Subject: Re: matrix multiplication of 2 three-dimensional arrays
Posted by pgrigis on Wed, 20 Aug 2008 14:34:06 GMT
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Bennett wrote:
> On Aug 20, 8:22 am, "thomas.jagdhuber" <thomas.jagdhu...@gmail.com>
> wrote:
>> Dear experts,
>>
>> I would like to matrix multiply two matrices with dimensions
>> [3,3,1500]. means: 1500 times a matrix multiplication of 2 matrices
>> with dimension [3,3]
>> I could do this with a for loop over the dimension [1500] but i
>> suppose this is not very elegant. Is there any other way to do this
>> time-efficient.
>>
>> Best regards,
>>
>> thomas
>
> Have you searched help on product() and its dimensional keyword?
> This could be useful for you.

It is not clear to me how "product" can be used for solving
matrix multiplications.

To the original poster:

1) your problem is so small that I don't see any need for
optimization.

2) however, if you really want to optimize in case that the number of
matrices N should increase in the future, use loops over the 3x3
matrix
arrays and columns instead and treat the matrix elements as N-element
vectors. This way, more work is done per loop for large values of N.

Ciao,
Paolo