Subject: Image Segmentation
Posted by miller on Wed, 10 May 1995 07:00:00 GMT
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I was wondering if there are any image segmentation routines available for IDL.
I have recently begun learning IDL and have yet to come across anything that would be useful for this procedure. Any information/help would be appreciated.

Thanks in advance,
Dave Miller

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Work
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Subject: Re: Image Segmentation
Posted by helaha on Thu, 25 Nov 2004 09:25:15 GMT
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Segmentation of images (grey or color) is not an easy task to be done in a short time. Very often the specific problem needs the application of several image processing steps in a varying way. My personal approach is very often to generate a binary representation of the feature, which should be segmented using threshold, edge detection or other methods. The binary image is treated with morphological operators and/or scrapping small areas or hole filling. This binary

image can be used as a mask for the original image.
Pravesh, I have tried several methods to solve your segmentation problem of your sample image, but unfortunately I haven't found a satisfactorily way until now. Actually I want to incorporate a k-mean clustering algorithm for IQM. This algorithm is an adaptive way of segmentation and will be implemented first with grey level clustering.

Best Regards,
Helmut Ahammer
Inst. of Biophysics
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praveshsubramanian@yahoo.com (Pravesh) wrote in message news:<e5a50c3b.0411241352.277b6176@posting.google.com>...
> Hello All:
> The edge detection operators, robert and sobel dont seem to work too
> fine for me. I am working with MRI images of human body and the
> problem is that the regions (and of course, their boundaries) in the
> images dont really stand out. As a result, if i use region-grow,
> inevitably there is a leakage into some other region.
> this problem is inherent as the human tissues are really not
> distributed in an orderly manner. Filtering : tried all of them! they
> all modify properties of the image (such as the number of pixels
> belonging to intensity ranges).
>
> the idea is to work on the raw image and get data out of it (smoothing
> et al simply change the image properties). but it seems that we need
> proper edge detection.
>
> i think region_grow routine using thresholding works, but not for all
> images for the same reason cited above. standard dev. multiplier is

> way too aberrant, sometimes it simply covers the entire image instead
> of a region.
>
>
> What options does that leave me for? hm... either i write my own
> routine using hints from u all.. or figure out a way using IDL
> routines..
>
> the idea is simply click on one region and only pixels from that
> region get highlighted. the standard deviation of the pixel
> intensities is around 80.
> (magic!!!)
>
> does someone have a magic wand???
>

> Regards
>
> PRavesh