

Levenberg Marquardt related question

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hi all,

I am writing to ask a question that might be simple..but after a long day..probably my brains aren't functioning..so I'm trying to take the easy way out..but seeking someone else's help.

well I'm trying to fit a model into experimental data. and I have to use the Levenberg-Marquardt algorithm to minimize the fit and find the best set of constants I can use.

as you know, all the available LM algorithm will take the x and y data I have, and try to estimate the function $f(x)$ at every x_i and for every set a_i of constants.

anyways...to have the algorithm work I need to provide a function that returns the values of $dyda$ (as the numerical recipes book call it)..

but the problem I'm facing is that the function I'm solving is not a function that has an analytical solution...it's a complex differential equation that we solve using a Runge-Kutta method...so how am I supposed to find the various $dyda$ that I need...as I cannot actually specify them.

well I hope someone can help me with that..

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