
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 single 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

Posted by [idlfreak](#) on Thu, 30 May 2002 02:30:27 GMT

[View Forum Message](#) <> [Reply to Message](#)

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 outline 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.com/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 single 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
```
