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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
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