
Subject: Re: Line index

Posted by [David Foster](#) on Fri, 22 Mar 1996 08:00:00 GMT

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Hermann Mannstein <H.Mannstein@dlr.de> wrote:

>

> Hello,

> is there a robust function which returns the indices within an image

> (like the where function)

> belonging to a line defined by two or more points.

I don't have a function, but I can suggest a possible solution.
Given your two points, if you use the familiar $Y = mX + B$ formula
to calculate the (X,Y) coordinate pairs for either each X or for
each Y along the "span" of the line (use the one that gives you
more points), and then convert these pairs to one-dimensional
indices using the formula

Indices = (Y_coors * Xdim) + X_coors

where the "image" is Xdim x Ydim. Obviously you'll have to do
some checking to make sure the points are within the image.

Hope this is useful.

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