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Subject: 2D Savitzky-Golay derivative filter?

Posted by [dg86](#) on Sun, 03 Feb 2013 18:55:32 GMT

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Dear Folks,

I would like to use Savitzky-Golay filters to calculate gradients of images. Before I roll my own code to calculate the filter coefficients, I was wondering if anyone here already had working routines that they would be willing to share.

IDL's built-in SAVGOL routine only computes one-dimensional filters, and I need two-dimensional filters. Erik Rosolowsky's SAVGOL2D computes two-dimensional smoothing filters, but not two-dimensional derivative filters.

Alternatively, is there an equivalently good IDL way to compute image gradients? A useful replacement would offer the noise rejection of Savitzky-Golay without suppressing peaks the way that SMOOTH() does.

Many thanks,

David

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