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Subject: Re: intersecting polygons

Posted by [David Fanning](#) on Mon, 18 Feb 2002 01:38:08 GMT

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Jonathan Pearce (jvp10@psu.edu) writes:

> Does anybody know of, or have a routine that could take polygonal  
> areas and find the common area between them? Consider the first  
> polygon defined by the set of points x1,y1 where x1 and y1 are arrays.  
> The second polygon is defined by the set of points x2 and y2. What I  
> am looking for is the points where the lines given by x1,y1 and x2,y2  
> intersect. Owing to limited time I am wondering if anybody has written  
> such a routine, that would return a polygon describing the area common  
> to both polygons.

This probably falls under the category of the world's biggest hack, but I've used it to good effect.

I use POLYFILLV with the two polygons to get a list of indices (or pixels) that belong to the two polygons. I then find the intersection of the two sets of pixels with the SetIntersection program (modified with some error checking in my real-world program), that you can find here:

[http://www.dfanning.com/tips/set\\_operations.html](http://www.dfanning.com/tips/set_operations.html)

Knowing the pixel "size" allows me to calculate areas, etc. You can probably use IDLanROI for the same purpose. It's worked for me, although I don't make any claims as to its elegance. :-)

Cheers,

David

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