Newsletter 41, May 1996

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- TC10 meeting at ICPR'96 in Vienna
- CFP: SDAIR'97
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Dear TC10 members and friends,

Time for a new (one of my last!) TC10 news issue. First, let me remind
you that we will have a formal TC10 meeting in Vienna during ICPR. The
meeting wil be held on
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+----------------------------------------+
|Monday, August 26th, 1996, at 18:00 (6pm)|
+----------------------------------------+
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in the same building as the ICPR conference. The room will be
announced on site (please look for posted announcement on different
boards). As previously said, all the recipients of this mailing list,
and any other person interested in the TC's activities, are heartily
invited to join us. On the agenda:
- Report about TC10's activities these last 2 years
- Next TC10 chairperson
- Update information about the coming GREC'97
- Discussion about future plans and actions
- Miscellaneous

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Now to the usual list of events, announcements, etc. As usual, some of
these announcements are shortened, but you can find full versions of
those (and of others) in my archives:

http://www.loria.fr/~tombre/CFP/maillist.html for the CFPs
http://www.loria.fr/~tombre/Programs/maillist.html for the programs
http://www.loria.fr/~tombre/Misc/maillist.html for misc. announcements

===
First, the CFP for the next SDAIR symposium:
===
>From: Frank Jenkins <frank@little-charlie.ISRI.UNLV.EDU>
>Subject: SDAIR97 - Call for Papers

Call for Papers SDAIR '97

Sixth Annual Symposium on
Document Analysis and Information Retrieval

April 20-23, 1997
Alexis Park Resort, Las Vegas, Nevada

SPONSOR

Information Science Research Institute
University of Nevada, Las Vegas

SYMPOSIUM CHAIR

Jan O. Pedersen
Xerox Palo Alto Research Center
pedersen@parc.xerox.com

PROGRAM CHAIRS

Document Analysis:
Hiromichi Fujisawa
Hitachi Central Research Lab
fujisawa@crl.hitachi.co.jp

Information Retrieval:
Susan Dumais
Bellcore
std@bellcore.com

SYMPOSIUM SECRETARY

Patty Corhn
University of Nevada, Las Vegas
Information Science Research Institute
4505 Maryland Parkway
Box 454021

Las Vegas, NV 89154-4021
(702)895-3338
(702)895-1183 (fax)
sdair@isri.unlv.edu

SCOPE

The purpose of this symposium is to present results of state-of-the-art research and to encourage the exchange of ideas in the general field of automatic extraction of information from images of printed documents. Papers are solicited on all aspects of document image analysis and information retrieval, both theoretical and applied, with particular emphasis on:

Document Analysis:

High-Accuracy Transcription
Postprocessing of OCR Results
Keyword Search in Textual Images
Multilingual OCR, Language ID, etc.
Geometric and Logical Layout Analysis
Recognition of Forms, Tables and Equations
Models of Document Image Degradation
Methods for Performance Evaluation

Information Retrieval:

Full-Text Retrieval
Retrieval from OCR'ed Text
Image and Multimedia Retrieval
Text Categorization
Multilingual Retrieval
User Interaction and Interfaces
Text Representation
Retrieval from Structured Documents
Evaluation of IR Systems

Papers on subjects in the intersection of these two areas will be given priority.

SUBMISSIONS

Please send five copies of complete papers, with the corresponding author's name, postal address, telephone and fax numbers and e-mail address, to the appropriate Chair:

Hiromichi Fujisawa, Chair (Document Analysis)
c/o Information Science Research Institute
University of Nevada, Las Vegas
4505 Maryland Parkway
Box 454021
Las Vegas, NV 89154-4021

Susan Dumais, Chair (Info. Retrieval)
c/o Information Science Research Institute
University of Nevada, Las Vegas
4505 Maryland Parkway
Box 454021
Las Vegas, NV 89154-4021

Manuscripts should be no longer than 20 double-spaced pages or 5,000 words and should not already have been accepted for publication by another conference or journal, nor should they be submitted elsewhere during the SDAIR'97 review period. Manuscripts must arrive on or before the due date. Both camera-ready paper and machine-readable source copies of accepted papers will be required. The proceedings will be available at the conference.

Student papers are encouraged. The symposium will present a prize for the best accepted student paper.

CONFERENCE TIMETABLE

Papers Due September 30, 1996
Notification To Authors December 2, 1996
Camera Ready and Machine Readable Copy January 15, 1997

DOCUMENT ANALYSIS COMMITTEE:

Hiromichi FUJISAWA, chair, Hitachi Central Research Lab

Andreas DENGEL, German Research Center for Artificial Intelligence
Tin Kam HO, Bell Laboratories
Jonathan J. HULL, Ricoh California Research Center
Junichi KANAI, University of Nevada, Las Vegas
Seong Whan LEE, Korea University
Yasuaki NAKANO, Shinshu University
Larry SPITZ, Daimler Benz Research & Technical Center
Suzanne TAYLOR, Lockheed Martin
Karl TOMBRE, INRIA Lorraine

INFORMATION RETRIEVAL COMMITTEE:

Susan DUMAIS, Chair, Bellcore

Robert ALLEN, Bellcore
Abe BOOKSTEIN, University of Chicago
Jamie CALLAN, University of Massachusetts
Stephen GALLANT, Belmont Research
Donna HARMAN, National Institute of Standards and Technology
David HULL, Rank Xerox Research Center
Kazem TAGHVA, Univ of Nevada, Las Vegas
Peter SCHAUBLE, Swiss Federal Institute of Technology, Zurich
Ellen VOORHEES, National Institute of Standards and Technology
Ross WILKENSON, Royal Melbourne Institute of Technology

==
This is the CFP for the 1997 edition of the Canadian Vision Interface
conference:
==
>From: Gerhard Roth <GERHARD.ROTH@nrc.ca>
>Subject: Call for papers - Vision Interface 97

V i s i o n I n t e r f a c e ' 9 7

Kelowna, BC., Canada
19-23 May 1997

CALL FOR PARTICIPATION

Vision Interface '97 is the eleventh Canadian conference devoted to
computer vision, signal and image processing, and pattern recognition.
This conference, held in various Canadian cities, is sponsored by the
Canadian Image Processing and Pattern Recognition Society. The 1997
conference will be held in Kelowna, BC., May 19-23, 1997 in conjunction
with Graphics Interface '97.

INVITED SPEAKERS:

Richard Szeliski Microsoft Research
Brian Funt Simon Fraser University

IMPORTANT DATES:

Four copies of a Full Paper due: Nov. 15 - 1996
Workshop/Tutorial Proposals due: Jan. 15 - 1997
Authors Notified: Jan. 20 - 1997
Final Paper due: Mar. 31- 1997

TOPICS:

Contributions are are solicited (English or French) describing unpublished
research results and applications in any area of computer vision, signal and
image processing, and pattern recognition. Topics will include,
but are not limited to:

Robot Perception Biomedical Applications
Intelligent Autonomous Systems Modeling Human Perception and Movement
Multi-sensor Perception On-line and Off-line Document Processing
Active Perception Industrial Applications
S/W and H/W Architecture 3-D Vision
Methods for Image and Scene Analysis Remote Sensing
Neural Network Motion Representation
Knowledge Representation Robust Methods for Signal and Image processing

Four copies of full papers should be submitted to the Program Co-chairmen
before Nov. 15 1996 Include with the paper full name, address, phone
number, fax number and electronic mail address of the contact author.

Submit papers to:

Gerhard Roth John Barron
Visual Information Technology Dept. of Computer Science
National Research Council The University of Western Ontario
Ottawa, Ontario, Canada K1A 0R6 London, Ontario,Canada N6A 5B7
Tel: (613) 993-1219 Tel: (519) 679-2111
Fax: (613) 952-0215 Fax: (519) 672-7775
email:roth@iit.nrc.ca email: barron@csd.uwo.ca

See also the internet site: http://www.csd.uwo.ca/conf/VI97 for uptodate
information on the conference, including registration information
when it becomes available.

==
Those of us working on map analysis and having to do with GIS may be
interested in this workshop:
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>From: Thomas Roos <roos@inf.ethz.ch>
>Subject: ACM-GIS 96

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********** CALL FOR PAPERS **********
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- 4th ACM INTERNATIONAL WORKSHOP -
= ON ADVANCES IN =
- GEOGRAPHIC INFORMATION SYSTEMS -
=-=

Rockville, Maryland, USA
November 15-16, 1996

=-=

Sponsored by ACM

in cooperation with CACS-USL, UT1-CERISS

in conjunction with the Fifth International
Conference on Information and Knowledge Management
(CIKM'96)

=-=

In recent years computer processing of Earth observations through
geographic information systems has attracted a great deal of
attention from the industrial and research world. The Fourth ACM
International Workshop on Advances in Geographic Information Systems
will provide an effective forum for disseminating original and
fundamental research and experience in the rapidly advancing area of
the use of computer science for spatial studies.

Since the workshop will be held in conjunction with the Fifth
International Conference on Information and Knowledge Management,
(CIKM'96), participants will be able to maximize their interchange
of experiences and knowledge among researchers and practioners
across the entire field of knowledge and information management.

ACM-GIS'96 will bring together leading researchers and developers
and will strive toward setting future research directions in this
area. The primary focus of the workshop is on new and original
research results in the areas of theorical foundations, design,
implementation and applications of GIS as well as experience reports
from application specialists. The goal is to exchange research ideas
and results among participants.

Therefore the topics that will be addressed include, but are not
limited to:
- Query processing and optimization
- Spatio-temporal data models and languages
- Requirements analysis for GIS applications
- GIS performance modeling and evaluation
- Reasoning with GIS information
- Imprecise spatio-temporal information
- Semantics of spatio-temporal data
- Quality aspects of geographic information
- Design of spatio-temporal data structures
- Spatial indexing and storage
- Knowledge discovery
- GIS meta data
- User interfaces for GIS
- Multi-media GIS
- Digital libraries for GIS
- Virtual reality in GIS
- Interoperability among heterogeneous GIS
- Electronic geographic data interchange standards
- Parallel/distributed GIS
- GIS and internetworking
- Client-server architecture for GIS
- GIS and cooperative work
- Multidatabase GIS
- Distributed spatial objects
- Time in GIS
- Active spatio-temporal objects
- Moving objects in GIS
- Real-time GIS systems
- GIS software tools and environments
- Novel applications in scientific and environmental domains
- Integration with existing commercial products
- Reports on experience with real applications

Papers submission:
- -----------------

Authors are invited to submit complete and original research
contributions or experience reports; submissions should be written
in english and should include:
- Title
- Author(s) information (Name, Affiliation, Postal address
E-mail address, Phone/Fax numbers)
- Topic(s)
- Abstract (up to 200 words)
- Text (double-spaced and no longer than 5 000 words)
- References

In case of multiple authors, an indication of which author is
responsible for correspondence and preparing the camera ready paper
for the proceedings should also be included. Submitters should
indicate in a cover letter their willingness to attend the workshop
and present their paper.

All submitted papers will be refereed by at least five reviewers for
quality, correctness, originality and relevance. Accepted papers
will be published in the ACM-GIS'96 proceedings. We encourage
submissions from both academic and industrial spheres.

Authors will be interested to know that extended versions of out-
standing papers from the workshop will be considered for publication
in "GeoInformatica", an international journal on advances of
computer science for GIS (by Kluwer Academic Publishers).

Proposals for panels that examine emerging, innovative, or otherwise
provocative geographic information issues are encouraged as well.
Panel proposals should include a summary of the topic and the names
and affiliations of the panelists who have made a commitment to
participate.

Seven copies of the manuscript should be submitted by August 4, 1996
to either Dr. Patrick Bergougnoux or Dr. Shashi Shekhar, the
ACM-GIS'96 Program Co-Chairs:

European Chair: USA Chair:
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Dr Patrick Bergougnoux Prof. Shashi Shekhar
c/o Michele Cuesta 4-192 EE/CS
The University of Toulouse 1 University of Minnesota
IRIT-CERISS laboratory 200 Union Street S.E.
Place Anatole France Minneapolis
31042 Toulouse Cedex - FRANCE MN-55455 USA
Email : bergougn@irit.fr Email : shekhar@cs.umn.edu
Phone : (33) 09 70 13 36 Phone : 612-624-8307
Fax : (33) 61 77 06 71 Fax : 612-625-0572

- ----------------------------IMPORTANT DATES--------------------------
Paper submission deadline : August 4, 1996
Notification of acceptance : September 29, 1996
Camera ready paper due : October 27, 1996
ACM-GIS'95 workshop date : November 15-16, 1996
- --

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All those of us who are interested in performance evaluation problems
may be interested also in this special issue of MVA:
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>From: hic@grip.cis.upenn.edu (Henrik I. Christensen)
>Subject: CFP, Special issue of MVA on Performance Characteristics

Call for papers for special issue of
Machine Vision and Applications
on
"Performance Characteristics of Vision Algorithms"

Guest editors: Henrik I. Christensen, Stockholm and
Wolfgang Foerstner, Bonn

The special issue is motivated by the belief that the lack of
performance characterization of vision algorithms is responsible for
the hesitation of industry to use computer vision as one of its tools.
Reasons for this situation are manifold: the lack of commonly accepted
criteria for evaluation, the lack of a methodology for testing, the
lack of translating the experience in testing of other engineering
areas to Computer Vision and possibly also the non-acceptance of
empirical or theoretical comparisons of vision algorithms, including
their replication, as original research.

The goal of the special issue is to present the state of the art in
characterizing the performance of vision algorithms in all stages of
the development and use, such as the design of algorithms with a
pre-specified performance, the testing of algorithms with respect to
give specifications and the self-diagnosis of vision algorithms during
their use in an automated process.

We encourage authors to submit papers on the following topics:

* Theory and strategies for performance analysis of vision algorithms
* Linking analysis of vision experiments to the theory underlying the
algorithms
* Characterization of the limitations of vision algorithms and/or
the class of image data for which a vision algorithm is suited or
not suited
* Demonstrations of the usefulness of performance characterization
and/or the limitations of statistical testing in Computer Vision
* Modularization of vision tasks and the characterization of networks of
vision algorithms

General information about the IAPR journal Machine Vision and
Applications published by Springer Verlag kan be found at the URL:
gopher://trick.ntp.springer.de/11/TOC/138/ guidelines for authors and

style files for LaTeX may be retrieved directly from Springer Verlag
at the address gopher://trick.ntp.springer.de/11/tex/latex/ljour2/

TIMETABLE:

15 August 1996 Deadline for manuscripts
1 December 1996 Acceptance/Rejection decision and revies
returned to authors.
31 December 1996 Final manuscript are due at the publisher
No 1, 1997 Special issue will be published

Please submit papers before 15. August 1996 to:

Dr. Henrik I. Christensen
Center for Autonomous Systems
Numerical Analysis and Computing Science
Kungliga Tekniska Hogskolan
S-100 44 Stockholm
Sweden

E-mail: hic@vision.auc.dk

==
This is also a conference which is close to our topics of interest:
==
>From: Ravi Rao <rao@watson.ibm.com>
>Subject: CFP: Machine Vision Applications in Industrial Inspection 1997

MACHINE VISION APPLICATIONS in INDUSTRIAL INSPECTION 1997

Conference Chairs: A. Ravishankar Rao, IBM Thomas J. Watson Research Ctr.;
Ning Chang, KLA Instruments Corp.

Machine vision systems can augment human vision capabilities in
repetitive or high-speed industrial inspection tasks or when precise
visual measurement and inspection are required. These systems improve
manufacturing productivity, quality, and compliance with product
standards, and thus provide a competitive advantage. Improvements in
machine vision hardware, algorithms, and software expand the range of
industrial processes to which this technology can be successfully
applied.

This conference brings together practitioners and researchers in
machine vision to share recent developments in computer vision
architectures, hardware, algorithms, and software for industrial
inspection tasks. Papers are solicited but not limited to the
following areas:
* new or improved algorithms for industrial inspection
* novel hardware designs for machine vision systems
* robot vision and tracking
* verification and identification
* performance evaluation of algorithms
* use of 3D or color imaging techniques
* automatic defect classification
* software systems for flexible automatic inspection
* applications of machine vision in microelectronics manufacturing, web
and paper products, glass and steel inspection, food and agriculture,
and pharmaceuticals.

Papers emphasizing fundamental methods that are widely applicable to
industrial inspection are especially welcome. All submissions will be
peer reviewed. Please note that abstracts must be at least 500 words
in length in order to receive full consideration.

This conference is just one of nearly 30 conferences to be held at the EI'97
symposium. And EI'97 is just part of the larger Photonics West Symposium being
held 8-14 February 1997, San Jose Convention Ctr., San Jose,
California USA.

TO OBTAIN ALL CALLS FOR PAPERS ELECTRONICALLY
The URL for the web site with the calls is:

http://www.spie.org/web/meetings/calls/pw97/pw97call_home.html

by anonymous FTP
(ftp://spie.org/meetings/calls/pw97*),
or by e-mail file retrieval
send a message to info-optolink-request@spie.org with the following in the
message body:
send [meetings.calls]pw97*}

For a printed call for papers or other information:
E-mail: pw97@spie.org
Fax: 360/647-1445
Phone: 360/676-3290

Electronic Imaging '97 DEADLINES
Paper Abstracts Due from Authors:
15 July 1996

Manuscripts Due from Authors:
13 January 1997

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The ICIP'96 conference will be held in September. Here is some update

information on this event. Please check the WWW address for details:
==
>From: Alain Chehikian <chek@tirf.inpg.fr>
>Subject: Intl_Conf_on_Image_Processing_1996

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_____
IEEE SIGNAL PROCESSING SOCIETY /| /|
/ |ICIP / |
1996 INTERNATIONAL CONFERENCE ON IMAGE PROCESSING /__|____/ |
September 16-19, 1996 | |____|__|
| / | /
Lausanne, Switzerland | / 96 | /
|/_____|/
e-mail: icip96@ieee.org
http://www.tele.ucl.ac.be/ICIP96/
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REMINDER: Early registration DEADLINE for ICIP-96 is

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MONDAY, JULY 29, 1996

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Your REGISTRATION and HOTEL reservation forms must be received by July 29, 1996
in order to qualify for the lower registration fees.

You will find:

Advance program,
Registration Information including registration form,
Hotel Information including reservation form,
Travel Information,
Social Program,

through the web site:

http://www.tele.ucl.ac.be/ICIP96/

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==
Another conference in the general area:
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>From: william.beaudot@csemne.ch
>Subject: ECVP96 Programme

Hi Everybody!
The full programme of the European Conference on Visual Perception ECVP96,
which will take place in Strasbourg in next September, is now available
on the Web: http://iris.inpg.fr/PERSON/beaudot/ecvp96.html

Best Regards,

Dr. William H.A. BEAUDOT E-mail: william.beaudot@csemne.ch
CSEM SA Finger: beaudot@anina.csemne.ch
Advanced Research & Development Dept.: Bio-inspired Systems Research
Jaquet-Droz 1 Phone: (41) 38 205 666 < RECENT
CH-2007 Neuchatel (Switzerland) Fax: (41) 38 205 763 < CHANGES !!!
WWW: http://iris.inpg.fr/PERSON/beaudot/beaudot.html

==
This recent book has been announced:
==
>From: Dr Kevin Bowyer <kwb@bigpine.csee.usf.edu>
>Subject: New Book Announcement: Advances In Image Understanding

** New Book Announcement **

Advances In Image Understanding:
a Festschrift for Azriel Rosenfeld

This volume of original papers has been assembled to honor
Azriel Rosenfeld on the occasion of his 65-th birthday.

There will be an announcement reception for the Festschrift on
the evening of Monday, June 17, just prior to CVPR, in the
conference hotel (Hotel Nikko, 6:00 pm, in the Pink Pearl Room).

The contributions in this book illustrate the changes that
have occurred in dealing with crucial research problems and
the methodologies employed to solve them. The contributors
include Jake Aggarwal, Narendra Ahuja, Ruzena Bajcsy, Jacob Beck,
Mike Brady, Freddy Bruckstein, Rama Chellappa, Larry Davis,
Chuck Dyer, Herb Freeman, Robert Haralick, Thomas Huang,
Bob Hummel, Anil Jain, Ramesh Jain, Jan J. Koenderink,
Martin Levine, Hans-Hellmut Nagel, Sandy Pentland, Tomaso Poggio,
Hanan Samet, and Steve Zucker.

344 pages. 6 x 9; Softcover. July 1996.

ISBN 0-8186-7644-2.

Published by IEEE Computer Society Press.

Catalog # BP07644. $40.00 Members / $45.00 List.

Telephone orders: 1 800 CS BOOKS.

http://www.computer.org/cspress/catalog/bp07644.htm

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A new journal has also been announced; this may interest some of you:
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>From: Melinda PALMER <palmerm@oup.co.uk>
>Subject: New Journal - Medical Image Analysis

In June 1996, Oxford University Press will be publishing the first
issue of a new journal - Medical Image Analysis - which will represent
work at the forefront of medical imaging and computer vision/image
processing.

Special emphasis will be placed on efforts related to the application
of computer vision, virtual reality and robotics to medical imaging
problems. While not limited to these alone, it is expected that the
typical medical image datasets of interest will include those acquired
>from magnetic resonance, ultrasound, computed tomography, nuclear
medicine, X-ray and video and range data images of the patient.

A CD-ROM is distributed with each issue which will permit you to scan
the text and view movies, images and graphics.

If you would like to submit a paper for publication, or request a
free sample copy, you will find these options at the Medical Image
Analysis web site at: <A href="/<a href="http://medweb.bham.ac.uk/mia">http://medweb.bham.ac.uk/mia">
http://medweb.bham.ac.uk/mia</A>

==
The ECCV'96 is over. Proceedings are available:
==
>From: Charles Dyer <dyer@cs.wisc.edu>
>Subject: ECCV '96 Proceedings Available

%%
% %
% European Conference on Computer Vision (ECCV 96) %
% %
%%

The European Conference on Computer Vision, held biennially, took
place this year at Cambridge University. Over one hundred papers have
been published in a two-volume proceedings by Springer-Verlag.
Forty-three papers were selected for oral presentation in this
single-track conference. You may like to check it out for yourself by
browsing titles and abstracts at the conference web site:

http://svr-www.eng.cam.ac.uk/Research/Vision/ECCV/ECCV.html

and ordering a copy of the proceedings for yourself.

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I regularly receive announcements about new CVL Technicl Reports from
the UMD. Here are two such announcements which may be of direct
interest to several colleagues working on graphics recognition:
==
>From: Sandy German <sandy@cfar.umd.edu>
>Subject: New reports now available

Below are the directions for anonymous ftp access to our archive:

1. "ftp ftp.cfar.umd.edu"

2. login "anonymous"

3. password "your login" (e.g., sandy@cfar.umd.edu)

4. "cd CfAR/TRs/CVL-Reports-1995" (or CVL-Reports-1996)
(please match upper and lower case as indicated)

The contents of these directories are:

a. "directory_contents" (an ascii file containing abstracts and other
descriptive information---keywords, postscript file name, total number
of pages when output in hardcopy, etc.---about each report available in
the directory)

b. "INDEX" (an ascii file containing the name of the postscript file
and the title of the paper contained in that file)

c. postscript files (some of these files can be quite large---even
when compressed---as they include figures and/or images)

Note: occasionally the title page of a report must be formatted
separately from the body of the report. When this happens the title
page will be posted as a separate postscript file with "tpg" as

part of the file name.

Advice: set "bin" (Apparently it is advisable to use binary transfer
when downloading compressed files---which all of these files are)

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These files can also be accessed via the World Wide Web at:

The URL is: "http://www.cfar.umd.edu/cvl/". Then you should scroll to
the bottom of the page and link to "CVL Technical Reports". From there
you should choose the folder for the appropriate year in which the
report was dated.

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Most recent reports placed in CVL-Reports-1995 and CVL-Reports-1996 archive.

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file name(s): TR3579-Hori.ps.Z
title: Quantitative Measurement of the Performance of Raster-to-Vector
Conversion Algorithms
author(s): Osamu Hori and David Doermann
date: December 1995
pages: 13
support: ARPA
keywords: raster to vector conversion, vectorization, document image analysis
abstract:
This paper presents a methodology for measuring the performance of
application-specific raster-to-vector conversion algorithms. In
designing and building image analysis systems, comparison of several
algorithms is often required. Unfortunately, many methods of comparison
do not give quantitative performance measurements, but rather
qualitative, and often subjective, evaluations. Our key observation is
that there is a need for domain- or task-dependent evaluation of the
output. By specifying the input data in the same parameter space as the
intended output of the system, we are able to evaluate the quality of
the output and how well it conforms to the intended representation. We
provide a set of basic metrics, but we emphasize that in general, such
metrics may be task-specific. In this paper, the performance of three
approaches to raster-to-vector conversion---{\em thinning},
{\em medial line finding}, and {\em line fitting}---are compared using this
methodology.

file name(s): TR3580-Hori.ps.Z
title: Box-Driven Reasoning: A Toolkit for the Development of Document
Image Understanding Systems
author(s): Osamu Hori and David Doermann
date: December 1995
pages: 31
support: ARPA
keywords: document images, tables, forms page segmentation
abstract:
This paper proposes a strategy and set of supporting tools to aid
in the development of document image understanding systems. Many
document image understanding tasks can be generalized to the
segmentation of an image into rectangular regions and the assignment of
attributes to those regions. A data model which supports this view
consists of three layers: images, features, and rectangular regions with
attributes. The toolkit has been developed to employ the reusability and
expandability of C++, an object-oriented language. Widely available
image processing packages are used for feature extraction and the
toolkit is used to extract and manipulate the third layer of data,
rectangular regions. Two applications are implemented using the toolkit:
table form processing and page segmentation. Results suggest that the use of
the toolkit saves about one-third of the coding cost and one-fourth of
the development, in comparison with development from scratch.

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This may not be directly related to graphics recognition or document
analysis, but maybe some of you find interest in it:
==
>From: "Jean Ve'ronis" <veronis@univ-aix.fr>
>Subject: Free Soft: MtRecode - Character conversion program
.
*** ANNOUNCING FREE SOFTWARE ALPHA RELEASE ***

MtRecode - Character conversion program

MtRecode is a program for translation between various character sets,
developed in the framework of the MULTEXT project. It has some of the
functionality of the GNU `recode' tool, but it is based on different
principles and is oriented towards SGML text manipulation. ISO 10646 is
used internally as a pivot in the character translation process. When
exact translation into a character is not possible, MtRecode can use SGML
entities as a fallback. Conversely, MtRecode understands SGML entities in
the input and can recode them into characters of the target character
sets, if they exist. MtRecode is completely customizable: the user can
add new character sets and/or entities by providing tables that map
characters and entities to ISO 10646.

C source code for UN*X platforms and documentation can be freely
downloaded for non-commercial, non-military use (see our user agreement)
from:

http://www.lpl.univ-aix.fr/projects/multext/MtRecode/

Note that MtRecode is an alpha version with (probable) bugs and
limitations. It is being distributed "as is" in order to solicit
feedback. We invite the user community to send comments and advice,
provide additional character tables, etc.

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Well, that's it for this issue. Looking forward to meeting as many of
you as possible in Vienna in August. In the meantime, happy holidays
to all those who take some holidays in this period of year.

Your TC10 chairman,

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