

Package: RcppProgress (via r-universe)

September 2, 2024

Maintainer Karl Forner <karl.forner@gmail.com>

License GPL (>= 3)

Title An Interruptible Progress Bar with OpenMP Support for C++ in R Packages

Type Package

LazyLoad yes

Author Karl Forner <karl.forner@gmail.com>

Description Allows to display a progress bar in the R console for long running computations taking place in C++ code, and support for interrupting those computations even in multithreaded code, typically using OpenMP.

URL https://github.com/kforner/rcpp_progress

BugReports https://github.com/kforner/rcpp_progress/issues

Version 1.0.0

Date 2024-06-03

Suggests devtools, knitr, Rcpp, RcppArmadillo, rmarkdown, roxygen2, testthat

RoxygenNote 7.3.1

Encoding UTF-8

VignetteBuilder knitr

Repository <https://kforner.r-universe.dev>

RemoteUrl https://github.com/kforner/rcpp_progress

RemoteRef HEAD

RemoteSha d851ac62fd0314239e852392de7face5fa4bf48e

Contents

test_amardillo_multithreaded	2
test_eta_progress_bar	2
test_multithreaded	3
test_sequential	4

Index**5**

 test_amardillo_multithreaded

runs the multithreaded test from the RcppProgressArmadillo example package

Description

runs the multithreaded test from the RcppProgressArmadillo example package

Usage

```
test_amardillo_multithreaded(
  max = 100,
  nb = 1000,
  threads = 0,
  display_progress = TRUE
)
```

Arguments

max	the number of loops/increments to execute
nb	a parameter controlling the number of computations executed in each loop, so the time complexity is quadratic in this parameter
threads	the number of OMP threads to use for the computation. If < 0, runs in sequential mode.
display_progress	whether to display the progress bar

Value

the computed number, or -1 if the computation was aborted

test_eta_progress_bar *runs the test from the RcppProgressETA example package*

Description

runs the test from the RcppProgressETA example package

Usage

```
test_eta_progress_bar(max = 100, nb = 1000, display_progress = TRUE)
```

Arguments

max	the number of loops/increments to execute
nb	a parameter controlling the number of computations executed in each loop, so the time complexity is quadratic in this parameter
display_progress	whether to display the progress bar

Value

the computed number, or -1 if the computation was aborted

test_multithreaded	<i>runs the multithreaded test from the RcppProgressExample example R package</i>
--------------------	-----------------------------------------------------------------------------------

Description

runs the multithreaded test from the RcppProgressExample example R package

Usage

```
test_multithreaded(max = 100, nb = 1000, threads = 0, display_progress = TRUE)
```

Arguments

max	the number of loops/increments to execute
nb	a parameter controlling the number of computations executed in each loop, so the time complexity is quadratic in this parameter
threads	the number of OMP threads to use for the computation. If < 0, runs in sequential mode.
display_progress	whether to display the progress bar

Value

the computed number, or -1 if the computation was aborted

test_sequential	<i>runs the sequential test from the RcppProgressExample example R package</i>
-----------------	--------------------------------------------------------------------------------

Description

runs the sequential test from the RcppProgressExample example R package

Usage

```
test_sequential(max = 100, nb = 1000, display_progress = TRUE)
```

Arguments

max	the number of loops/increments to execute
nb	a parameter controlling the number of computations executed in each loop, so the time complexity is quadratic in this parameter
display_progress	whether to display the progress bar

Value

the computed number, or -1 if the computation was aborted

Index

test_amardillo_multithreaded, 2
test_eta_progress_bar, 2
test_multithreaded, 3
test_sequential, 4