
Subject: any suggestion about merging small regions
Posted by [Xiaoying Jin](#) on Wed, 08 May 2002 05:25:43 GMT
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Hi, there,

After segmentation, I got a lot of regions contiguous with each other.

As Ted Cary descibed in the previous post,
"It is something like a grayscale photograph of a jar of marbles. All the marbles are touching each other, so there is no background. Two marbles of the same color may not belong to the same region.

You want to give a unique label to each marble/region."

But now here is the problem: Even if the gray levels of the regions are fairly uniform, there are a lot of holes in a big region assigned to other different regions. So if I try to find edges between different regions, the output will get complicated. To solve this problem, I want to merge regions with small area into the adjacent regions.

Any suggestion about how to implement it in IDL?

Best regards,

Xiaoying Jin

Subject: Re: any suggestion about merging small regions
Posted by [Ted Cary](#) on Wed, 08 May 2002 12:14:23 GMT
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How about MORPH_CLOSE?

TC

"Xiaoying Jin" <xje4e@mizzou.edu> wrote in message
news:abacij\$lg\$1@dipsy.missouri.edu...

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>

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> Best regards,
>
> Xiaoying Jin
>
>
>

Subject: Re: any suggestion about merging small regions
Posted by [Xiaoying Jin](#) on Wed, 08 May 2002 17:24:03 GMT
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"Ted Cary" <tedcary@yahoo.com> wrote in message
news:abb87e\$5uo\$1@netnews.upenn.edu...

> How about MORPH_CLOSE?
>
> TC

I tried that, it helps, but not good enough. If I choose the small structure
element, there is still lots of small
regions left. If I choose the large structure element, it will merge some
near large regions together and
affects the shape of the regions.

Regards,

Xiaoying Jin

Subject: Re: any suggestion about merging small regions
Posted by [Ted Cary](#) on Thu, 09 May 2002 15:29:33 GMT
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"Xiaoying Jin" <xje4e@mizzou.edu> wrote in message

news:abacij\$lg\$1@dipsy.missouri.edu...

>

- > But now here is the problem: Even if the gray levels of the regions are
- > fairly uniform,
- > there are a lot of holes in a big region assigned to other different
- > regions. So if I try to
- > find edges between different regions, the output will get complicated.
- > To solve this problem, I want to merge regions with small area into the
- > adjacent regions.
- >

MORPH_CLOSE did not work for this? Out of curiosity, did you apply it to your original image or to the bi-level region mask?

You might try to SMOOTH the image, or you can reduce the colors in it. You mentioned this is an unsigned integer image; that's a lot of gray levels, do you need them all? If the regions are truly almost uniform in gray level, reducing the number of grays might get rid of the noise.

TC

Subject: Re: any suggestion about merging small regions
Posted by [Ted Cary](#) on Thu, 09 May 2002 16:20:58 GMT
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"Ted Cary" <tedcary@yahoo.com> wrote in message
news:abe81u\$ggg\$1@netnews.upenn.edu...

- > MORPH_CLOSE did not work for this? Out of curiosity, did you apply it to
- > your original image or to the bi-level region mask?

Sorry, I think I should have been recommending MORPH_OPEN instead of MORPH_CLOSE. Hopefully, you figured it out.

Fanning, keep your coyote on a leash...

TC

Subject: Re: any suggestion about merging small regions
Posted by [Ted Cary](#) on Thu, 09 May 2002 18:30:59 GMT
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Never mind. I was more right the first time.

Subject: Re: any suggestion about merging small regions
Posted by [David Fanning](#) on Fri, 10 May 2002 03:17:35 GMT
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Ted Cary (tedcary@yahoo.com) writes:

> Never mind. I was more right the first time.

These are unmistakable coyote tracks. :-)

Cheers,

David

--

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