
Subject: Re: Filter image with moving window and averaging pixels
Posted by rpertaub@gmail.com on Thu, 01 Feb 2007 16:13:43 GMT
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Thank you for the responses!! Really great to know I am not alone as I learn my way thru this language!

Anyway, I ended up doing a some arithmetic to find neighboring pixels and used a couple of for loops to go through all the pixels in the image.(still need to add a border to image to get all these pixels)!! It is not very elegant, but once I have everything working, I might go back and make it more elegant with the kernel and convol function which I am still trying to grasp does exactly!

```
w=2           ;width of buffer pixels
for j=2,(imagesize[0]-1-w) DO BEGIN
    for i=2,(imagesize[1]-1-w) DO BEGIN

        centervalue=N[i,j]
        print,"Center Value is ",centervalue

        topH=N[(i-w):(i+w),(j-w):(j-w)]
        sum1=total(topH)
        ele1=N_elements(topH)

        rghtside=N[(i+w):(i+w),(j-w+1):(j+w)]
        sum2=total(rghtside)
        ele2=N_elements(rghtside)

        BtmH=N[(i-w):(i+w-1),(j+w):(j+w)]
        sum3=total(BtmH)
        ele3=N_elements(BtmH)

        Lftside=N[(i-w):(i-w),(j-w+1):(j+w-1)]
        sum4=total(Lftside)
        ele4=N_elements(Lftside)

        Average=float((sum1+sum2+sum3+sum4)/(ele1+ele2+ele3+ele4))
        print, "Total Average is ",average
        ratio = float(average/centervalue)
        print,"Ratio is average of border divided bycenter",ratio

    endfor
endfor
```
