Subject: Re: Constrained Optimization routine
Posted by James Kuyper on Fri, 26 Aug 2005 15:05:49 GMT
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Gianluca Li Causi wrote:
> Hi all,
> I'm wondering if anybody knows an IDL routine to perform minimization
> of a nonlinear function given functional constraints on the variables.
>
> I mean: I would minimize a nonlinear F(x0,...,xn) subject to the
> constraint G(x0,...,xn)=0, where G is another nonlinear function of the
> same variables.
>
> I know the very good TNMIN routine from Craig B. Markwardt, it can deal
> very well with simple boundary constraints on each variable (e.g. xi >
> low_boundary or xi < high_boundary), but it is not possible to define a
> limit constraint which is a function of more variables.

Have you tried CONSTRAINED_MIN()? It sounds like exactly what you're looking for.