
Subject: Nearest-neighbor interpolation and steepest-descent method

Posted by [g.nacarts](#) on Fri, 09 May 2014 09:07:44 GMT

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Hi

Does anyone know if there is available a function to perform Nearest-neighbor interpolation?
Also a function that performs steepest-descent method?

With Thanks

G.

Subject: Re: Nearest-neighbor interpolation and steepest-descent method

Posted by [Russell Ryan](#) on Mon, 12 May 2014 20:41:15 GMT

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Nearest neighbor interpolation? yes. The IDL function griddata does this as an option.

steepest descent method? Which one, there are at least two things called this. If you're looking for something to find the minimum of a function, then I think you should look at powell or amoeba (both are native to IDL). While neither are strictly what you're asking for, they're pretty good. And for what it's worth, I've always been discouraged from using a strict steepest descent method, because it can have loads of problems with certain types of functions. Well, for that matter, I think you should also look at tnmin.pro, which is truncated newton and is implemented by Craig Markwardt. If you have analytic derivatives, then you can also try dfpmin.pro (native to idl).

If you want the steepest descent method of approximating integrals, then I can't help you.

Good luck,

R

On Friday, May 9, 2014 5:07:44 AM UTC-4, g.na...@gmail.com wrote:

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