
Subject: Re: Filter image with moving window and averaging pixels

Posted by [Michael Galloy](#) on Wed, 31 Jan 2007 23:55:28 GMT

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On Jan 31, 11:58 am, "rpert...@gmail.com" <rpert...@gmail.com> wrote:

> I need to filter some noise out of an image and was pointed towards
> making a moving/sliding window (size, say 7x7) and compare the center
> pixel with surrounding pixels right next to border (ignoring middle
> pixels). And compare the value of center pixel with the border average
> pixels and thus filter out noise. However, I am not sure how to do
> this.
> Anyone has any idea?

I'm not sure I'm following you, but how about this:

```
; read/generate your image
```

```
im = byte(randomu(seed, 200, 200) * 255)
```

```
; create a kernel with 1's on the outside edges
```

```
kernel = bytarr(7, 7) + 1B ; set everything to 1's then...
```

```
kernel[1:5, 1:5] = 0B ; set the inside to zero
```

```
print, kernel
```

```
borderAverage = convol(im, kernel, total(kernel), /edge_truncate)
```

You say "compare the value of center pixel with the border average pixels" and I'm not sure what you want to do as a result of this comparison, but the border average pixels are in borderAverage. So you could compare borderAverage[10, 20] to im[10, 20] to compare the border average to the image value at pixel (10, 20).

Mike

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