# Package 'RViennaCL'

May 28, 2019

Type Package

**Version** 1.7.1.8

**Title** 'ViennaCL' C++ Header Files

Author Charles Determan Jr.  Maintainer Charles Determan Jr <cdetermanjr@gmail.com>  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  R topics documented:  RViennaCL-package</cdetermanjr@gmail.com>		
Maintainer Charles Determan Jr <cdetermanjr@gmail.com>  Description 'ViennaCL' is a free open-source linear algebra library</cdetermanjr@gmail.com>	<b>Date</b> 2019-05-28	
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Repository CRAN  Date/Publication 2019-05-28 16:20:48 UTC  R topics documented:  RViennaCL-package	Encoding UTF-8	
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R topics documented:  RViennaCL-package	Repository CRAN	
RViennaCL-package	<b>Date/Publication</b> 2019-05-28 16:20:48 UTC	
	R topics documented:	
Index 3	RViennaCL-package	2
	Index	3

2 RViennaCL-package

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)

Charles Determan Jr.

Maintainer: Charles Determan Jr <cdetermanjr@gmail.com>

#### References

http://viennacl.sourceforge.net/

### **Examples**

#None

## **Index**

```
*Topic package
RViennaCL-package, 2

RViennaCL (RViennaCL-package), 2
RViennaCL-package, 2
```