Subject: multiplication by a diagonal matrix Posted by lbusett on Fri, 03 Sep 2004 10:53:06 GMT

View Forum Message <> Reply to Message

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?

Thanks in advance for the help,

Lorenzo Busetto

Remote Sensing Lab. University of Milano-Bicocca.

Subject: Re: multiplication by a diagonal matrix Posted by David Fanning on Wed, 08 Sep 2004 13:33:07 GMT View Forum Message <> Reply to Message

Lorenzo Busetto writes:

- > Well, when I posted my message I'd never expected to increase the
- > speed 800000 times! Can it be possible?

You haven't been hanging out very long on the IDL newsgroup. It's not only possible, it is the humdrum around here. :-)

http://www.dfanning.com/code_tips/slowloops.html

Cheers,

David

--

David W. Fanning, Ph.D. Fanning Software Consulting, Inc. Coyote's Guide to IDL Programming: http://www.dfanning.com/

Phone: 970-221-0438, IDL Book Orders: 1-888-461-0155

Page 2 of 2 ---- Generated from comp.lang.idl-pvwave archive