Subject: Re: Cell boundary program?
Posted by Ben Tupper on Mon, 07 Aug 2000 07:00:00 GMT
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Hello,

There are two methods you can use, convolution or contouring.

Each has its advantages. The contouring method is quick, but it doesn't return
the location of every pixel that makes up the cell boundary. You're best bet to
contour a binarized version of the image.

The other method, convolution is also quick, but the returned indices are in
scan-line order. In this case, all the boundary pixels are included. This
method was suggested by ... uhoh, I forgotten who it was right now, sorry.
Here's the steps as described on the newsgroup by the unknown author.

```
bb = convol(Image, replicate(1,3,3),9,/center)
Edges = Where(bb gt 0 AND bb LT 255)
bb[*] = 0
bb[edges] = 255 ; make this new image just edges
bb = Image AND BB ; now keep just those edges inside your object
perimeter = where(bb eq 255); these are indices to final outline
```

Ben

Alexandros Pertsinidis wrote:

> I am looking for an IDL program that determines the boundary of a cell. I
> have a lot of video of cells (neurons). Ideally, I would like track the
> change in their shape/size as time progresses. Does anyone know of anything
> like this?   Thank you very much!
>
> Rachel

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