
Subject: Minimization Problem

Posted by [moxament](#) on Tue, 27 Mar 2012 06:52:12 GMT

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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
