Subject: 3d matrix rotation
Posted by biomedthesis2002 on Thu, 02 Jan 2003 19:52:29 GMT
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Hi,
I'm trying to rotate a 3D matrix using trackball. I have a 3D matrix of size 512x512x25. Hwn i try to rotate it, the matrix stretches along Z-axis. Hwn displayed the image is perfectly fine. Can anybody explain why that happens and what can be done to fix it. When i tried a dataset from the example (head.dat) for the same code, the rotation takes place without any stretch.

Please help me.

Thanks in Advance!

Subject: Re: 3d matrix rotation
Posted by David Fanning on Mon, 02 Jul 2007 18:08:06 GMT
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caf.pang@gmail.com writes:

> Are there somebody know how to rotate a 3d matrix in IDL? e.g. rotate
> arr[10, 30, 80] with 29 degree angle.
> I tried rotate and rot function, but I have not got correct result.

Here is an article:

http://www.dfanning.com/math_tips/rotvolume.html

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: 3d matrix rotation
Posted by Conor on Tue, 03 Jul 2007 14:59:26 GMT
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On Jul 2, 2:08 pm, David Fanning <n...@dfanning.com> wrote:
> caf.p...@gmail.com writes:

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> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Hmm... that would have been good to know. I had the same problem and
I ended up spending a lot of time studying rotation matrices to
program a solution. Oh well :)

Subject: Re: 3d matrix rotation
Posted by David Fanning on Tue, 03 Jul 2007 15:45:57 GMT
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Conor writes:

> Hmm... that would have been good to know. I had the same problem and
> I ended up spending a lot of time studying rotation matrices to
> program a solution.

Well, you've got to ask...or search. That page has
been available since 2001. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: 3d matrix rotation

Posted by Conor on Tue, 03 Jul 2007 19:42:52 GMT
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On Jul 3, 11:45 am, David Fanning <n...@dfanning.com> wrote:
> Conor writes:
>> Hmm... that would have been good to know. I had the same problem and
>> I ended up spending a lot of time studying rotation matrices to
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>
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> David
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> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

True, but at least I learned about rotation matrices. You never know
when that might come in handy...