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Subject: array indexing question

Posted by [mmiller3](#) on Thu, 11 Jul 2002 22:57:02 GMT

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I'm doing some calculations to calculate mutual information and I have a question about the most efficient/slickest way to calculate the sum. I wonder if there is a loop-free way to do this.

I have three arrays, pa, pb and pab. pa and pb are both 1D arrays of length N and pab is a 2D NxN array. I want to calculate the sum of  $pab[i,j] * \log(pab[i,j] / (pa[i] * pb[j]))$ . I know that I can do things like `total( pa * alog(pa) )` when I'm dealing with a single array. Any suggestions for how to do my first sum most efficiently?

Mike

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