
Subject: Re: about label regions

Posted by [Xiaoying Jin](#) on Tue, 07 May 2002 05:53:42 GMT

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Thanks for your suggestion.

That's what I want to do. I previously thought of this kind of method (label region after edge detection), but using the normal edge detection we can not localize the edge to one pixel wide. I think your suggestion is very helpful. I will try that.

Besides, what is the function "Distance"?

Regards,

Xiaoying Jin

"Ted Cary" <tedcary@yahoo.com> wrote in message
news:3CD71905.25D5A98D@yahoo.com...

Thanks for your suggestion.

> If the gray levels of the regions are fairly uniform, do some type of edge
> detection. Mask anything that is not an edge, then you will have a mask
of

> only region interiors. This mask is a bi-level image that you can analyze
with

> one call to LABEL_REGION.

>

> For edge detection of regions of uniform gray level, you might try a
grayscale

> analog of a gradient morph to find the margins. Try something like this
for

> your image:

>

> rad = 1 ; Radius of structuring element. Change for fatter margins.

> disk = Shift(Distance(2*rad+1), rad, rad) LE rad ; Create a disk
structuring

> element.

> imageDilated = Dilate(image, disk, /GRAY) ; Dilate the image with the
disk.

>

> wh = Where(image NE imageDilated) ; Find subscripts of margins.

>

> marginMask = image ; Just create another image of same size as original.

> marginMask[*] = 255 ; Pretend everything is in the interior.

> marginMask[wh] = 0 ; Set margins to 0.

>

> If you TVSCL the marginMask, you should see all regions of white with
black

> borders. This is a bi-level image that can be used with LABEL_REGION.
>
> The disadvantage of this technique is that "brighter" region margins will
> intrude by one pixel into dimmer regions because of the dilation, but at
least
> it illustrates the method. Keep in mind that this assumes your regions
are
> each monotone, as stated in the original post.
>
> Good luck,
>
> TC
>
>
>
>
