
Subject: Re: multiplication by a diagonal matrix
Posted by [JD Smith](#) on Fri, 03 Sep 2004 15:01:56 GMT
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On Fri, 03 Sep 2004 03:53:06 -0700, Lorenzo Busetto wrote:

> Hi all,
>
> I have the following problem: given a matrix $A(n,m)$ and a vector of
> weighting factors $w(n)$, i need to multiply each row of the matrix $A(i,*)$ by
> the corresponding weighting factor $w(i)$.
>
> I know that I can simply "transform" the w vector into a diagonal matrix
> with `diag_matrix` and then multiply it with A (e.g.: `result =`
> `A##diag_matrix(w)`), but for large values of n this solution is very slow.
>
> Can anybody suggest me a faster approach to solve this problem ?

I have had luck with the `SPRSIN` and `SPRSAB`, the numerical recipes sparse matrix routines IDL includes.

JD
