
Subject: Re: Minimization Problem

Posted by [SonicKenking](#) on Tue, 27 Mar 2012 12:44:32 GMT

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

On Mar 27, 5:52 pm, IDL beginner <moxam...@gmail.com> wrote:

> Dear All,

>

> I need your help to solve the following problem using IDL. I need to
> come up with an efficient way to find the minimum of a function. The
> function is:

>

>
$$F(b) = (1 / \text{la_determ}((1 - b) * \text{la_invert}(v2) + b * \text{la_invert}(v1))) /$$

>
$$((\text{la_determ}(v1) ^ b) * (\text{la_determ}(v2) ^ (1 - b)))$$

>

> Where v1 and v2 are given matrices and $0 < b < 1$. So, what I need is
> an efficient way of finding the value b for which the F(b) is
> minimum.

>

> I know that I can calculate for example 1000 values of b and for each
> value I can find F(b) and search for the minimum. But this way is not
> efficient in terms of accuracy and execution time.

>

> Any help is appreciated.

>

> MD

You may wanna try TNMIN from the MPFIT package.
