Subject: coherence.pro re-re-post (ignore previous re-post) Posted by Dick Jackson on Thu, 13 May 1999 07:00:00 GMT

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(now attaching it *after* changing the Windows settings... sorry, folks!)

Hi again,

eddie haskell wrote:

>

- > Dick,
- > [...]
- > As an aside, I had a difficult time extracting the code you attached to
- > your post. It could easily be my news reader but if others are using
- > similar readers and you have other options for attachments, ...

Thanks for letting me know (*blush!*). If this attachment works better, then my lesson for the day is that in Windows File Types Options panel (accessible in Windows Explorer/View/Options...) the IDL source file should have Content Type (MIME): text/plain. Thanks to Dave Foster (who knows how to attach a file!) for the good example.

Cheers.

-Dick

Fanning Software Consulting, Canadian Office Dick Jackson djackson@dfanning.com Calgary, Alberta Voice/Fax: (403) 242-7398 Coyote's Guide to IDL Programming: http://www.dfanning.com/ FUNCTION coherence, array, width

- Returns 'coherence' matrix from 2D input array.
- Each element in the result is the Std. Dev. of the
- 'width' x 'width'-pixel neighborhood from the original image.
- Dick Jackson, Fanning Software Consulting
- djackson@dfanning.com

size = Size(array, /Dimensions) IF N Elements(size) NE 2 THEN \$ Message, 'Input array must be 2-dimensional.' nx = size[0]nv = size[1]IF nx LT 3 OR ny LT 3 THEN \$

Message, 'Input array must have at least 3 rows and 3 columns.'

IF N Elements(width) EQ 0 THEN width = 3

```
Make Sum-of-X array (sx) where each element contains the sum of
   values from the neighborhood of the original array.
kernel = Replicate(1, width, width); kernel for convolution to simply
                       ; sum all values with equal weight
sx = Convol(Float(array), kernel)
   Make Sum-of-X-squared array (sx2) where each element contains the sum of
   *squared* values from the neighborhood of the original array.
sx2 = Convol(array ^ 2.0, kernel)
   Calculate, for each pixel, the standard deviation of the set of
   the neighborhood values:
    SD = Sqrt((Sum(X^2) - (Sum(X)^2 / n)) / (n-1))
n = width ^ 2.0
Return, Sqrt((sx2 - (sx^2 / n)) / (n-1))
END ;; coherence
File Attachments
1) coherence.pro, downloaded 88 times
Subject: Re: coherence.pro re-re-post (ignore previous re-post)
Posted by eddie haskell on Tue, 18 May 1999 07:00:00 GMT
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Dick Jackson wrote:
> (now attaching it *after* changing the Windows settings...
Third time's a charm! ;-)
Cheers,
eddie
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\ Old Dominion University, Norfolk VA 23529
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       e-mail haskell*ccpo.odu.edu
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