
Subject: Re: Image Inpainting

Posted by [Jean H.](#) on Wed, 21 Jan 2009 12:42:49 GMT

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erano wrote:

> Hello,
> I'm looking for a simple IDL code for Image Inpainting.
>
> Input is an image (2D) with small missing areas, and I wish to add
> values to the unknowm pixels, based on the known pixels.
>
> Thanks
> Eran

Hi Eran,

there are a lot of ways of filling missing pixels... one of them is to have a 3*3 (or else) window that moves over your image. When the central pixel is a "missing" one, get the value of the pixels in the window and assign the majority value to the missing pixel... this works well for classification, you might want to do an average instead if you have continuous values.

The trick is not to assign the missing value to any pixel, even if it is the majority value, so you would have to iterate it several times... And of course, your window doesn't need to move over the whole image, just select the missing pixels via Where()).

Jean

Subject: Re: Image Inpainting

Posted by [erano](#) on Wed, 21 Jan 2009 17:19:24 GMT

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On Jan 21, 3:42 pm, "Jean H." <jghas...@DELTHIS.ucalgary.ANDTHIS.ca> wrote:

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> of course, your window doesn't need to move over the whole image, just
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> Jean

Hi,
The missing pixels are in a groups so I can not do so.
For now I'm using the MPFIT2DFUN.PRO (Craig's code
<http://www.physics.wisc.edu/~craigm/idl/idl.html>)

I'm using a binary mask for the WEIGHTS, but the result is not smooth
at all.

If I take the missing edge then I must to keep the fit function (f) to
be also fit on the 2D gradient function (df/dx and df/dy) on the
bounds.

Can I add these rules to the MPFIT2DFUN ?

Subject: Re: Image Inpainting
Posted by [Gianluca Li Causi](#) on Mon, 26 Jan 2009 12:29:23 GMT
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On Jan 21, 6:19 pm, erano <eran.o...@gmail.com> wrote:

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> wrote:

>
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>> erano wrote:

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Dear Eran,
image inpainting is a difficult task: I don't know what kind of images
you're qpeaking of, but in general you should also fit the laplacian
at the border (e.g.: consider to have a group of missing pixels on a
circle: your inpainting should propagate the curve at the border, in
order to reconstruct the circle). More, you should also propagate the
texture, or the noise, in the image.
If a totally *manual* intervention is ok for you, I suggest to use the
very very powerful "healing tool" of PhotoShop CS3, which is able to
do al that with one click.
Try it, sometimes it is really incredible.

Hope to be of help
bye
Gianluca

Subject: Re: Image Inpainting

Posted by [erano](#) on Tue, 27 Jan 2009 08:37:46 GMT

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> do al that with one click.
> Try it, sometimes it is really incredible.
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> Hope to be of help
> bye
> Gianluca- Hide quoted text -
>
> - Show quoted text -

Thanks, but I wish to solve it by IDL. I found few algorithmes for
MATLAB and a I wish to translate one of them to IDL. But if anuone did
it allready, I will be happy to share.

Eran
