Package 'libimath'

July 2, 2025

Type Package

Title 'Imath' Computer Graphics Linear Algebra Static Library

Version 3.1.9-4

Description Provides a static library for 'Imath'
(see <https://github.com/AcademySoftwareFoundation/Imath>),
a library for functions and data types common in computer graphics
applications, including a 16-bit floating-point type.

License BSD_3_clause + file LICENSE

SystemRequirements GNU Make, cmake

Encoding UTF-8

Config/build/compilation-database true

RoxygenNote 7.3.2

Biarch TRUE

NeedsCompilation yes

Author Tyler Morgan-Wall [aut, cre] (ORCID:
<https://orcid.org/0000-0002-3131-3814>),
Andrew Kunz [ctb, cph],
Antonio Rojas [ctb, cph],
Brecht Van Lommel [ctb, cph],
Cary Phillips [ctb, cph],
Christina Tempelaar-Lietz [ctb, cph],
Christopher Kulla [ctb, cph],
Daniel Kaneider [ctb, cph],
Dirk Lemstra [ctb, cph],
Ed Hanway [ctb, cph],
Eric Wimmer [ctb, cph],
Florian Kainz [ctb, cph],
Gregorio Litenstein [ctb, cph],
Harry Mallon [ctb, cph],
Huibean Luo [ctb, cph],
Jean-Marie Aubry [ctb, cph],
Jens Lindgren [ctb, cph],
Ji Hun Yu [ctb, cph],

Jonathan Stone [ctb, cph],
Jules Maselbas [ctb, cph],
Kazuki Sakamoto [ctb, cph],
Kimball Thurston [ctb, cph],
Larry Gritz [ctb, cph],
Liam Fernandez [ctb, cph],
Lucas Miller [ctb, cph],
Mark Sisson [ctb, cph],
Mathieu Malaterre [ctb, cph],
Mathieu Westphal [ctb, cph],
Matthäus G. Chajdas [ctb, cph],
Matthias C. M. Troffaes [ctb, cph],
Nicholas Yue [ctb, cph],
Nick Porcino [ctb, cph],
Nick Rasmussen [ctb, cph],
Nicolas Chauvet [ctb, cph],
Nigel Stewart [ctb, cph],
Owen Thompson [ctb, cph],
Peter Hillman [ctb, cph],
Piotr Barejko [ctb, cph],
Piotr Stanczyk [ctb, cph],
Ralph Potter [ctb, cph],
Richard Hobbes [ctb, cph],
Simon Boorer [ctb, cph],
Thanh Ha [ctb, cph],
Thorsten Kaufmann [ctb, cph],
Xiao Zhai [ctb, cph],
Yujie Shu [ctb, cph],
Yuya Asano [ctb, cph],
Zachary Klein [ctb, cph],
Kevin Ushey [cph]

Maintainer Tyler Morgan-Wall <tylermw@gmail.com>

Repository CRAN

Date/Publication 2025-07-02 12:10:02 UTC

Contents

`imath_rotate_point` *Rotate Point*

Description

This rotates a point around the origin at the angles specified. This function is primarily just included as an example of integrating the Imath library into a package. See imath-info.cpp in the source for the corresponding C++ code.

Usage

```
imath_rotate_point(point, angles)
```

Arguments

point	A length-3 numeric vector (x, y, z)
angles	A length-3 numeric vector (rotation angles in radians)

Value

The rotated point as an R numeric vector

Examples

```
# This rotates a point around an angle.
point = c(1.0, 0.0, 0.0)
angles = c(0.0, pi/4, 0.0)
imath_rotate_point(point, angles)
```

---

print_imath_version *Print the Imath library version info*

Description

Print the Imath library version info

Usage

```
print_imath_version()
```

Value

None.

Examples

```
# Print the Imath version provided in the static library
print_imath_version()
```

Index