Subject: Re: Local Maxima of 2D array Posted by DavidPS on Wed, 20 Jan 2010 15:35:17 GMT

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On Jan 19, 5:48 pm, Robin Wilson <r.t.wil...@rmplc.co.uk> wrote:

> Hi,

- >
- > Another question from me I'm afraid. I'm trying to implement a routine
- > which needs to be able to calculate the local maxima of a small window
- > moved across an array. That is, I have a large array and I will need to
- > move a small 3x3 array across it, each time working out what the maximum
- > value of that array is and storing its index (or selecting it in some
- > other way).

>

- > I've investigated various methods for doing this, including the dilate
- > method, but I can't seem to get them to work properly.

>

- > Is there any good (as in fast, efficient and elegant) way of doing this,
- > or will I be reduced to using for loops and lots of IF statements?

>

> Best regards,

>

- > Robin
- > University of Southampton

Hi Robin,

I asked something similar a few weeks ago, but I was looking for a local minima in a running window of 9. I think you can use the same the guys suggested to me then, just changing the sign of the function to convolve (so you find a max). It's in here: http://tr.im/L0ob [groups.google.com]

David

Subject: Re: Local Maxima of 2D array Posted by Jeremy Bailin on Thu, 21 Jan 2010 13:02:52 GMT View Forum Message <> Reply to Message

On Jan 20, 10:35 am, DavidPS <dps.he...@gmail.com> wrote:

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- >
- >
- >
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>
> David
```

I don't think it's the same problem... correct me if I'm wrong, but I think that Robin wants the maximum value within the window, regardless of whether it's surrounded by lower values.

The only IDL-way I've thought of so far uses absurd amounts of memory if your image is large, so I'm not even going to suggest it. Still thinking about it...

-Jeremy.