
Subject: On the edge of a polygon...?

Posted by [Olivia](#) on Wed, 15 Mar 2006 11:50:47 GMT

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Dear All,

Firstly, apologies for posting on a topic that I know has been covered a lot - but I cannot find the answer to my query and I am hoping that someone has brighter ideas than me at the moment :-)!

I am comparing the morphology of ellipses with polygons. I compare the major axis of an ellipse to the distance between the most distant vertex points of the polygon, (found for a set of points from triangulate). Then I find the center x-coordinate on the major axis of the polygon. I want to find a minor axis comparator - the distance from the top of the polygon to the bottom of the polygon at $x=x_0$.

So far I have found the equations of the lines connecting the polygon vertices. Then I solved these lines for $x=x_0$ to find the corresponding y values. Here's the thing - I tried various ways and lit upon using IDLanROI:ContainsPoints, which would return a 2, or a 3, for the (hopefully) 2 points which intersect with the polygon boundary. Only it doesn't return that at all. In fact, it gives me always one point inside the boundary, and everything else exterior to the polygon.

This is a lengthy explanantion, but I think I might be going a long way about this, and cannot figure out why it isn't working. I've messed around with the accuracy, but everything is working in double.

Any ideas would really be appreciated, cheers,

Olivia
