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Subject: Re: Filling a contour

Posted by [Jeremy Bailin](#) on Sat, 07 Jun 2008 13:19:34 GMT

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> I have created a single contour and converted it into a 'contour  
> image'. That is to say that I have created an N x M image array and  
> populated it with 0's and placed a 1 where a contour point resides. I  
> would like to be able to fill the interior of the contour with 1's.  
> Any ideas? Thanks

If the contour is closed in the image, then an interior point is defined as having an odd number of contour crossings to the edge in each direction. So I would create a new NxM array of "number of contour crossings between x=0 and this point" and the same for y (which, since everything is either 0 or 1, is simply the cumulative sum). Then test for positions where both of these are odd and set those to 1.

```
xcrossings = total(contour_image, 1, /cumulative)
ycrossings = total(contour_image, 2, /cumulative)
interior = where(xcrossings mod 2 and ycrossings mod 2, ninterior)
if ninterior gt 0 then contour_image[interior]=1
```

-Jeremy.

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