Rob writes:

> I have been messing around a bit with blurring an image to be used for
> an intro for a talk. What I want to do is display a series of color
> images over time that begin with a very blurry version first and end
> with the sharp version. My knowledge of image processing is limited so
> I'm hoping that you experts can help me out a bit. The original sharp
> image is a PNG file. I use TV to display the image in a window that is
> the same size as the image. I've tried the MEDIAN filter where the
> width decreases with each image in the sequence but I'm not happy with
> the band of unblurred image that extends around the perimeter of the
> image. EDGE_TRUNCATE takes care of that in SMOOTH but the effect is
> still not great. There seems to be a "mixing" of colors when I use
> SMOOTH that isn't present when I use MEDIAN which is also annoying.
> I'm looking for a very smooth and relatively seamless transition.
>
> If it helps the code below shows what I've been doing. Any suggestions
> would be appreciated.

Well, I thought it looked pretty good with the PNG file I
choose, but if you want to do the MEDIAN thing, I think
the professional image expert embeds their image in a
larger image so that edge effects are ameliorated. Then,
when they are finished, extracts the processed image from
the larger image etc. (I know, but if it doesn't involve
iTools, you and me, babe, are the only ones interested.)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/

Daer Bob,
I have written an IDL application (IQM) for interactive image
processing and the IDL's Median, Smooth and Lee Filtering is

implemented without edge effects.
More info and a tutorial of the application can be found at:
http://www.uni-graz.at/people/ahammer/IQM/index.htm
If you send me an e-mail, I can give you the download password.

Best wishes,
Helmut Ahammer

helmut.ahammer@meduni-graz.at

> Rob writes:
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>> I have been messing around a bit with blurring an image to be used for
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>
> Cheers,
>
> David

Subject: Re: blurring and deblurring for effect
Posted by Rob Dimeo on Wed, 23 Feb 2005 14:01:54 GMT
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David,

The problem is that the smoothed image shows some strange colors. Since the image that I'm using is "more or less" a blue-white color scheme, I ditched the image colors (converted my image to gray-scale), loaded in color table 1, then performed the smoothing operation. This resulted in the look that I wanted. Unfortunately I don't know how to accomplish this for the general case for an image with its *own* colors like my PNG image.

Of course this begs the question: How come IDL doesn't *know* what's aesthetically pleasing to me? ;)

Rob
David Fanning wrote:

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> Well, I thought it looked pretty good with the PNG file I
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> larger image so that edge effects are ameliorated. Then,
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> the larger image etc. (I know, but if it doesn't involve
> iTools, you and me, babe, are the only ones interested.)
>
> Cheers,
>
> David

Subject: Re: blurring and deblurring for effect
Posted by K. Bowman on Wed, 23 Feb 2005 14:41:36 GMT
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In article <1109167314.650513.117960@o13g2000cwo.googlegroups.com>,
 "Rob" <robert.dimeo@nist.gov> wrote:

> David,
>
> The problem is that the smoothed image shows some strange colors.
> Since the image that I'm using is "more or less" a blue-white color
> scheme, I ditched the image colors (converted my image to gray-scale),
> loaded in color table 1, then performed the smoothing operation. This
> resulted in the look that I wanted. Unfortunately I don't know how to
> accomplish this for the general case for an image with its *own* colors
> like my PNG image.

This works pretty well for me.

infile = '~/Pictures/dave_index.jpg'

```
READ_JPEG, infile, image
TV, image, TRUE = 1
cr = ''
READ, cr, PROMPT = 'Enter <cr> to continue ...'
image = SMOOTH(image, [1, 20, 20], /EDGE)
TV, image, TRUE = 1
```

The picture is from http://www.dfanning.com/images/dave_index.jpg.

After smoothing, Dave looks much like he did at the end of the last
Expert Programmers Association meeting.

Ken Bowman

Subject: Re: blurring and deblurring for effect
Posted by K. Bowman on Wed, 23 Feb 2005 21:09:05 GMT
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In article <1109167314.650513.117960@o13g2000cwo.googlegroups.com>,
 "Rob" <robert.dimeo@nist.gov> wrote:

> David,
>
> The problem is that the smoothed image shows some strange colors.
> Since the image that I'm using is "more or less" a blue-white color
> scheme, I ditched the image colors (converted my image to gray-scale),
> loaded in color table 1, then performed the smoothing operation. This
> resulted in the look that I wanted. Unfortunately I don't know how to
> accomplish this for the general case for an image with its *own* colors
> like my PNG image.

Apologies if this shows up twice.

This seems to work pretty well for me to blur a truecolor image:

```
infile = '~/Pictures/dave_index.jpg'
READ_JPEG, infile, image
TV, image, TRUE = 1
cr = ''
READ, cr, PROMPT = 'Enter <cr> to continue ...'
image = SMOOTH(image, [1, 20, 20], /EDGE)
TV, image, TRUE = 1
```


The sample image I used is

  http://www.dfanning.com/images/dave_index.jpg

After blurring David looks much like he did at the end of the last IDL
Expert Programmers Associate meeting.

Ken Bowman

Subject: Re: blurring and deblurring for effect
Posted by Rob[1] on Thu, 24 Feb 2005 02:01:25 GMT
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Thanks Ken. That's just what I wanted.

Rob

Kenneth Bowman wrote:
> This works pretty well for me.
>
> infile = '~/Pictures/dave_index.jpg'
> READ_JPEG, infile, image
> TV, image, TRUE = 1
> cr = ''
> READ, cr, PROMPT = 'Enter <cr> to continue ...'
> image = SMOOTH(image, [1, 20, 20], /EDGE)
> TV, image, TRUE = 1