Subject: Re: Avoiding FOR loops (version googleplex.infinity) Posted by Gaurav on Thu, 10 Apr 2008 06:13:54 GMT

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Dear All,

Over the past two days I was able to think of an algorithm and it solved my problem. And now, looking at Tom's solution above, it appears that it is almost the same thing that I came up with.

What I did was to pad up my image with kernelSize/2 pixels all around and then compare it with temporary arrays shifted all around the kernel by turn. Wherever the shifted array was equal to the padded array, I added one in the final, output array. Run this loop for the kernel size and you are done. Now it is up to you guys to decide if it is exactly the same as Tom's or there is some difference and as to which would be faster. Here follows my code:

kernelSize = 5 ;define the kernel size (here, 5) padSize = FLOOR(kernelSize /2.0) ;calculate the padding to generate around the original image paddedImg = bytarr(dims(0)+2*padSize, dims(1)+2*padSize) ;initialize the padded image paddedImg(padSize, padSize) = img ;define the padded image tempImg = bytarr(dims(0)+2*padSize, dims(1)+2*padSize) ;will contain the padded, final output

In my case it works wonderfully well and speeds things up by a factor of a few hundred times. Any further optimization would be highly appreciated.

I guess, I ought to go for a manicure for my gnawed nails now.

Cheers, Gaurav