
Subject: Re: Perimeter or Vertices from the return of search_2D??

Posted by [David.Steele](#) on Wed, 15 May 1996 07:00:00 GMT

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In article <Pine.sola.3.91.960514123444.7234C-100000@sparky.ic.sunysb.edu>, sbarrkum@ic.sunysb.edu says...

>

>

> Has anyone developed some code that would find the perimeter or vertices

> of pixels returned by the search_2d routine. I have done a search on

> Peter Rileys web page using keywords such as "vertices" and "perimeter".

> Only get a procedure that apparently want a inputs of vertices and will

> then compute the perimeter etc. I have not been able to find a routine

> that can find either the vertices or perimeter given a a set of contiguous

> pixels (as returned by search_2d).

>

> Any suggestions, algorithms known would be welcome

>

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>

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> |

A suggestion:

If the dimensions of the 2d region to be searched are WxL, try the following.

```
IDL> s2d_out=SEARCH2D(.....)
```

```
IDL> bin=BYTARR(W,L)
```

```
IDL> bin(s2d_out)=1
```

```
IDL> sbin=(SOBEL(bin) GT 1)
```

```
IDL> wedge=WHERE((sbin GT 0) AND (bin GT 0))
```

Then WEDGE should contain the 1-d subscripts of the pixels on the perimeter of the region identified by SEARCH2D.

I've tried the above on a simple region with a piecewise linear perimeter, and it did OK. I hope it helps.

Dave

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