Subject: Re: connected component labeling problem in a graylevel image without background

Posted by Julia on Fri, 11 Oct 2002 17:15:14 GMT

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Yes, David, I think you've got the point.

> How many marbles do I have
> with a gray-scale level of X?
Variable. A graylevel at most times corresponds to a marble. But
at some graylevels, maybe it has two, three or more marbles each graylevel.

> but if you have N gray-levels and you have a tool that works with
> bi-level images only, don't you pretty much have to use
> your tool N times to get what you want?
Right, if we use label_region function which works only on binay image.
But I think if we know how they do label_region and extend the algorithm on
the graylevel image,
maybe we only needs to trace the image less than twice.
I am not sure if this is practical.

Cheers,

Julia

"David Fanning" <david@dfanning.com> wrote in message
news:MPG.1810ac85dd5a4b049899de@news.frii.com...
> Julia (julia65201@yahoo.com) writes:
>
>> But I think you kind of misunderstood my problem, maybe due to my not
very
>> clear expression. :)
>>
>>>> " The problem is like a grayscale photograph of a jar of
>>>> marbles. Each marble is uniformly gray. 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.
>>>> I want to give a unique label to each marble/region."
>>
>> In my problem, all the marbles are touching each other, so there is no
>> background there. I do not think I can use
>> label_region on the original image. So I do like this:
>> First, use HISTOGRAM to get a mask of regions at each gray level, and
then
>> use LABEL_REGION on each mask.

>>
>> If there are n gray levels in the image, I need do label_region n times.
I
>> think this is not very efficient. I am not sure if I can solve this kind
of
>> problem more efficiently in IDL, I call it "connected component labeling
>> problem in a graylevel image without background".
>>
>> Any suggestion there?
>
> I'd never be confused with a mathematician, but if you
> have N gray-levels and you have a tool that works with
> bi-level images only, don't you pretty much have to use
> your tool N times to get what you want? At least if I
> understand the question to be: How many marbles do I have
> with a gray-scale level of X?
>
> Cheers,
>
> David
>
> P.S. Let's just say I'd bet some good money even the
> HISTOGRAM function can't get us out of this one. :-)
>
> --
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