## Not run: ort_infer_raw(session, input)
```

`ort_install` *ort_install*

Description

ort_install

Usage

```
ort_install()
```

Value

invisible where it was saved to

Examples

```
## Not run: ort_install()
```

`ort_install_dir` *ort_install_dir*

Description

ort_install_dir

Usage

```
ort_install_dir()
```

Value

where the install lives

Examples

```
## Not run: ort_install_dir()
```

`ort_is_installed` *ort_is_installed*

Description

ort_is_installed

Usage

```
ort_is_installed()
```

Value

boolean for if you have onnx runtime or not

Examples

```
## Not run: ort_is_installed()
```

`ort_session` *session.R*

Description

session.R

Usage

```
ort_session(
  path,
  type = "detection",
  provider = "cpu",
  cache_dir = NULL,
  threads = 0L,
  opt_level = 99L
)
```

Arguments

`path`	where the .onnx is located
`type`	detection/classificaton/segmentation
`provider`	cpu or coreml (only for apple silicon)
`cache_dir`	where coreml cache be directed
`threads`	= 0 for all, integer otherwise
`opt_level`	= 99 for all ops, 1 for basics

Value

ORT session object

Examples

```
## Not run: ort_session('./yolov8n.onnx', 'detection')
```

`print.ort_session` *print.ort_session*

Description

print.ort_session

Usage

```
## S3 method for class 'ort_session'
print(x, ...)
```

Arguments

x	session object
...	extra params

Value

invisible session

Examples

```
## Not run: print(session)
```

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