Subject: Re: Inverse of POLYFILLV
Posted by davidf on Wed, 13 Nov 1996 08:00:00 GMT
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Larry Busse writes <ljb@shell.one.net> writes:

> I'm a newbie to IDL and am trying to implement some Region Of Interest (ROI)
> tools for image processing.
>
> I'm using DEFROI to generate the list of pixels in the ROI. I'm then
> modifying the list to include pixels which are close to the average pixel
> intensity. Given this modified list of pixels, I'd like to generate the
> coordinates of the polygon which bounds this region. I'm asking to do
> something which is the inverse of POLYFILLV.
>
> Some sort of "hulling" algorithm
> comes to mind.

You can use the IDL TRIANGULATE procedure to return the indices on the
points of the convex hull that surrounds a set of points. For example,
like this:

```
x = RANDOMU(seed, 100) * 5 + 2.5
y = RANDOMU(seed, 100) * 5 + 2.5

TRIANGULATE, x, y, triangles, hullPoints
PLOT, x, y, PSYM=1, XRANGE=[0,10], YRANGE=[0,10]
hullPoints = [hullPoints, hullPoints(0)]
PLOTS, x(hullPoints), y(hullPoints)
```

I learned this from David Stern himself! :-)

David

****
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*
* Sometimes I go about pitying myself, and all along my
* soul is being blown by great winds across the sky.
* -- Ojibway saying
****

Subject: Re: Inverse of POLYFILLV

Posted by hamill on Wed, 13 Nov 1996 08:00:00 GMT
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In article <56d78n$jog@news.one.net>, ljb@shell.one.net (Lawerence J. Busse) wrote:

>
> I'm using DEFROI to generate the list of pixels in the ROI. I'm then
> modifying the list to include pixels which are close to the average pixel
> intensity. Given this modified list of pixels, I'd like to generate the
> coordinates of the polygon which bounds this region. I'm asking to do
> something which is the inverse of POLYFILLV.

The DILATE and ERODE operators are useful in this kind of application. Good luck.

--
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|
| With interests in image processing, mathematics, physics,
| and especially nuclear medicine. And other stuff too.