
Subject: Re: Can anyone show me how to do this without loops?

Posted by [chase](#) on Mon, 31 Jul 1995 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

>>>> > "Liam" == Liam Gumley <liamg@ssec.wisc.edu> writes:

In article <3vilva\$5uq@spool.cs.wisc.edu> Liam Gumley <liamg@ssec.wisc.edu> writes:

Liam> Can anyone show me how to code this algorithm without loops?

Liam> Data types are:

Liam> degree is an integer

Liam> i = degree + 1

Liam> j = degree + 1

Liam> kx = fltarr(i, j) ; contains polynomial coefficients

Liam> ky = fltarr(i, j) ; contains polynomial coefficients

Liam> x0, y0, xi, yi are float variables or vectors

Liam> Here is the code:

Liam> xi = 0.0

Liam> yi = 0.0

Liam> for i = 0, degree do begin

Liam> for j = 0, degree do begin

Liam> xi = xi + kx(i, j) * x0 ^ j * y0 ^ i

Liam> yi = yi + ky(i, j) * x0 ^ j * y0 ^ i

Liam> endfor

Liam> endfor

Try this:

x = x0^indgen(degree+1) ; Unfortunately IDL does not have a recursive

y = y0^indgen(degree+1) ; filter operator (AR) to efficiently do this.

xi = y # (kx # x)

yi = y # (ky # x)

Chris

--

=====

Bldg 24-E188

The Applied Physics Laboratory

The Johns Hopkins University

Laurel, MD 20723-6099

(301)953-6000 x8529

chris.chase@jhuapl.edu
