
Subject: Re: plots

Posted by [ashraf](#) on Tue, 06 Mar 2007 15:59:35 GMT

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again I must stress that these are noncontiguous but discreet coordinates which form a closed polygon, for example let

x = [0,1,1,0,0,2,2,2]

y = [0,1,2,2,1,0,1,2]

These points can be uniquely re-arranged as

x = [0,1,2,2,2,1,0,0]

y = [0,1,0,1,2,2,2,1]

to form a closed non-intersecting outline. My question is how can I re-arrange these points efficiently?

Thanks.

David Fanning wrote:

> David Fanning writes:

>

>>

>>> These are integer pixel coordinates which form a closed boundary of an
>>> object, so each pixel will have at least two neighbours. I guess my
>>> question is how do you trace the boundary of an object if the all you
>>> have is an 2D array of noncontiguous pixel coordinates.

>>

>> I think the answer was, you don't. At least not in
>> any unique way. If you DO want a unique path, you
>> are going to have to come up with something other than
>> this. :-)

>

> One possibility might be to find the convex hull of these
> points. This is not the polygon formed by the points, but rather
> the polygon that encloses all the points. Maybe that's good
> enough for what you have in mind.

>

> If so, here is an article:

>

> http://www.dfanning.com/tips/convex_hull.html

>

> Cheers,

>

> David

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

> Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
