Subject: Re: Curve Fitting Question
Posted by cgguido on Wed, 14 Nov 2012 14:22:43 GMT
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Holy bytescale Batman!

Forget the Physics Nobel Prize: when your name is burried in the header of a program by THE David Fanning, then, you have arrived! :-) No seriously.

Btw, I have a super clumsy version of Otsu that estimates local thresholds. It runs like molasses on a cold day in January.

I loop in x and y with a given step and consider a box of size L around x,y. I then run Otsu on that box. For all the values of x,y that I skipped I proceed as follows:

Because they don't teach interpolation at stupid school, I start with the subarray with the threholds I calculated [nx/step, ny/step]). I then use congrid to enlarge the subarray with the thresholds to the original image size [nx,ny]. Kinda works, I am ashamed to say.

If you wanted to get a local Otsu Threshold for each pixel how would you go about it? I was thinking it would be nice to calculate the local thresholds for a set of random points in the image, and then interpolate those. No idea how to proceed. INTERPOL? INTERPOLATE? ahhh!

Infact, you could then start chosing the points at not-so-random (more points where there is more info in the image, say).

Thoughts?

Gianguido

On Tuesday, November 13, 2012 5:24:20 PM UTC-6, David Fanning wrote:
>
> Yes, this Otsu's thresholding function works great. It
>
> didn't have quite as many features as I would have liked,
>
> so I stole the main ideas and wrote up a similar program
>
> that is working very, very well with the data sets I
>
> am working with today. It even picks reasonable
>
> thresholds when the dividing line between pixel
>
> populations is not totally straightforward. Thanks
>
> for bringing it to my attention.
>

>
>
> You can find my version of the program here:
>
>
>
> http://www.idlcoyote.com/programs/cgotsu_threshold.pro
>
>
>
> Cheers,
>
>
>
> David
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> --
>
> David Fanning, Ph.D.
>
> Fanning Software Consulting, Inc.
>
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
>
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")
