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

Subject: Re: filtering images in the fourier domain
Posted by MKatz843 on Mon, 17 Nov 2003 23:42:47 GMT

> 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! :-)

I know this is a topic for a separate thread, but I'm interested to
know more about the Matlab vs. IDL differences. I always figured their
similarities made things a toss-up for small projects--but objects,
and pointers, and object graphics give IDL a big advantage in
important ways for more complex projects.

I'm in an IDL minority among colleagues who are all trained on free
Matlab academic licenses. David, as someone actually making
translations, what can you say about concrete differeces and ease of
solution between the two systems.

Thanks,
M. Katz