
Subject: Re: 2-d fitting

Posted by [R.G. Stockwell](#) on Wed, 12 Nov 2008 18:00:06 GMT

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"xqinshan" <xqinshan@tom.com> wrote in message

news:2dec9a37-fe3b-4999-a80b-e47d06c5e13a@v22g2000pro.google groups.com...

> Hi,

> I have a set of data z_i at indepent vaiables (x_i, y_i) . I want to get

> coefficients of a fiting function such as $f(x,y)=a*f_1(x,y)+b*f_2(x,y)$

> $+c*f_3(x,y)+...$, $f_1(x,y), f_2(x,y)...$ are given by myself. If $f_1(x,y), f_2$

> $(x,y)...$ are polunomials, we can use sfrit or mpfitfun to do it. Are

> there any routins to do it?

>

> thanks,

>

> Xqinshan

Just write out the A matrix (in $Ax = b$, where x is unknown, b is your data,) and fire it off to the svd routines.

The 'two dimensions' are just columns.

For instance:

1, x,y,xy,x^2,y^2

Cheers,
bob
