Subject: Re: Image outline
Posted by David Fanning on Wed, 29 May 2002 21:18:19 GMT
View Forum Message <> Reply to Message

Akhila (idlfreak@yahoo.com) writes:

> I have an image of a vertebra. The image is posted in the link below:

>

> www.geocities.com/r akhila/final.tif

>

- > I have been trying to get a good sigle pixel wide contour of the
- > vertebra from the image. I tried different methods like edge
- > detection, thresholding, erosion, dilation and thinning. I still did
- > not get a good one. Can anybody please suggest some techniques that
- > will be helpful to obtain a contour of the image. Please help me.

I have a little routine named FIND_BOUNDARY that I wrote based on some code sent to me by Richard Adams and written by his graduate student Guy Blanchard. The idea is to find a one pixel wide boundary around a region of interest given by a set of indices.

http://www.dfanning.com/misc/find_boundary.pro

It happens to work particularly well with your image. I did this:

```
image = Read_Tiff('final.tif')
s = Size(image, /Dimensions)
indices = Where(image GT 0)
pts = Find_Boundary(indices, XSize=s[0], YSize=s[1])
Window, XSize=s[0], YSize=s[1]
PLOTS, pts, /Device
```

Cheers.

David

--

David W. Fanning, Ph.D. Fanning Software Consulting

Phone: 970-221-0438, E-mail: david@dfanning.com

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Image outline

```
Dr. Fanning, I wasn't trying to get that. I think i wasn't clear as
well. the original image looks like this:
www.geocities.com/r akhila/8bit.tif
I tried to get the outline of the vertebra there, i could manage some
6 vertebra. I'm trying to get only the outine and clear the other
stuff. The image i got looks like this
www.geocities.com/r akhila/output.gif
I need something which looks pretty close to this output but it has
small polygons which i'm trying to clear and that's what i'm not able
to do.
www.geocities/r akhila/expect.gif
Thanks in advance...
-Akhila.
David Fanning <david@dfanning.com> wrote in message
news:<MPG.175ef3896afb48f989901@news.frii.com>...
> Akhila (idlfreak@yahoo.com) writes:
>
>> I have an image of a vertebra. The image is posted in the link below:
>>
>> www.geocities.com/r_akhila/final.tif
>>
>> I have been trying to get a good sigle pixel wide contour of the
>> vertebra from the image. I tried different methods like edge
>> detection, thresholding, erosion, dilation and thinning. I still did
>> not get a good one. Can anybody please suggest some techniques that
>> will be helpful to obtain a contour of the image. Please help me.
>
> I have a little routine named FIND BOUNDARY that I wrote based
> on some code sent to me by Richard Adams and written by his
> graduate student Guy Blanchard. The idea is to find a one
> pixel wide boundary around a region of interest given by
> a set of indices.
>
    http://www.dfanning.com/misc/find boundary.pro
>
>
> It happens to work particularly well with your image.
> I did this:
>
    image = Read_Tiff('final.tif')
>
    s = Size(image, /Dimensions)
    indices = Where(image GT 0)
```

```
pts = Find_Boundary(indices, XSize=s[0], YSize=s[1])
```

- Window, XSize=s[0], YSize=s[1] >
- PLOTS, pts, /Device >

>

> Cheers,

> David