

Ruby trunk - Bug #9499

The Vector.cross_product function returns the opposite vector of the expected result

02/07/2014 03:46 PM - dodo (Deyan Hadzhiev)

Status:	Closed	
Priority:	Normal	
Assignee:	marcandre (Marc-Andre Lafortune)	
Target version:		
ruby -v:	ruby 2.1.0dev (2013-09-22) [i386-mingw32]	Backport: 1.9.3: DONTNEED, 2.0.0: DONTNEED, 2.1: DONE

Description

The member function of class Vector returns the opposite vector of the expected result. The function calculates the resulting vector as if the cross_product is v X self instead of self X v. Just to be sure I tried running the exact example from the 2.1.0 documentation, where is specified:

```
Vector[1, 0, 0].cross_product Vector[0, 1, 0] => Vector[0, 0, 1]
```

The documentation is right, but running the example produces Vector[0, 0, -1].

The fix is just to swap the two arguments of the '-' operator.

The implementation is in matrix.rb line:1764

Associated revisions

Revision 72d05366 - 07/11/2014 05:19 AM - marcandre (Marc-Andre Lafortune)

- lib/matrix.rb: Fix sign for cross_product [#9499]

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/trunk@46780 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 46780 - 07/11/2014 05:19 AM - marcandre (Marc-Andre Lafortune)

- lib/matrix.rb: Fix sign for cross_product [#9499]

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Revision feea0a9e - 07/11/2014 02:08 PM - nagachika (Tomoyuki Chikanaga)

merge revision(s) r46780: [Backport #9499]

```
* lib/matrix.rb: Fix sign for cross_product [#9499]
```

git-svn-id: svn+ssh://ci.ruby-lang.org/ruby/branches/ruby_2_1@46789 b2dd03c8-39d4-4d8f-98ff-823fe69b080e

Revision 46789 - 07/11/2014 02:08 PM - nagachika (Tomoyuki Chikanaga)

merge revision(s) r46780: [Backport #9499]

* lib/matrix.rb: Fix sign for cross_product [#9499]

History

#1 - 03/03/2014 04:21 PM - nagachika (Tomoyuki Chikanaga)

- Status changed from Open to Assigned
- Assignee set to marcandre (Marc-Andre Lafortune)
- Backport changed from 1.9.3: UNKNOWN, 2.0.0: UNKNOWN, 2.1: UNKNOWN to 1.9.3: DONTNEED, 2.0.0: DONTNEED, 2.1: REQUIRED

#2 - 07/11/2014 02:09 PM - nagachika (Tomoyuki Chikanaga)

- Status changed from Assigned to Closed
- % Done changed from 0 to 100

Applied in changeset [ruby-21:r46789](#).

merge revision(s) r46780: [Backport [#9499](#)]

* lib/matrix.rb: Fix sign for cross_product [#9499]

#3 - 07/11/2014 02:10 PM - nagachika (Tomoyuki Chikanaga)

- Backport changed from 1.9.3: DONTNEED, 2.0.0: DONTNEED, 2.1: REQUIRED to 1.9.3: DONTNEED, 2.0.0: DONTNEED, 2.1: DONE

backported at r46789.