Subject: Re: inverse gradient
Posted by erano on Fri, 28 Nov 2008 09:31:24 GMT

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On Nov 27, 5:24 pm, Jeremy Bailin <astroco...@gmail.com> wrote:
> On Nov 27, 3:27 am, erano <eran.o...@gmail.com> wrote:
>
>>> "inverse" meaning what for a vector-field?
>
>>> Paolo
>
>> "inverse" is the opposite operation for gradient.
>> The inputs are 2D gradient images (dX and dY), where high values are
>> large changes in the "inverse gradient" image, and zeros are stable
>> (no changes) in the "inverse gradient".
>
>> Eran
>
> I would never use this in production code, but here's a hack that will
> give you something to look at:
>
> scalarfield = total(dX, /cumulative, 1) + total(dY, /cumulative, 2)
>
> The real solution is to replace those totals with actual integrals.
>
> -Jeremy.

Thanks,

It's the simplest way. it's basicly works but with errors.
I found few articlies about "inverse gradient" on the web, and the
problem is very complex and the simple MATLAB function (from matlab
exchange) is expensive (memory).
The main problem is to solve A*F=V where A is M*N matrix, V is vector
and we look for F.
I used LA_LEAST_SQUARES (with all possible methods) for solve this
but it is slow and have memory problem. please note that most of A
matrix are zeros...

Any ideas?