Subject: Re: Image filtering Posted by David Foster on Mon, 28 Jun 1999 07:00:00 GMT View Forum Message <> Reply to Message

Robert B. Bohn wrote:

Dear Folks,

>

- > I'm trying to do some blob filtering on an 8 bit B&W image (TIFF
- > file). The range of the bits is 0-255.

>

- > I am trying to clean up the image and remove extraneous black
- spots from white fields and vice-versa. In terms of BLOB filtering,
- I am trying to perform a "close" operation.

Any suggestions how to do this with IDL?

Sincerely,

Bob Bohn

Bob -

Look at the ERODE() and DILATE() functions. You might also have a look at CONVOL() for more general purpose convolutions.

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: Image filtering

Posted by gabriel rodriguez ibe on Wed, 30 Jun 1999 07:00:00 GMT

View Forum Message <> Reply to Message

Robert B. Bohn escribii; 1/2:

> Dear Folks,

- > I'm trying to do some blob filtering on an 8 bit B&W image (TIFF
- > file). The range of the bits is 0-255.

>

- > I am trying to clean up the image and remove extraneous black
- > spots from white fields and vice-versa. In terms of BLOB filtering,
- > I am trying to perform a "close" operation.

>

> Any suggestions how to do this with IDL?

>

> Sincerely,

>

- > Bob Bohn
- > email: robert.bohn@nist.gov

>

- > --
- > Dr. Robert B. Bohn
- > High Performance Systems & Services
- > NIST
- > 100 Bureau Dr, STOP 8951
- > Gaithersburg, MD 20899-8951
- > phone: 301-975-4731

A non linear filter that may apply is the MEDIAN filter. IDL has a function with the same name. That filter will eliminate the black/ white spots from a white/black surrounding WITHOUT CHANGING any other values (the ones that are supposed to be correct), provided that the errors are relatively not frecuent.

Other linear filters will change the values of all pixels, and probably not eliminate the spots very clearly, unless you choose a big window, in wich case borders will get fuzzy.

In any book on image processing you will see easy to understand examples.

Hope it helps.

Gabriel