Subject: Re: filtering images in the fourier domain
Posted by David Fanning on Mon, 17 Nov 2003 14:24:23 GMT

dino nicola writes:

> is anybody out there that can tell me how to filter row by row or column by
> column an image (actually one radiographic projection)
>
> indeed I am little confused with the FFT call in IDL
>
>
> in matlab the commands are :
>
> % matalb working example ... column by column ... H is my filter
>
> proj = fft(proj);   % p holds fft of projections
> for ic = 1:size(proj,2)
>   % filter column by column i.e. row sino by row sino
>   proj(:,ic) = proj(:,ic).*H;   % frequency domain filtering
> end
> proj = real(ifft(proj));   % p is the filtered projections

Things are done a little differently in IDL than they are
in MatLab. I know because I am actually working on a MatLab
translation today and I can't *believe* how much easier things
are in IDL! :-)

Here is an article that explains FFT filtering in IDL.

   http://www.dfanning.com/ip_tips/freqfiltering.html

Cheers,

David
--
David W. Fanning, Ph.D.
Fanning Software Consulting, Inc.
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155