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
Medical University of Graz

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