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Subject: Re: Non-linear optimization

Posted by [Craig Markwardt](#) on Tue, 12 Nov 1996 08:00:00 GMT

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hto@kaiwan.com (Howard Onishi) writes:

>  
> Does anyone know of a source for non-linear optimization codes (in IDL  
> of course)? I am particularly interested in image restoration  
> techniques such as maximum entropy deconvolution. The problem size is  
> on the order of several hundred variables.  
> Thanks,  
> Howard Onishi

You might try an interesting new technique based on "pixons".  
Dr. R. Puetter developed this technique primarily for deconvolution of  
astronomical images, but you should be able to apply it to most  
problems. His webpage:

<http://cassfos01.ucsd.edu:8080/puetter.html>

has references to the IDL source code as well as published articles  
which you can download and read. The technique is iterative, a  
portion of which is the standard maximum likelihood deconvolution.  
You could probably strip this part out if you wanted to.

There are some restrictions for non-scientific use.

Best luck,  
Craig

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internet: [craigm@astrog.physics.wisc.edu](mailto:craigm@astrog.physics.wisc.edu) | to solve ..." -MathNet  
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