Subject: Re: 2D Savitzky-Golay derivative filter?
Posted by dg86 on Sun, 03 Feb 2013 21:37:11 GMT
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Thanks David for following up.

Sobel and Roberts both use nearest-neighbor estimates for derivatives, and thus do a bad job of computing gradients in noisy images. Savitzky-Golay does a much better job at rejecting noise because it uses information over a larger domain. It might seem tempting just to smooth the image to suppress noise before using a simple derivative operator. The problem is that smoothing suppresses real features along with the noise. Savitzky-Golay is much better at preserving features such as peaks and ridges.

So, unless somebody already has an implementation, I might spend a couple of days rolling my own.

All the best,

David