

Package ‘RViennaCL’

July 21, 2025

Type Package

Title 'ViennaCL' C++ Header Files

Version 1.7.1.8

Date 2019-05-28

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Description 'ViennaCL' is a free open-source linear algebra library for computations on many-core architectures (GPUs, MIC) and multi-core CPUs. The library is written in C++ and supports 'CUDA', 'OpenCL', and 'OpenMP' (including switches at runtime). I have placed these libraries in this package as a more efficient distribution system for CRAN. The idea is that you can write a package that depends on the 'ViennaCL' library and yet you do not need to distribute a copy of this code with your package.

License GPL-3

URL <http://github.com/cdeterman/RViennaCL>

BugReports <http://github.com/cdeterman/RViennaCL/issues/new>

Suggests gpuR

RoxygenNote 6.1.1

Encoding UTF-8

NeedsCompilation no

Repository CRAN

Date/Publication 2019-05-28 16:20:48 UTC

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RViennaCL-package

The ViennaCL C++ Library Headers

Description

This package provides easy access for R packages to the ViennaCL library header files. The ViennaCL home page provides the following description:

The Vienna Computing Library (ViennaCL) is a free open-source scientific computing library written in C++ and provides CUDA, OpenCL and OpenMP computing backends. It enables simple, high-level access to the vast computing resources available on parallel architectures such as GPUs and is primarily focused on common linear algebra operations (BLAS levels 1, 2 and 3) and the solution of large systems of equations by means of iterative methods with optional preconditioners.

Details

Package: RViennaCL
Type: Package
Version: 1.6.2-0
Date: 2015-05-26
License: GPL-3

ViennaCL provides free, portable C++ source libraries with a large part implemented as template headers. As done with the BH package, I have placed these libraries in this package as a more efficient distribution system for CRAN. The idea is that you can write a package that depends on the ViennaCL library and yet you do not need to distribute a copy of this code with your package.

Bug reports can also be registered at the GitHub issue tracker at <https://github.com/cdeterman/RViennaCL/issues>.

Author(s)

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References

<http://viennacl.sourceforge.net/>

Examples

#None

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