Subject: Re: Joining Multiple Vectors from the Thin Function
Posted by David Fanning on Tue, 12 Aug 2008 18:25:08 GMT
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mzagursk@gmail.com writes:

> This problem is a bit complex so I'll try to spell it out as best I
> can. IDL's THIN() function finds the medial axis of a shape. In my
> case, this medial axis is akin to the ridge of a mountain. The output
> of the THIN function is an array of the same dimensions as the image
> with all values set to 0 except: If the point is on the medial axis,
> it has a value of '3'. If the point is on the medial axis and is an
> endpoint, it has a value of 2. I need to find a way to extract (in
> order) the ridge data. This task is further complicated because the
> THIN function does not output just one medial axis. Instead, it
> outputs 'segments' if there is a kink in the shape. So, you end up
> with a complex structure of line segments. What I need to do is put
> these segments in order from one endpoint to the other endpoint of the
> ridge. Any ideas?

Get a list of end points and make arrays to keep track of any
end points and ridge points you have already examined. Start with
any unexamined endpoint. Mark it as "examined". Look at its eight
neighbors for an unexamined ridge point. Mark this ridge point
as "examined". Keep doing this until you find another end point.
That's a segment.

Do this until you have no more unexamined end points.

Cheers,

David

P.S. Consider doing this in C. :-)

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David Fanning, Ph.D.
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Coyote's Guide to IDL Programming (www.dfanning.com)
Sepore ma de ni thui. ("Perhaps thou speakest truth.")