Subject: new book/software - multiscale image processing
Posted by multires on Sun, 14 Jun 1998 07:00:00 GMT
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The following may be of interest. The compression program in MR/1, for instance, includes various wavelet and other multiscale options, various noise models, variable compression ratio and quantization level, lossless and other options. Decompression can be based on specified scales to allow for progressive transmission, and an applet is provided to illustrate this.

Another recent reference: F Murtagh, JL Starck and M Louys, "Very high quality image compression based on noise modeling", International Journal of Imaging Science and Technology 9, 38-45, 1998.

Visualization, deconvolution, image registration, vision modeling and many other topics are also comprehensively covered in the new book (details below) and in the MR/1 software package. A significant part of this work is based on IDL.

Multiscale image and data analysis - News! News! News!

New book - "Image and Data Analysis:
The Multiscale Approach",
JL Starck, F Murtagh, A Bijaoui,
Cambridge University Press,
available now, June 1998.

Online ordering, hardback and paperback,
from CUP's Web sites (e.g. -
http://www.cup.cam.uk - do search
on author names to find full description)

2-day course - "Multiscale Image and Data Analysis:
New Methods, New Applications"

at

Imperial College London, 8-9 Sept. 1998

and at

Technologiepark Karlsruhe, 16-17 Sept. 1998

Comprehensive overview of methods and
applications, noise modelling, use of the

MR/1 software.

Accommodation (Halls of Residence in Imperial College; hotel near Technologiepark in Karlsruhe) available. Easy transport possibilities - Imperial College is 40 mins by direct Underground from Heathrow Airport; the Technologiepark is off the A5 highway, Anschluss Karlsruhe-Durlach.

Software package - MR/1 - 70,000 lines of C++ code, 4000 lines of IDL, for filtering, deconvolution, object modeling, compression, registration, visualization, object and feature detection, and much more. Under licence from CEA, Saclay (France).

All based on rigorous noise modeling for major detectors including optical, X-ray, radar, point pattern data. For analysis results of the highest quality.

Executables available for major platforms, 100-page manual, and booklet "Multiresolution and its Applications: an Overview".

Some demos and animations at
http://hawk.infm.ulst.ac.uk:1998/multires

Information on the course and software at
http://visitweb.com/multires

Further information - ask for flyer on course and on software - from
Fionn Murtagh at multires@hotmail.com
