
Subject: Re: inverse gradient

Posted by [pgrigis](#) on Tue, 02 Dec 2008 22:44:57 GMT

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On Dec 2, 2:42 pm, erano <eran.o...@gmail.com> wrote:

> On Dec 2, 8:59 pm, Paolo <pgri...@gmail.com> wrote:

>

>

>

>> erano wrote:

>

>>>> But you haven't really described how you got dX and dY and

>>>> what is the potential....

>

>>> Well, dX and dY are based on other parameters gradient. I based on

>>> MATLAB code. In MATLAB, we can use "\" for doing $Ax=Y$: $x=A\backslash Y$, where A

>>> is M*N matrix. I can attach the code.

>

>> My question was what are dX and dY? What is the potential?

>

>> In IDL you can do $x=A\#invert(Y)$ that I guess is similar

>> to what matlab does (modulo transposition of the arrays).

>

>> But if A is large and sparse, then use the sparse methods suggested.

>

>> Paolo

>

>>> Eran- Hide quoted text -

>

>> - Show quoted text -

>

> The potential ia not relevant. The dX and dY can be based on any 2D

> function.

I am still not convinced that total wouldn't work in that case...

maybe increasing the sampling by a factor 2 or 3 if memory allows...

again it depends what your final goal is, of which we haven't a clue.

> And yes, A is (very) large and sparse, but the sparse

> methods are only for N*N matrix...while A is M*N.

OK, you are totally right that IDL sparse-array

function are somewhat... sparse ;-)

I think you can buy an add-on for this kind of things,

but I never used it.

Maybe somebody out there has written an SVD program that

accept non-square, sparse arrays?

Ciao,
Paolo

>
> Eran
