Newsletter 23

Contents:
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Hello everybody,

A last mail for 1994. Welcome to the new members who receive this TC10 news directly for the first time.

First of all, I want to remain all of you about our Graphics Recognition Workshop, to be held just before ICDAR'95. The announced deadline is Dec. 31st, and we have already received several submissions, but in order to give more time to all authors-to-be who may be in a hurry in this Christmas+New Year period, we have decided to extend the deadline to January 10th. So here comes the last call for abstracts for GREC'95:

IAPR Workshop on Graphics Recognition
(sponsored by the International Association for Pattern Recognition)

The Pennsylvania State University
University Park, Pennsylvania, 16802 USA

August 10-11, 1995

You are invited to participate in a single-track 2-day workshop on methods and systems for graphics recognition organized by IAPR TC-10 (Technical Committee on Graphics Recognition). The workshop will comprise several sessions dedicated to specific topics. For each session, there will be 1 or 2 main paper presentations giving the state of the art and stating the open questions for the session's topic, followed by a number of short presentations where each participant is invited to contribute by proposing solutions to some of the questions or presenting results of his/her work. Each session will be concluded by a panel discussion. There will also be time for working groups where participants can discuss in detail specific problems.

The workshop will be held just before the 3rd International Conference on Document Analysis and Recognition (Montreal, Canada, August 1995). Attendance will be limited to 75 persons. All participants are expected to contribute actively to the workshop, either by presenting a full state-of-the-art paper, or by an abstract of remarks on a specific topic. You are invited to submit to the program committee an abstract (maximum 2 pages) of your proposed contribution to the workshop. Please indicate also if you would be willing to present a state-of-the-art paper on this topic, if invited to do so by the program committee.

Pre-proceedings of all contributed papers will be available at the workshop for the participants. After the workshop, the program committee plans to publish as a book revised versions of selected key papers, possibly including reports from the panel discussion groups.

Relevant topics include but are not limited to:
- raster-to-vector techniques
- recognition of graphical primitives
- recognition of graphic symbols in charts and diagrams
- interpretation of engineering drawings, logic diagrams, maps,
charts, etc.
- analysis of line drawings, tables, forms etc.
- 3-D models from multiple 2-D views
- description of complete systems for interpretation of graphics in
scanned documents

Workshop Organization

Chairs:

Rangachar Kasturi
Department of Computer Science and Engineering
Penn State University
University Park, PA 16802, USA
Email: kasturi@cse.psu.edu, Phone: +1 (814) 863-4254, Fax: +1 (814) 865-3176

Karl Tombre
INRIA Lorraine & CRIN/CNRS
Batiment LORIA,
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54602 Villers-les-Nancy Cedex, France
Email: tombre@loria.fr, Phone: +33 83 59 20 71, Fax: +33 83 27 83 19

Program Committee:

Sergey Ablameyko Institute of Engineering Cybernetics, Minsk, Belarus
Atul Chhabra NYNEX Science & Technology, USA
Vincenzo Consorti IBM SEMEA, Italy
Luigi Cordella Naples University, Italy
Dov Dori Technion Haifa, Israel
Osamu Hori Toshiba R&D Center, Japan
Stephen Joseph Sheffield University, UK
Gerd Maderlechner Siemens AG, Germany
Babu Mehtre ISS, National University, Singapore
Lawrence O'Gorman AT&T Bell Labs, USA
Theo Pavlidis SUNY at Stony Brook, USA
Ken Tomiyama Aoyama Gakuin University, Japan

Abstracts (max. 2 pages, 3 copies): January 10, 1995
Acceptance notification: March 15, 1995
Camera Ready Manuscripts: May 15, 1995

Please send your abstract to one of the co-chairs. Contact either one
of the co-chairs for further information.

As announced in the previous issue of TC10 news, we plan to arrange a
dashed-line detection contest during this workshop. So we invite all
computer vision researchers, practitioners and document analysts to
participate in the

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International Workshop on Graphics Recognition
Dashed-Line Detection Contest

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The purpose of this contest is to foster the exchange of ideas and
techniques in the field of graphics recognition. Contestants will have
to run a live demonstration of their program on given test images, on
SPARC-type workstations or similar equipment, on the day of the
contest. Facilities for downloading software via ftp would be
provided. All images will be in TIFF format. Programs will be judged
on the basis of accuracy (percentage of segments not detected,
percentage of incorrectly detected segments, tracking accuracy when
segments intersect) and of their ability to recreate the test image
from the representation and interpretation.

Test image will be available very soon now by ftp. Three kinds of
images will be available, in TIFF 5.0 format:

1. SIMPLE
a. The image size varies from 256 * 256 to 1000 * 1000.
b. Only one kind of dashed line :
- - - - - - - - -
c. Only horizontal, vertical and diagonal (+/- 45 deg) dashed lines.
d. A minimum distance of 50 pixels between lines.
e. Minimum number of dashed lines is 10 while the maximum number is 20.
f. Segment length varies from 10 - 30 pixels.
g. Gap length varies from 1 - 10 pixels.
h. Segment length to gap length ratio varies from 0.8 - 2.0 .
i. Thickness of a dashed line varies from 3 - 30 pixels.
j. The above parameters (f, g) have variations of the order of +/- 10%.
k. Minimum length of a dashed line is 50 pixels.

2. MEDIUM
a. The image size varies from 1000 * 1000 to 4000 * 4000.
b. Three linds of dashed lines

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_ . _ . _ . _ . _
___ _ ___ _ ___ _

c. Lines can be in any random orientation, but only 4 orientations
possible in an image.
d. Angles in image have a minimum difference of 20 degs between them.
e. Only straight dashed lines.
f. A minimum distance of 50 pixels between lines.
g. Minimum number of dashed lines is 20 while the maximum number is 40.
h. Segment length varies from 10 - 30 pixels.
i. Gap length varies from 1 - 10 pixels.
j. Segment length to gap length ratio varies from 0.8 - 4.0 .
k. Thickness of a dashed line varies from 3 - 30 pixels.
l. The above parameters (i, j) have variations from 10% to 40%.
m. Minimum length of a dashed line is 50 pixels.

3. COMPLEX
a. The image size varies from 4000 * 4000 to 8000 * 8000.
b. Three linds of dashed lines

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_ . _ . _ . _ . _
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c. Straight and curved dashed lines.
d. Lines can be in any random orientation, but only 4 orientations
possible in an image.
e. Angles in image have a minimum difference of 20 degs between them.

f. Distance between lines equals the thickness of lines.
g. Minimum number of dashed lines is 30 while the maximum number is 100.
h. Segment length varies from 10 - 30 pixels.
i. Gap length varies from 1 - 10 pixels.
j. Segment length to gap length ratio varies from 0.8 - 4.0 .
k. Thickness of a dashed line varies from 3 - 30 pixels.
l. The above parameters (i, j) have variations from 40% to 100%,
missing segments possible.
m. Minimum length of a dashed line is 50 pixels.

All people interested in participating in this contest are invited to
send a note to prof. Kasturi and to me, and we will keep you informed
of the exact procedure to get images, evaluate the results etc. as
soon as all the details are worked out. Update information will also
be regularly posted in this mailing list.

These two pieces of information were directly related to TC10
activities. Another TC10-sponsored event, the MVA workshop, was held a
week or so ago in Japan. I will give some more information about it in
the next TC10 news.

Now, as usual, here comes some other information which some of you may
find useful. First, an announcement about the availability of extra
proceedings from the 12th ICPR:

>From: Shmuel Peleg <peleg@cs.huji.ac.il>
>To: list2@cs.huji.ac.il
>Subject: Extra Proceedings: 12-ICPR Conference, Jerusalem
>Date: Thu, 8 Dec 1994 00:05:50 +0200

We have some copies left of the proceedings of the 12-ICPR, Jerusalem.
As long as supplies last you can get the 3-volume set for US$ 130.00
including surface shipping, and US $150.00 including airmail shipping.

After we run out of books, you could get the proceedings from the IEEE at
$150/member, $300/non-member, + shipping.

Details below.

Shmuel

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Proceedings - 12th ICPR
International Conferences on Pattern Recognition
Oct 9-13, 1994, Jerusalem, Israel

Vol 1. COMPUTER VISION AND IMAGE PROCESSING
Vol 2. PATTERN RECOGNITION AND NEURAL NETWORKS
Vol 3. SIGNAL PROCESSING; PARALLEL COMPUTING

Pre-publication Cost: US$ 130.00, surface shipping included.
US$ 150.00, airmail shipping included
The proceedings (a 3-volume set) can be ordered, as supplies last, using a
check or credit-card (Visa, Master-Card, AmEx), by mail, fax, or E-Mail, from:

12th ICPR, c/o International
10 Rothschild Blvd.
65121 Tel Aviv, ISRAEL.

Tel. +972(3)510-2538, Fax +972(3)660-604
E-mail: icpr@math.tau.ac.il
===

The First IEEE Int. Conf. on Image Processing was held in November, in
Austin. Here comes some info received after this event, and
announcements for the next one, in 1995:

>From: International Conf on Image Processing Mail Box <icip@pine.ece.utexas.edu>
>To: tombre@loria.fr
>Date: Thu, 1 Dec 1994 15:52:54 -0600

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FIRST IEEE INTERNATIONAL CONFERENCE ON IMAGE PROCESSING
November 13-16, 1994
Austin Convention Center, Austin, Texas, USA
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Dear Colleague:

We are happy to inform you that the first ICIP was a tremendous
success! There were more than 900 participants at the inaugural
event. By all accounts, the conference succeeded in every way,
including a successful first-time Products Exhibition.

If you attended ICIP-94, then we'd like to thank you for making
the show such a great one. If you missed ICIP-94, then perhaps
we'll see you next year, at ICIP-95.

ICIP-95 will be held in Washington, DC. If you would to obtain

advance information about ICIP-95, please send an email inquiry
to the following address: icip95@ccr-p.ida.org.

If you are interested in obtaining an extra copy of the ICIP-94
Conference Proceedings, or if you were unable to attend ICIP-94
and would like a copy of the Conference Proceedings, then we're
happy to let you know that we have available a limited number
of extra copies for sale (IEEE Members: $150; nonmembers: $200)
If you are interested, please reply to the following address:

icip@pine.ece.utexas.edu
with the message:
"ICIP PROCEEDINGS INFO PLEASE"

We hope to see you in DC!

THE ORGANIZING COMMITTEE
OF THE
FIRST IEEE INTERNATIONAL CONFERENCE ON IMAGE PROCESSING
November 13-16, 1994
Austin Convention Center, Austin, Texas, USA

>From: Maureen Quirk <icip95@ccr-p.ida.org>
>Subject: ICIP-95
>Date: Thu, 8 Dec 1994 04:47:24 -0500

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IEEE SIGNAL PROCESSING SOCIETY /| /|
/ |ICIP / |
1995 INTERNATIONAL CONFERENCE ON IMAGE PROCESSING /__|____/ |
October 22-25, 1995 | |____|__|
Hyatt Regency Crystal City | / | /
Washington, D.C., USA | / 95 | /
|/_____|/
ON-LINE INFORMATION

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Information about ICIP-95 is processed by procmail. In order to
get information on a specific subject, simply include the appropriate
keyword as the subject of your message. If you make any inquiry about
ICIP-95, you will be added to the mailing list and will automatically
receive all future information as it becomes available. If you wish to
be removed from the mailing list, send a message with Subject: delete.

Currently available subjects:

Information - This file which includes a the first three subjects

Keywords - The keyword (top) portion of this message

Call - The Call-for-Papers

Style - The LaTeX style file for camera-ready papers

Exhibits - The Exhibitor's Prospectus

Future subjects:

Program - Advance Program

Registration- Information and forms

Hotel - Information and forms

Tutorials - Information and registration forms

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IEEE SIGNAL PROCESSING SOCIETY /| /|
/ |ICIP / |
1995 INTERNATIONAL CONFERENCE ON IMAGE PROCESSING /__|____/ |
October 22-25, 1995 | |____|__|
Hyatt Regency Crystal City | / | /
Washington, D.C., USA | / 95 | /
|/_____|/
CALL FOR PAPERS

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Sponsored by the Signal Processing Society of the Institute of
Electrical and Electronics Engineers, ICIP-95 is an international
conference on theoretical, experimental and applied image proces-
sing. It provides a unique, centralized, forum for presentation
of technological advances and research results by engineers and
scientists working in Image Processing and associated disciplines.

SCOPE:

1. GENERAL TECHNIQUES & ALGORITHMS: Filtering, Enhancement,
Restoration, Coding, Segmentation, Multiresolution Processing,
Multispectral Processing, Image Representation, Image Analysis,

Interpolation and Spatial Transformations, Neural Networks, Noise Modeling, Architectures and Software.

2. COMPUTED IMAGING: Acoustic, Radar, Tomographic, Magnetic Resonance, and Geophysical Imaging, Radio Astronomy, Speckle Imaging, Computer Holography, Confocal Microscopy, Electron Microscopy, X-ray Crystallography, Coded-Aperture Imaging, and Real-Aperture Arrays.

3. IMAGE SCANNING DISPLAY AND PRINTING: Scanning and Sampling, Quantization and Halftoning, Color Reproduction, Rendering, Graphics and Fonts, Architectures and Software for Display and Printing, Visualization.

4. VIDEO: Multimedia, HDTV, Packet Video, Video Signal Processor Chips, Motion Estimation, Image Sequence Processing, Video Data Base, Low Bit Rate and Very Low Bit Rate Coding, Video over Wireless Channels.

5. APPLICATIONS: Application of image processing technology to any field, including the biomedical sciences, astronomy and the geosciences.

SUBMISSION PROCEDURES:

Prospective authors are invited to propose papers in any of the technical areas listed above. To submit a proposal, prepare a 2-3 page summary of the paper including figures and references. Send five copies of the paper summary and a cover sheet (see the form at the bottom of this message) stating the (1.) paper title, (2.) technical area(s), (3.) contact author's name, (4.) address, (5.) telephone number, (6.) Fax number, and (7.) electronic mail address to:

Prof. Rama Chellappa
Center for Automation Research
Rm. 4417, A.V. Williams Building,
University of Maryland
College Park, MD 20742.

Attn. ICIP' 95

Each selected paper (four-page limit) will be published in the Proceedings of ICIP-95, using high-quality paper for good image reproduction. Style files in LaTeX will be provided for the convenience of the authors.

SCHEDULE
Paper summaries/abstracts due: 1 February 1995
Notification of Acceptance: 24 April 1995
Camera -Ready papers: 15 June 1995
Conference: 22-25 October 1995

PROGRAM COMMITTEE:

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takao@dsp.cl.nec.co.jp

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EE Dept., P.O. Box 5031, 2600 GA Delft, The Netherlands
Phone: +31 15 78 4695; Fax: +31 15 78 1843
Biemond@et.tudelft.nl

CONFERENCE ENVIRONMENT
ICIP-95 will be held in the Hyatt Regency Crystal City, near
Washington National Airport, about ten minutes from the center of
Washington, D.C. The nearest "Metro" stop (the underground rapid
transit system) is a ten-minute walk, and there is a free shuttle
service available to and fromt he airport and the Metro stop.

Washington, D.C. is the center of the federal government of the
United States. It houses many beautiful monuments, large parks,
and imposing government buildings. It is a major cultural center
with numerous major museums, libraries, and houses of worship.

An exciting range of Exhibits, Tutorials, Special Product Seesions
and Social Events will be offered.

For further details about ICIP-95, and a copy of this file, please
send an electronic message to:
icip95@ieee.org

Then, an announcement about the 6th British Machine Vision Conference:

>From: E.Claridge@computer-science.birmingham.ac.uk
>Subject: BMVC95

BMVC'95

Sixth British Machine Vision Conference
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11-14 September 1995
The University of Birmingham, UK.

The British Machine Vision Conference is the main UK conference for
machine vision and related topics. High quality contributed papers are sought
describing recent and novel research in the areas of computer vision, image
analysis and processing or pattern recognition. Papers describing research
being undertaken throughout national or international collaborative projects
are particularly welcome. The conference is a single-track meeting with both
oral and poster presentations. In addition to the contributed papers, there
will be talks by invited speakers and a pre-conference tutorial programme
(free to registered students).

Contributions are sought on any novel aspect relating to machine vision and
pattern analysis, including:

* image processing and feature extraction * practical applications
* object recognition and scene analysis * model based coding
* reconstruction of 3D shape * architectures
* advanced pattern analysis * active vision
* computational issues in perception * motion analysis
* robotic vision and sensory fusion * neural networks

Four copies of full papers not exceeding 10 pages (approx. 5000 words if no
figures) should be submitted for review. It may be possible to purchase
additional pages and or colour prints. Two title pages should be included, one
of which should be anonymous, containing only the title of the paper and up

to 5 keywords. Papers will be reviewed by the elected BMVA(*) Committee
with a small number of specially coopted members. By submitting a paper to
BMVC, the author(s) warrant that it, and any related paper with essentially
the same technical content, has not been and will not be submitted to any
other conference during the BMVC review period. Papers will be accepted
either for oral presentation or for presentation as posters.

A printed copy of the Proceedings will be available to delegates at the
conference and a selection of the best papers will be published separately
in a special issue of 'Image and Vision Computing'.

Deadlines and format
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Deadline for paper submission 24 April 1995
Notification of acceptance 12 June 1995
Deadline for Camera-Ready copy 7 July 1995

Guidelines for the format of papers can be found on the PEIPA at:
ftp: peipa.essex.ac.uk in ipa/bmvc (login name: anonymous)
WWW: http://peipa.essex.ac.uk/index.html

Papers should be submitted to the Conference Chairman:
David Pycock
BMVC'95
School of Electronic and Electrical Engineering
The University of Birmingham
Edgbaston
Birmingham B15 2TT

Tel: +44 21 414 4285
Fax: +44 21 414 4291
Email: BMVC95@bham.ac.uk

(*) The British Machine Vision Association and Society for Pattern Recognition
is a Company limited by guarantee, No.2543446, registered in England and Wales.
Registered Office: Granta Lodge, 71 Graham Road, Malvern, Worcs. WR14 2JS.
The Association is a non-profit-making body and is registered as charity
No. 1002307.

Finally, information about the 8th ICIAP:

>From: ICIAP 95 <iciap@dist.dist.unige.it>
>To: iciap-com@dist.dist.unige.it
>Subject: ICIAP '95
>Date: Mon, 28 Nov 94 19:06:01 MET

Dear Sirs,

A postscript version of the 8th ICIAP Call for Papers is now on the
Web. The URL is

http://afrodite.lira.dist.unige.it/confs/ICIAP.ps

The International Conference on Image Analysis and Processing will be held
in Sanremo, Italy, September 13-15, 1995. The deadline for submission of
contributions is January 2, 1995.

Regards.

Well, that's it. I hope you enjoy the TC10 mails and find them
somewhat useful. Let me wish to all of you a pleasant time for
Christmas and New Year's day, for those who celebrate it. And I hope
that 1995 will be a year of success for you, but also, much more
important, a year with peace, happiness and good health.

Your TC-10 chairman,

Karl Tombre - INRIA Lorraine & CRIN-CNRS --- Email: Karl.Tombre@loria.fr
Post: Batiment LORIA, BP 239, 54506 Vandoeuvre CEDEX, France --or--
615 rue du jardin botanique, BP 101, 54602 Villers CEDEX, France
Phone: +33 83.59.20.71 --- Fax: +33 83.41.30.79 --or-- +33 83.27.83.19
WWW URL: http://www.loria.fr/~tombre