
Subject: Grayscale AND Binary Image
Posted by [idlfreak](#) on Thu, 07 Mar 2002 06:33:05 GMT
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HI,
I have an image that's greyscale and i performed thresholding and morphological operations on that image. When i try to perform AND operation on the greyscale and this binary image obtained after processing, i don't get a clear output. With the binary image that is processed I should be able to obtain the same region in the grayscale image.

The original grayscale image can viewed at

http://www.geocities.com/r_akhila/original.jpg

The (binray)threshholded image can be viewed here
http://www.geocities.com/r_akhila/thresholded.jpg

The original AND thresholded image can be viewed here
http://www.geocities.com/r_akhila/final.jpg

Please tell me how to do that.

Thanks in advance for any help.

Cheers,
Akhila

Subject: Re: Grayscale AND Binary Image
Posted by [Wonko\[2\]](#) on Thu, 07 Mar 2002 22:23:00 GMT
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idlfreak@yahoo.com (Akhila) wrote:

- > I have the same size window for both the images. Is there any way
- > that i can get the region(pixel value) from the binary image and
- > obtain the same pixels in the original image. If that's possible
- > it'd be more ideal as that's the result i want.
- > Help me please !!!

I'm not sure what you mean... do you want to get the indices of the pixels which are set to 1 in your mask image? Then have a look at the WHERE() function.

For example, instead of

```
new_img = original_img * mask_img
```

you can do it that way:

```
index = where( mask_img eq 1 )  
new_img = 0 * original_img  
new_img[index] = original_img[index]
```

or:

```
index = where( mask_img eq 0 )  
new_img = original_img  
new_img[index] = 0
```

Alex

--

Alex Schuster Wonko@netcologne.de
alex@pet.mpin-koeln.mpg.de

PGP Key available

Subject: Re: Grayscale AND Binary Image
Posted by [idlfreak](#) on Fri, 08 Mar 2002 20:45:20 GMT
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yes. i want to get the indices of the pixels in the
masked region and plot them in the original image.

The idea you had suggested does the same thing as *

i'm not sure if i can get the indices only (pixel
location and not the value of the pixel) in a variable
and then use those values to mask the original image
and set the values of rest of the pixels to 0 in the
original image.

I hope i'm clear this time.

Thanx for ur time.

-Akhila.

Wonko@netcologne.de (Alex Schuster) wrote in message
news:<8KQj1SOed8B@netcologne.de>...
> idlfreak@yahoo.com (Akhila) wrote:
>

```
>> I have the same size window for both the images. Is there any way
>> that i can get the region(pixel value) from the binary image and
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>
> index = where( mask_img eq 0 )
> new_img = original_img
> new_img[index] = 0
>
>
> Alex
```

Subject: Re: Grayscale AND Binary Image
Posted by [Alex Schuster](#) on Mon, 11 Mar 2002 10:32:25 GMT
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Akhila wrote:

```
>> For example, instead of
>>
>> new_img = original_img * mask_img
>>
>> you can do it that way:
>>
>> index = where( mask_img eq 1 )
>> new_img = 0 * original_img
>> new_img[index] = original_img[index]
>>
>> or:
>>
```

```
>> index = where( mask_img eq 0 )
>> new_img = original_img
>> new_img[index] = 0
>>
>> Alex
```

> yes. i want to get the indices of the pixels in the
> masked region and plot them in the original image.
>
> The idea you had suggested does the same thing as *

Correct, it was just indented as an example for where().

> i'm not sure if i can get the indices only (pixel
> location and not the value of the pixel) in a variable
> and then use those values to mask the original image
> and set the values of rest of the pixels to 0 in the
> original image.
>
> I hope i'm clear this time.

Sorry, I still don't understand. Why doesn't the code above already do what you want?

And the indices `_are_` already there, they are in the index array. If you need them as coordinates, you can calculate them like this:

```
x_coord = index mod x_dim
y_coord = index / y_dim
```

Alex

--

Alex Schuster Wonko@planet-interkom.de
alex@pet.mpin-koeln.mpg.de

Subject: Re: Grayscale AND Binary Image
Posted by [Dick Jackson](#) on Mon, 11 Mar 2002 15:41:27 GMT
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"Alex Schuster" <alex@pet.mpin-koeln.mpg.de> wrote in message
news:3C8C87B9.AB9F06DC@pet.mpin-koeln.mpg.de...

> And the indices `_are_` already there, they are in the index array. If you
> need them as coordinates, you can calculate them like this:
>
> x_coord = index mod x_dim
> y_coord = index / y_dim

That may be a typo. In this kind of calculation, you would usually have:

$$y_coord = index / x_dim$$

^

Cheers,

--

-Dick

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