

Newsletter 29

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Dear IAPR TC-10 friends,

Here comes the advance program and registration information for the graphics recognition workshop:

>From: David A Kosiba <kosiba@pacific.cse.psu.edu>

International Workshop for Graphics Recognition '95
The Penn State Scanticon Conferene Center Hotel
University Park, PA
August 10-11, 1995

-----IWGR 95 - ADVANCED PROGRAM NOTES -----

This is for all those who are planning to attend both IWGR 95 and ICDAR 95. Unfortunately our official brochure may not be out in time for those attending both to get their registration and travel plans finalized before ICDAR's registration deadline.

Included here is information regarding workshop registration, accomodations, as well as the schedule of events for the workshop. If there are any questions, please contact either Chuck Wilson our conference coordinator at PHONE:(814) 863-5130, FAX: (814) 863-5190, email: cqw4@cde.psu.edu or myself (David Kosiba) at (814) 863-0076, FAX: (814) 865-3176, email: kosiba@cse.psu.edu.

As a side note, for those who are NOT in a rush to finalize their travel plans, please wait until the official brochure (with registration forms included, to be mailed on June 1) is sent before trying to register. This is only intended for those who need to finalize things before ICDAR's deadline.

Thank you,
David A. Kosiba

-----REGISTRATION AND ACCOMODATIONS-----

Advanced registration and accomodations for IWGR 95 may be attained by contacting:

Conferences and Institutes Registration
The Pennsylvania State University
225 Penn State Scanticon
University Park, PA 16802-7002

PHONE (814) 863-5130
FAX (814) 863-5175

The fee for the workshop is \$75 which covers workshop registration, reception, preproceedings (given at workshop), banquet, coffee breaks, lunches, and a picnic on the last day of the workshop.

The cost of accomodations is \$85/night for a single room and \$95/night for a double. Rooms have been reserved for workshop attendees at the Scanticon conference center/hotel, so there should be no problem in obtaining a room.

----- SCHEDULE OF EVENTS -----

Wednesday, August 9, 1995

6:30 PM to 8:00 PM: Reception

8:00 PM to 10:00 PM: Dashed-line contest set-up (ftp code, etc).

Thursday, August 10, 1995

8:15 AM to 8:30 AM: Opening Remarks (Kasturi/Tombre)

8:30 AM to 10:30 AM: BASIC TECHNIQUES AND SYMBOL-LEVEL RECOGNITION:

AN OVERVIEW

Lawrence O'Gorman, AT&T Bell Labs.

"Fast Algorithms for Raster to Vector Conversion of Line Drawings and Extraction of Graphic Primitives from Skeletonized Pictures", Vladimir M. Kiyko, Institute of Cybernetics of the Ukrainian, Ukraine.

"Comparison of Methods for Detecting Corner Points from Digital Curves", Tokuhisa Kadonaga and Keiichi Abe, Shizuoka University, Japan.

"Detection of Horizontal Lines in Telephone Company Drawings", Atul K. Chhabra, NYNEX Science and Technology, White Plains, NY.

"Morphological Approach for Dashed Lines Recognition", Huizhu Luo and Its'hak Dinstein, Ben Gurion University of the Negev, Israel.

"Automatic Learning and Recognition of Graphical Symbols in Engineering Drawings", B.T. Messmer and H. Bunke, Institut für Informatik, Switzerland.

"Towards a High Quality Vectorization", Markus Roosli and Gladys Monagan, Swiss Federal Institute of Technology, Switzerland.

"Knowledge-Oriented Primitive Recognition on the Basis of Geometrical Information", Liu Wenyin, Tang Long, Tang Zesheng, and Dov Dori, Technion, Israel Institute of Technology, Israel.

"A Hybrid System for Locating Low Level Graphic Items", F. Cesarini, M. Gori, G. Soda, and S. Marianai, Università di Firenze, Italy.

Open Problems/Discussion/Recommendations

10:30 AM to 11:00 AM Break

11:00 AM to 12:30 PM: AUTOMATIC MAP INTERPRETATION
Jurgen den Hartog, T.N.O. Institute of Applied Physics,
The Netherlands.

"Automatic Region Labeling of the Layered Map", Mun-Kyu Park, Min-Ki Kim, and Young-Bin Kwon, Chung-Ang University, Korea.

"Verification-Based Approach for Automated Text and Feature Extraction from Raster-Scanned Maps", Gregory K. Myers and Prasanna G. Mulgaonkar, SRI International, Menlo Park, CA.

"Character String Extraction Based on Multi-Scale Measurement", Hidekata Hontani and Shigeyoshi Shimotshuji, Toshiba Corporation, Japan.

"Systems for Paper Map Interpretation: Methods Engineering", A. W. M. Smeulders and T. ten Kate, University of Amsterdam, The Netherlands.

Open Problems/Discussion/Recommendations

12:30 PM to 2:00 PM: Lunch

2:00 PM to 3:45 PM: ENGINEERING DRAWING INTERPRETATION
Dov Dori, Technion, Israel.

"Understanding Engineering Drawings: A Survey", Tapas Kanungo, Robert M. Haralick, and Dov Dori.

"Expressing Structural Relations Among Graphic Symbols Using the Object-Process Methodology", Dov Dori, Technical Israel Institute of Technology, Israel.

"Segmentation and Recognition of Text from Engineering Drawings", Dov Dori and Yelena Velkovitch, Technical Israel Institute of Technology, Israel.

"Functional Parts Detection in Engineering Drawings: Looking for the Screws", Maria A. Capellades and Octavia I. Camps, The Pennsylvania State University, University Park, PA.

"Reconstruction of 3D Solid Model from Three Orthographic Views - Top-Down Approach", Kem Tomiyama and Ken'ichi Nakaniwa, Aoyama Gakuin University, Japan.

"Robust Recognition of Form-Features Using Neural Network Techniques from CAD Model", Chia-Hwa Liu, National Defense Management College, Taiwan.

"Interpreting Scanned Engineering Drawings - A High Level Approach", P. D. Thomas, J. F. Poliakoff, S. M. Razaq, and R. J. Whitrow, The Nottingham Trent University, Great Britain.

"Knowledge Based Interpretation of Engineering Drawings and Maps", Sergey Ablameyko, Steve Joseph, and Tony Pridmore, Institute of Engineering Cybernetics, Minsk.

Open Problems/Discussion/Recommendations

3:45 PM to 4:15 PM: Break

4:15 PM to 5:30 PM: GENERAL DIAGRAM-RECOGNITION METHODOLOGIES
Dorothea Blostein, Queen's University, Canada.

"Automatic Interpretation of Chemical Structure Diagrams",
Joe R. McDaniel and Jason Balmuth, PSI International, Inc.
Baltimore, MD.

"Recognition of Faces in a Drawing by Vote", Michihiko
Minoh, Jun Yashiki, and Katsuo Ikeda, Kyoto University, Japan.

"Model-Based Analysis of Printed Tables", E. Green and
M. Krishnamoorthy, Rennselaer Polytechnic Institute, Troy, NY.

"'Getting the Picture' from Graphs", Robert W. Berger, Samuel
J. Kass, Rick Romero, David S. Touretzky, and Robert H.
Thibadeau, Carnegie Mellon University, Pittsburgh, PA.

"An Electronic Circuit Images Recognizer", Edison Oliveira
de Jesus, Rennselaer Polytechnic Institute, Troy, NY.

"Form Item Extraction Based on Line Searching", Eric Turolla,
Yolande Belaid and Abdel Belaid, INRIA Lorraine, France.

Open Problems/Discussion/Recommendations

5:30 PM to 6:30 PM: Break

6:30 PM to 8:30 PM: Banquet

Keynote Address -- "The Commercial Value of Graphics
Recognition Technology", Dr. Clifford Kottman,
Executive Director, Federal Systems Intergraph.

8:30 PM to 11:00 PM: Dashed Line Detection Contest

Friday, August 11, 1995

8:30 AM to 10:30 AM PERFORMANCE EVALUATION: METRICS AND DATABASES
Robert M. Haralick, University of Washington.

"A System for CAD Reconstruction from Machine Drawings",
Tapas Kanungo and Robert M. Haralick, University of
Washington, Seattle, WA.

"Quantitative Measurement of the Performance of Raster-to-
Vector Conversion Algorithms", Osamu Hori and David S.
Doermann, University of Maryland, College Park, MD.

"Evaluation of Drawing Recognition Systems in Industrial
Applications", Gerd Maderlechner, Siemens AG, Munich,
Germany.

An Alternative Approach to the Performance Evaluation of
Thinning Algorithms for Document Processing Applications",
L. P. Cordella and A. Marcelli, University of Napoli,
"Federico II", Italy.

Open Problems/Discussion/Recommendations

10:30 AM to 11:00 AM: Break

11:00 AM to 12:30 PM: Closing Session (Kasturi/Tombre)
Recommendations of the Workshop

12:30 PM to 2:00 PM: Lunch

2:00 PM to 6:00 PM: Picnic at Stone Valley Recreation Park

I also received some other piece of information which may be of
interest to some of you. Here is a call for posters and demos at a
forthcoming workshop on visual information, during ICCV at MIT.

>From: Laurie Pillsbury <lawp@media.mit.edu>
>Subject: Call for Posters and Demos, ICCV Workshop

CALL FOR POSTERS AND DEMONSTRATIONS

In conjunction with the ICCV Workshop on Visual Information
Management, June 19, Bartos Theater, The Media Laboratory, M.I.T.

In the last few years, many researchers have begun building systems
for visual information management. Such systems encompass central
aspects of databases, pattern recognition, image understanding,
interface design, and AI reasoning systems. The challenge for vision
researchers is to develop tools for analyzing the semantic content of
video and image, representing that content in a way that can be
efficiently searched and compared, and finally delivering it to users
in the form of useful, focused presentations.

To help stimulate research and communication in this area, we are organizing a workshop on visual information management, sponsored by NSF and ARPA. This one-day workshop will consist of presentations and discussions involving researchers from around the world.

As part of this workshop we ask interested researchers to submit proposals for poster presentations and computer demonstrations.

Poster presentations should be no more than 500 words in length, including title, author list, email addresses, postal addresses, and a summary description of the poster's content. The submission should be by email only, and must arrive before May 31, 1995. Notification of acceptance will be by June 7, 1995.

Proposals for computer demonstrations should be no more than 500 words in length, including title, author list, email addresses, postal addresses, and a summary description of the demonstration's content and a detailed description of required space, time, and computation resources. The submission should be by email only, and must arrive before May 31, 1995. Notification of acceptance will be by June 7, 1995.

Submissions and questions should be sent to either Alex Pentland (sandy@media.mit.edu) or Rosalind Picard (picard@media.mit.edu).

A final CFP was also recently issued for this special issue of PAMI:

>From: "Roz W. Picard" <picard@media.mit.edu>
>Subject: PAMI Special Issue on Digital libraries: Representation and Retrieval

FINAL CALL FOR PAPERS

Special Issue of the IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE on Digital libraries: Representation and Retrieval

Papers are solicited for a special issue of the IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE which will address the subject of Digital libraries: Representation and Retrieval. The Guest Editors for the special issue will be Rosalind W. Picard and Alex P. Pentland, both of the M.I.T. Media Laboratory, USA.

With the rapid increase in worldwide networks, people will soon have access to massive libraries of digital text, sound, image, video and other special-purpose data. The biggest obstacle to this "information glut" is that the technology for organizing, querying, and retrieving data from these multimedia libraries is still in its infancy.

Research in pattern analysis and machine intelligence is needed to provide tools for accessing the content of these databases. The papers in this special issue will describe novel and significant tools and techniques that facilitate access to the content of large data collections. Manuscripts will not be accepted if they have been previously published, or if they describe algorithms that have not been carefully evaluated on large databases. Possible topics for papers submitted to the special issue include, but are not limited to:

- * Robust recognition and retrieval of classes of information, such as "find all photos containing trees" or "all places where there is laughter."
- * Search on compressed representations, and new representations that facilitate efficient semantic or perceptual searching.
- * Intelligent searching through huge amounts of text or data, e.g. for DNA matching or drug design.
- * Automatic annotation to generate descriptions of data, especially based on combinations of visual, acoustic, and motion (temporal) features.
- * Recognition of video content invariant to viewing conditions, e.g., "Find all other shots of this scene."
- * Computational measures of perceptual similarity: especially texture, shape, color, that have been evaluated on a large set of data, e.g., "computer, are there any other drum patterns that sound like this?" or "find fabrics which look most like this one."
- * Segmentation of video/soundtrack/image as applied to database search and retrieval.
- * Automatic extraction of video keyframes, or analogous summarizing information in non-visual media.

All papers will be reviewed by the guidelines of the transactions. Please submit four copies of your paper to:

Prof. Rosalind W. Picard
MIT Media Laboratory, E15-392
20 Ames Street
Cambridge, MA 02139

Schedule:

Deadline for submission of manuscripts: June 30, 1995
First set of reviews to authors: December 1, 1995
Final manuscripts due: March 1, 1996
Publication of special issue: November, 1996

For further information, contact

Rosalind W. Picard (picard@media.mit.edu)
or
Alex P. Pentland (sandy@media.mit.edu).

Finally, for those of you who are interested in computer vision, this
announcement can be of interest to you:

>From: Roger Mohr <Roger.Mohr@imag.fr>

The Workshop on

Geometrical Modeling and Invariants for Computer Vision

was held in Xi'an, China, the 27, 28, 30 April 1995. Exciting new developments
were presented and the text of the communications published by Xidian
University Press, Xi'an (ISBN 7-5606-0383-1).

There are 60 papers included in the proceedings. The papers are edited
in five sections: Curved 3D Objects, Image Geometry and Algebra, 3D
Projective Invariants, 3D Reconstruction and Robots, and Shape
Invariants (see below for the table of content). The proceedings
consists of 404 pages with a softcover.

Proceedings can be obtained by ordering from
Daniele Herzog,
Lifia-Inria,
46 av. Felix Viallet
38031 Grenoble, France
fax: (33) 76 57 46 02 tel: (33) 76 57 48 06
email : daniele.herzog@imag.fr

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No cash, no credit card, sorry.

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Well, that's all for now. I hope to meet many of you in Pennsylvania
this summer.

Your TC10 chairman,

--

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