Subject: Re: IDL implementation of the rolling ball background subtraction algorithm
Posted by helaha on Wed, 18 Aug 2004 06:45:53 GMT
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The rolling ball background subtraction of ImageJ works really good
(as most of the ImageJ features), but unfortunately I have no IDL
implementation too.

Regards,
Helmut

pirgon@btinternet.com (Alan) wrote in message
news:<1ac1caf9.0408170322.251b6380@posting.google.com>...
> Hi,
>
> Does anybody know of an IDL implementation of the rolling ball
> background subtraction algorithm used in ImageJ (Subtract Background
> Command). A brief description is as follows:
>
> 'Roll' a filtering object over a (shrunken) image in order to find the
> image's smooth continuous background. For the purpose of explaining
> this algorithm, imagine that the 2D grayscale image has a third
> (height) dimension defined by the intensity value at every point in
> the image. The center of the filtering object, a patch from the top
> of a sphere having radius BallRadius, is moved along each scan line of
> the image so that the patch is tangent to the image at one or more
> points with every other point on the patch below the corresponding
> (x,y) point of the image. Any point either on or below the patch
> during this process is considered part of the background. Shrinking
> the image before running this procedure is advised due to the
> fourth-degree complexity of the algorithm.
>
> The ImageJ's Subtract Background command is based on
> the NIH Image Pascal version by Michael Castle and Janice
> Keller of the University of Michigan Mental Health Research
> Institute. Rolling ball algorithm inspired by Stanley
> Sternberg's article, "Biomedical Image Processing",
> IEEE Computer, January 1983.
>
> I have the java code - just wondered if it's already been written in
> IDL or not.
>
> Thank you,
>
> Alan