Subject: Re: CONVOL2D
Posted by David Foster on Tue, 16 Feb 1999 08:00:00 GMT
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Lisa Bryan wrote:
>
> Hello all,
>
> I am sure this is out there, I'm just too lazy to find it. I need to
> convolve a 2D gaussian (not necessarily the same size in each
> dimension) into an image. Does anyone have a tool I may beg, borrow,
> or steal?
>
> Lisa

uh, how about CONVOL()?

Dave
--

~~~~~~ ~~~~~~
David S. Foster Univ. of California, San Diego
Programmer/Analyst Brain Image Analysis Laboratory
foster@bial1.ucsd.edu Department of Psychiatry
(619) 622-5892 8950 Via La Jolla Drive, Suite 2240
La Jolla, CA 92037
~~~~~~ ~~~~~~

Subject: Re: CONVOL2D
Posted by davidf on Tue, 16 Feb 1999 08:00:00 GMT
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Lisa Bryan (lbryanNOSPAM@arete-az.com) writes:

> I am sure this is out there, I'm just too lazy to find it. I need to
> convolve a 2D gaussian (not necessarily the same size in each
> dimension) into an image. Does anyone have a tool I may beg, borrow,
> or steal?

Do you mean something other than the CONVOL function?

Gaussian kernels to use with the CONVOL function are
easy to create. You can find them in the back of image
processing books or even in the image processing
section (p72) of my book. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: CONVOL2D
Posted by lbryanNOSPAM on Wed, 17 Feb 1999 08:00:00 GMT
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Hello all,

I had assumed that since the IDL help manual says:
'Assume R = CONVOL(A, K, S), where A is an n-element vector, K

is an m-element vector'

the function CONVOL acted in a 1D manner only, i.e. it worked on data
as vectors and not arrays. Excuse the mistake. On the other hand
I've decided to bypass colvolutions all together and delve into
Fourier space (new territory for me so wish me luck!)

On Tue, 16 Feb 1999 16:02:50 -0700, davidf@dfanning.com (David
Fanning) wrote:

> Lisa Bryan (lbryanNOSPAM@arete-az.com) writes:
>
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>> convolve a 2D gaussian (not necessarily the same size in each
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> section (p72) of my book. :-)
>

Lisa Bryan
Arete Associates

Tucson, Arizona
lbryan@arete-az.com

Subject: Re: CONVOL2D
Posted by meron on Wed, 17 Feb 1999 08:00:00 GMT
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In article <36c9df01.101510033@news1.alterdial.uu.net>, lbryanNOSPAM@arete-az.com (Lisa Bryan) writes:
> Hello all,
>
> I am sure this is out there, I'm just too lazy to find it. I need to
> convolve a 2D gaussian (not necessarily the same size in each
> dimension) into an image. Does anyone have a tool I may beg, borrow,
> or steal?
>
You can use M_CONVOL from my library, but you'll better get the whole library if you want to do it.

Mati Meron | "When you argue with a fool,
meron@cars.uchicago.edu | chances are he is doing just the same"

Subject: Re: CONVOL2D
Posted by David Foster on Thu, 18 Feb 1999 08:00:00 GMT
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Lisa Bryan wrote:
>
> Hello all,
>
> I had assumed that since the IDL help manual says:
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> is an m-element vector'
>
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> as vectors and not arrays. Excuse the mistake. On the other hand
> I've decided to bypass colvolutions all together and delve into
> Fourier space (new territory for me so wish me luck!)

And actually you can use convolution to perform Fourier transforms.

Dave
--

~~~~~~ ~~~~~~
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