
Subject: Help with least squares on non-linear function

Posted by [stefan.meingast](#) on Sat, 24 Aug 2013 19:14:55 GMT

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Hey

I finally want to enjoy at least some time of the weekend, but I am stuck at one problem tonight for which I still would like to find a solution.

I have a bunch of measurements in an array y which depending basically on another variable x . I want to do a least-squares fit to a non-linear function, which would be very easy if I just wanted e.g. a polynomial fit. My problem is now that there is another parameter coming into play (here: k), so the function I want to fit in the end looks like this (though the order should be variable in the end which in this example is set to 3):

<https://dl.dropboxusercontent.com/u/16787607/formula.jpg>

where the a_i are the coefficients I want to determine.

I have been trying to figure out what the best way might be to do such a fit, but this turns out to be much more complicated than I thought...

I hope some of you may have a hint

many thanks!!!
:)
