

# Newsletter 57, October 1998

TC10 News #57

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ICPR98 Website Update

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Dear TC10 members and friends,

Welcome to issue #57 of TC10 News. Before I begin with the CFP's, there are some administrative announcements.

First, I have completely revamped the TC10 web site (<http://www.iapr-tc10.or.kr>). I attempted to keep minimal information in the top level pages which essentially point you to other pages for detailed information. I hope you like the new layout. I am sorry that some of the pages are still under construction. One area where I would like input from the list members is the page on "Research Groups". If you know of good web sites that describe research efforts in graphics recognition, please e-mail me the URL's.

Second, I would like all of you to visit the "membership" link on the TC10 home page. I would like each one of you to take just a few minutes to fill out your mailing address and other info. This information will be used only for TC10 purposes. If you ever have a change in email address, mailing address, or any other information, you may reflect the change in the TC10 member database by visiting the membership site again and making the change yourself.

I would appreciate any feedback on the new web site and the web based member enrollment process.

The GREC'99 Call for Papers can be found online at <http://www.iapr-tc10.or.kr/GREC99/>. The deadline for submission of abstracts is March 1, 1999.

ICDAR'99 submission deadline is January 15. The ICDAR web site is located at <http://www.cedar.buffalo.edu/ICDAR99/>.

Rest of the CFP's and announcements follow.

--Atul

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> From: KAGIYAMA yoshimi <[kagiyama@nttvdt.hil.ntt.co.jp](mailto:kagiyama@nttvdt.hil.ntt.co.jp)>  
> Subject: CFP: ICIP'99 Int. Conf. on Image Processing, Kobe, Japan

IEEE ICIP-99 Kobe, JAPAN C A L L F O R P A P E R S

IEEE Signal Processing Society  
1999 International Conference on Image Processing  
October 25-28, 1999  
International Conference Center Kobe  
Kobe, JAPAN

ICIP-99 SCHEDULE:  
Paper proposals due: 15 January 1999  
Notification of Acceptance: 10 May 1999  
Camera-Ready papers due: 30 June 1999

ICIP-99 is the sixth international conference on theoretical, experimental, and applied image processing. It provides a unique, centralized, high-quality forum for presentation of technological advances and research results by engineers and scientists working in Image Processing and associated disciplines, such as multimedia and video technology. Also encouraged are image processing applications in areas such as biomedical sciences and earth sciences.

SCOPE:

1. General Techniques and Algorithms

Filtering, Enhancement, Restoration, Coding, Segmentation, Multiresolution Processing, Multispectral Processing, Image Representation, Image Analysis, Image Understanding, Interpolation and Spatial Transformations, Neural Networks for Image Processing, Architectures and Software.

2. Computed Imaging

Acoustic, Radar, Tomography, Magnetic Resonance, Geophysical and Seismic, Speckle Imaging, Radio Astronomy, Computer Holography, Confocal, Electron Microscopy, X-ray Crystallography, Coded-Aperture Imaging, Real-Aperture Arrays.

3. Image Scanning Display and Printing

Scanning and Sampling, Quantization and Halftoning, Color Reproduction, Rendering, Graphics and Fonts, Image Quality, Visualization.

4. Video and Multimedia

Multimedia, Visual Communications, HDTV, Enhanced Quality TV, Digital TV, Digital Versatile Disc, Video Terminals and Set-Top-Boxes, Packet Video, Motion Detection, Video Object Planes, Analysis and Estimation, Image Sequence Processing, Video Data Base, Low Bit Rate and Very Low Bit Rate Coding, Video over Wireless Channels, Video Streaming, Video Signal Processor Chips, Watermarking and Encryption, Access to and Retrieval from Multimedia Databases.

5. Applications

Application of Image Processing Technology to any field, including Consumer Electronics, Biomedical Sciences, Astronomy, Geosciences, and Environment and Document Processing.

SUBMISSION PROCEDURES:

Prospective authors are invited to propose papers for presentation 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 six copies of the paper summary each with a cover sheet stating:

(1) paper title, (2) technical area(s), (3) nature of problem which you have addressed and its importance, (4) original contribution, (5) contact author's a. first (personal) name, b. last (family) name, c. address, d. telephone number, e. fax number and f. electronic mail address

to:

ICIP-99 Secretariat, Ozawa Lab.

Dept. of Information and Computer Science

Keio University

3-14-1 Hiyoshi Kohoku Yokohama, 223-8522, Japan

Each selected paper (five-page limit) will be published in the Proceedings of ICIP-99. Presentations will be assigned to lecture or poster sessions by the technical committee. Style files in LaTeX and Microsoft Word will be provided for the convenience of the authors. Additional information can be obtained at:

ICIP-99 web site: <http://icip99.ozawa.ics.keio.ac.jp/>

ICIP-99 Conference Committee

General Chair

Yasuhiko Yasuda

Waseda University

Tel:+81-3-5286-3388

[yasuda@yasuda.comm.waseda.ac.jp](mailto:yasuda@yasuda.comm.waseda.ac.jp)

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[ List of various committee chairs edited for brevity. --AKC ]

> From: Stefano Cagnoni <[cagnoni@ce.unipr.it](mailto:cagnoni@ce.unipr.it)>

> Subject: CFP: EvoASP'99, Evolutionary Comptn for Image & Signal Proc, Goteborg, Sweden

CALL FOR PAPERS

EvoASP '99

FIRST EUROPEAN WORKSHOP ON EVOLUTIONARY COMPUTATION  
IN IMAGE ANALYSIS AND SIGNAL PROCESSING

GOTEBORG, 28 May, 1999

Evolutionary algorithms have been shown to be tools which can be used effectively in the development of systems (software or hardware) for image analysis and signal processing in complex domains of high industrial and social relevance.

EvoASP '99 will be the first European event specifically dedicated to the applications of evolutionary computation (EC) to image analysis and signal processing (IASP) and will give European and non-European researchers in those fields, as well as people from industry, an opportunity to present their latest research, discuss current developments and applications, besides fostering closer future

interaction between members of the three scientific communities.

The event will be held at Chalmers University of Technology in Goteborg, Sweden.

The workshop is sponsored by EvoNet, the Network of Excellence in Evolutionary Computing, and is one of the activities of EvoIASP, the EvoNet working group on Evolutionary Computation in Image Analysis and Signal Processing. It will be held in conjunction with four other major European events:

- \* EuroGP'99, the second European workshop on genetic programming,
- \* EvoRobot'99, the second European workshop on evolutionary robotics,
- \* EuroECTel'99, the first European workshop on evolutionary telecommunications,
- \* EvoSCONDI'99, the first European workshop on evolutionary computation for systems, control and drives industry,

Topics of interest include, but are not limited to:

- Applications of evolutionary computation to real-life IASP problems
- Evolvable vision and signal processing hardware
- Evolutionary pattern recognition
- Hybrid architectures for machine vision and signal processing including evolutionary components
- Theoretical developments
- Comparisons between different evolutionary techniques and between evolutionary and non-evolutionary techniques in IASP applications
- Financial time series analysis by means of EC techniques.

The workshop will consist of:

- An invited talk
- Oral and poster sessions with periods for discussion
- Software demos and industrial stands

Fees: Registration fees are still being finalised and will be publicised shortly.

Registration to EvoIASP'99 will include free non-transferable registration to EvoRobot'99, EuroGP'99, EuroECTel'99 and EvoSCONDI'99 (and vice versa).

A reduced registration rate will be available for students.

Submissions:

To submit, send your manuscript (max length: 10 A4 pages) to one of the programme co-chairs in PostScript (preferably compressed and uuencoded) BY EMAIL (see addresses below) not later than December 15, 1998. The papers will be peer reviewed by at least two members of the programme committee, of whom at least one from the evolutionary computation community and one from the image analysis or signal processing community. Authors will be notified via email on the results of the review by January 15, 1999.

The authors of accepted papers will have four weeks to improve their paper on the basis of the reviewers' comments and will be asked to send a camera ready version of their manuscripts by February 15th, 1999. The papers accepted will appear in the workshop proceedings which will be available at the workshop.

[ List of committee members edited for brevity. -AKC ]

Venue:

Main Aula, Goteborg University, Vasaparken, Goteborg Directions can be found on the Web site of the workshops.

Timetable:

Submission deadline: 15 December 1998  
Notification of acceptance: 15 January 1999  
Camera ready papers for workshop: 15 February 1999  
Workshop: 28 May 1999

Workshop Web Site:

<http://www.ce.unipr.it/people/cagnoni/evoiasp99.html>

Contacts:

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Tel: +46 31 607213, Fax +46 31 607201

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> From: "Dr. Hongchi Shi" <[shi@cecs.missouri.edu](mailto:shi@cecs.missouri.edu)>

> Subject: CFP: PDIP'99, Parallel & distributed Methods for Image Proc., Denver, CO

Call for Papers and Announcement

Parallel and Distributed Methods for Image Processing III (SD87)  
([http://www.cecs.missouri.edu/~shi/spie\\_conf/](http://www.cecs.missouri.edu/~shi/spie_conf/))

Part of SPIE's International Symposium on Optical Science, Engineering,  
and Instrumentation  
18-23 July 1999 \* Colorado Convention Center \* Denver, Colorado USA

Conference Chairs: Hongchi Shi, Univ. of Missouri/Columbia; Patrick C.  
Coffield, Air Force Research Lab.

Program Committee: Ishfaq Ahmed, Hong Kong Univ. of Science and Technology  
(Hong Kong); Hamid R. Arabnia, Univ. of Georgia; Su-Shing Chen, Univ. of  
Missouri/Columbia; Edward J. Delp III, Purdue Univ.; Fikret Ercal, Univ. of  
Missouri/Rolla; Ka-Po Lam, Univ. of Keele (UK); Miles J. Murdoch, Rutgers  
Univ.; Yi Pan, Univ. of Dayton; Alexander Peleg, Intel Israel (Israel);  
Sartaj Sahni, Univ. of Florida; Yi Shang, Univ. of Missouri/Columbia; Vason  
P. Srinivasan, Data Flux Systems Inc.; Joseph N. Wilson, Univ. of Florida;  
Sergio E. Zarantonello, Silicon Graphics Inc.

The future of image processing lies with parallel and distributed  
technologies. Research on parallel and distributed computing for image  
processing applications is an active research field.

To achieve the same goal of the last two successful conferences, this  
conference is intended to bring together researchers and practitioners in  
parallel and distributed computing and image processing areas. The conference  
will provide a mechanism for researchers to keep abreast of new parallel and  
distributed methods for image processing applications and industrial needs,  
and for practitioners to learn of new available technologies. Besides  
solicited papers, we are planning to continue with our practice to invite  
research leaders and cutting-edge technology developers as guest speakers to  
give their views of this field. It is also our intention to recommend the best  
papers to relevant journals for publication.

The conference welcomes original papers on fundamental parallel and  
distributed methods for image processing. Emphasis will be placed on  
application of parallel and distributed techniques to image processing  
problems, including parallel and distributed architectures, software  
environments, and algorithms. Papers are solicited in the areas including,  
but not limited to the following:

- \* parallel and distributed image processing algorithms
- \* parallel architectures for image processing
- \* parallel languages and environments for image processing
- \* optoelectric image processing systems
- \* performance analysis and benchmarking
- \* distributed multimedia computing and systems.

Abstract Due Date: 21 December 1998  
Manuscript Due Date: 21 June 1999

For more information on the Annual Meeting or a complete listing of all  
conferences please go to our SPIE Web site:  
<http://www.spie.org/info/annualmeeting.html>

[ For instructions on submitting an abstract, see the conference web  
site. -AKC ]

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> From: Jenq-Neng Hwang <[hwang@ee.washington.edu](mailto:hwang@ee.washington.edu)>  
> Subject: CFP: MMSP'99, IEEE Multimedia Signal Processing, Copenhagen, Denmark

IEEE INTERNATIONAL WORKSHOP ON MULTIMEDIA SIGNAL PROCESSING

SEPTEMBER 6 - 8, 1999, COPENHAGEN, DENMARK.

<http://eivind.imm.dtu.dk/mm99/>

The workshop is organized by the Multimedia Signal Processing Technical  
Committee of the IEEE Signal Processing Society.

Sponsored by the Danish National Center for IT Research, Nokia A/S,  
Hewlett-Packard A/S, Tele Danmark A/S, and Thomas B. Thriges Fond.  
Thanks to the sponsorship of Nokia A/S a number of scholarships are  
available to provide financial support for participants from overseas,  
particularly Ph.D. students and Postdocs.

The workshop will feature keynote addresses, technical presentations,  
panel discussions, and special sessions by invited speakers.  
The topics include, from a signal-processing viewpoint:  
Integration of Media,  
Human/machine Interfaces, and  
Multimedia Networks including specially the Internet.

In particular, papers are solicited for, but not limited to, the following  
general areas:

1. Multimedia Processing: Compression for Multimedia (Audio, Video,  
Speech, etc.). Integration of Media, Joint Audio-Video Processing.
2. Multimedia Databases: Indexing, Retrieval, and Archiving, Authoring  
and Editing, Digital Library, Content Preparation and Presentation.

3. Multimedia System Design and Implementation: Parallel Architecture, ASIC Design, Software and Hardware Design, System Integration, Signal Acquisition.
4. Human-Machine Interface and Perception: Content Recognition/Analysis/Synthesis, Speech Recognition and Synthesis, Audio/Music Signal Processing and Synthesis, Multimodal Interaction (Speech, Image, and Video), Audiovisual Perception Quality and Human Factors, Agents, Avatars and Talking Heads.
5. Multimedia Communications: Equalization and Synchronization, Transport Protocols, QoS Control, Error Concealment and Loss Recovery, Rate Control and Hierarchical Coding, Wireless Communication.
6. Multimedia Applications: WWW and Hypermedia, Videoconferencing and Collaboration Environments, Education and Distant Learning, Telemedicine, Home-shopping, Gaming and Virtual Reality, SDTV, HDTV, SHDTV and Video on Demand.
7. Standards and Related Issues: ITU-T Standards for Audiovisual Communication, MPEG-1, MPEG-2, MPEG-4, MPEG-7, MHEG, DAVIC, ATM Forum, HTML, VRML, and others. Compressed Domain Processing.

#### PAPER AND DEMO SUBMISSION PROCEDURE:

PAPERS: Prospective authors are invited to submit 5 copies of extended summaries of no more than 4 pages. The top of the first page of the summary should include a title, authors names, affiliations, address, telephone and fax numbers and e-mail address. The camera-ready full papers (each up to 4 pages) of accepted proposals will be published in proceedings and distributed at the workshop.

DEMOS: Prospective authors are invited to submit proposals for demonstrations. Please contact the Demo Sessions Chair: Kim Tilgaard, [ktp@tdk.dk](mailto:ktp@tdk.dk).

#### PLEASE SEND PAPER SUBMISSIONS TO:

MMSP99  
Section for Digital Signal Processing  
Department of Mathematical Modelling, Build. 321  
Technical University of Denmark  
2800 Lyngby  
Denmark

#### SUBMISSION SCHEDULE:

Extended summary received by: January 15, 1999.  
Notification of acceptance: April 15, 1999.  
Camera ready papers received: June 4, 1999.  
Advance registration before: August 1, 1999.

#### FURTHER INFORMATION:

Further information on the workshop can be obtained from  
URL: <http://eivind.imm.dtu.dk/mmsp99/>  
Further questions can be directed to one of the workshop committee members or  
Email: [mmsp99@imm.dtu.dk](mailto:mmsp99@imm.dtu.dk)  
Fax: +45 45882673  
Phone: +45 45253353.

[ Edited for brevity. You can find detailed information at the workshop web site. -AKC ]

> From: "Ioannis Pavlidis" <[pavlidis@htc.honeywell.com](mailto:pavlidis@htc.honeywell.com)>  
> Subject: CFP: IEEE Wkshp Computer Vision Beyond Visible Spectrum, Fort Collins, CO, USA

#### Call for Papers

IEEE Workshop on Computer Vision Beyond the Visible Spectrum:  
Methods and Applications

June 21-22, 1999  
Fort Collins, Colorado

Workshop Web Site: <http://www.htc.honeywell.com/CVBVS99>

#### Organizing Committee

General Chairs: Robert Hummel (DARPA), Ioannis Pavlidis (Honeywell)

[ Program Committee edited for brevity. -AKC ]

#### Description and Rationale for the Workshop

Traditionally, the majority of the computer vision community has been involved implicitly or explicitly with the development of algorithms associated with visible range sensors. Imaging sensors from other ranges of the electro-magnetic (EM) spectrum were used only in special applications (e.g. medicine, military). There are a number of reasons for this situation: low cost and availability of visible imaging sensors, strong links between the computer vision research and the human vision research, and lack of consideration of the potential advantages other EM spectra may offer.

Recently, the cost of near and mid infrared (IR) sensors has dropped dramatically. New imaging sensors that operate in the millimeter wave (MMW) band of the EM spectrum have started to appear in a growing number

of applications. Image sensing devices that were once suitable only for military and remote sensing applications now find their way into more common areas like transportation and security vision based systems. Application of these new sensing modalities into a wide variety of computer vision systems necessitates either the adaptation of methods and algorithms originally developed for the visible range or the development of entirely new methods and algorithms.

The proposed workshop will bring together pioneering researchers in the field and give an accurate picture of the current state of the art. Emphasis will be given to new and traditional application areas where non-visible range sensors can help solving hard challenges posed to computer vision since its inception. Also, emphasis will be placed on comparative evaluation studies across the EM spectrum for a given computer vision task. The workshop will serve as a showcase of new and adapted algorithms and methods appropriate for ranges beyond the visible. In this context, fusion approaches that combine more than one sensing modalities to reduce ambiguity are of special interest.

Applications from the commercial domain as well as military applications with technology transfer potential are especially welcome. The rationale is to bring computer vision scientists in touch with exciting new possibilities on how to solve traditionally hard problems and how to expand on new application territory using non-visible range sensors. Sensors of interest include X-rays, infrared, millimeter wave, laser radar, synthetic aperture radar, and hyper-spectral. Original papers are solicited in, but not limited to, the following technical areas: Object Recognition, Object Detection and Tracking, Scene Understanding, Segmentation, Motion, Registration, Fusion, Military Applications, Commercial Applications, Comparative Evaluation

#### Paper Submission

Four copies of complete manuscript should be received by February 1, 1999 at the following address:

Prof. Bir Bhanu, College of Engineering, Bourns Hall  
University of California, Riverside, CA 92521 USA  
Tel. 909 787-3954, Fax 909 787-3188, Email [bhanu@cris.ucr.edu](mailto:bhanu@cris.ucr.edu)

Papers should include:

- (a) A title page containing the names and addresses of the authors (including email), an abstract of up to 200 words, and one or more categories as listed above or other keywords.
- (b) A second title page containing title and abstract only, to allow for double blind reviewing, and
- (c) The paper, limited to 24 double-spaced pages (12 points, 1 inch margins), including figures and references.

Accepted papers will be published in the proceedings of the Workshop. An award of \$1,000 will be given to the authors of the best paper for the workshop.

> From: ICIAP99 <[iciap99@dimi.uniud.it](mailto:iciap99@dimi.uniud.it)>  
> Subject: CFP: ICIAP'99, Int. Conf. on Image Analysis & Proc., Venice, Italy

First Announcement and Call for Papers -- ICIAP99

INTERNATIONAL CONFERENCE ON IMAGE ANALYSIS AND PROCESSING  
Venice, Italy  
September 27-29, 1999

Submission date: February 28, 1999

Updated information: <http://www.dimi.uniud.it/~iciap99/>  
E-mail: [iciap99@dimi.uniud.it](mailto:iciap99@dimi.uniud.it)

The Conference is an international forum for discussion on advances in the fields of image analysis, understanding and communication. It is organised biennially by the Italian Chapter of the International Association for Pattern Recognition (IAPR-IC).

#### SCIENTIFIC PROGRAM

ICIAP99 will focus on Image-based Emerging Applications. Papers will be accepted for both oral and poster presentation. Scientific events planned in conjunction with ICIAP99 are:  
- An open forum for young scientists;  
- A special session on european research projects.

The Conference Proceedings will be published by the IEEE Computer Society Press.

Special issues of two international journals are foreseen:  
Pattern Recognition (Elsevier)  
Image and Vision Computing (Elsevier)

#### CONFERENCE CHAIRS

Vito Roberto, University of Udine (General Chair)  
Virginio Cantoni, University of Pavia (Scientific Chair)  
Stefano Levialdi, University of Rome 'La Sapienza' (Program Chair)

#### PROGRAM COMMITTEE

C.Arcelli (I); J.P.Basille (F); A.Broggi (I); H.Bunke (CH);  
T.Caelli (USA); S.K.Chang (USA); L.P.Cordella (I); J.L.Crowley (F);  
L.De Floriani (I); A.Del Bimbo (I); V.Di Gesu' (I); D.Doermann (USA);  
M.Ferretti (I); O.Faugeras (F); R.B.Fisher (UK); H.Freeman (USA);  
A.Gagalowicz (F); C.Garbay (F); C.Guerra (I); S.Impedovo (I);  
A.K.Jain (USA); E.Jungert (S); J.Kittler (UK); W.Kropatsch (A);  
K.E.Liedtke (D); S.Mitra (USA); P.Mussio (I); L.Pastor (E);  
S.Peleg (IL); A.P.Pentland (USA); M.Sakauchi (JP); A.Sanfelio (E);  
G.Sanniti di Baja (I); H.Samet (USA); L.Shapiro (USA); G.L.Sicuranza (I);  
S.L.Tanimoto (USA); G.Tascini (I); M.Tekalp (USA); E.Truccho (UK);  
G.Vernazza (I); J.Villanueva (E); A.Verri (I); S.Vitulano (I);  
H.Wechsler (USA); J.Yang (PRC); Y.Yeshurun (IL); B.Zavidovique (F)

#### TECHNICAL COMMITTEE

P.Bottoni; G.L.Foresti; A.Fusiello  
L.Lombardi; M.Pelillo

#### LOCAL COMMITTEE

V.Della Mea, S.Gentili, S.Marchetti

#### CONFERENCE TOPICS

Under the perspective of IMAGE-BASED EMERGING APPLICATIONS, topics will include (but not limited to):

1.-- Image Analysis: sensing, filtering and attention.

Image operators and feature extraction; Shape and motion primitives;  
Color and texture primitives; Image and video sequence analysis;  
Segmentation and grouping; Active perception; Dedicated architectures.

2.-- Image Inference: learning, modeling and reasoning.

Neural networks and perceptual learning; Pattern classification;  
Model acquisition; Shape analysis and reconstruction;  
Spatial data structures and spatial reasoning; 2D and 3D object recognition;  
Motion analysis and tracking.

3.-- Image Communication: coding, retrieval and dialogue.

Image and video compression and coding; Digital and video libraries;  
Multimedia databases; Visual languages and computing;  
Human-computer interaction; Virtual and augmented reality.

4.-- Domain-oriented Applications.

Biomedical applications; OCR and document processing;  
Cultural heritage; Remote sensing and GIS;  
Automated surveillance; Face recognition and tracking;  
Inspection and Quality Control; Telematics applications.

#### PAPER SUBMISSION

Four hard copies of the full paper should be mailed to:

ICIAP99

Prof. Vito Roberto

Dipartimento di Informatica, Universita' di Udine

Via delle Scienze, 206

I 33100 Udine, Italy

No electronic submission will be accepted. The papers should not exceed 18 A4 pages (12pt, 1.5 spacing); a cover sheet with the authors names and affiliations is also requested, with the complete address of the corresponding author, the topic area and an abstract (200 words). The papers will be refereed by three separate reviewers of the Program Committee. The electronic submission (PostScript format) will be requested for camera-ready manuscripts, via anonymous ftp.

#### IMPORTANT DATES

Papers submission deadline: February 28, 1999

Notification of acceptance: May 1999

Camera-ready copy: June 1999

#### CONFERENCE LOCATION

The old historical centre of Venice is situated in north-eastern Italy, four kilometers from the mainland, on 118 islands of the Venetian Lagoon. Its singular appearance and wealth of art treasures make it unique. It is crossed by more than 150 canals and 400 bridges.

Venice can be reached by car (to be left in one of the car parks on the mainland); by train (the Santa Lucia railway station); by airplane (the Marco Polo airport, about 13 Km from Venice).

The Conference venue is downtown Venice, at the 'Zitelle' Cultural Centre, a complex of historical buildings designed by the great architect Andrea Palladio (1508-1580) on the Giudecca island, facing St. Mark's Square. It can be easily accessed by public boats from the railway station or the car terminals.

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> From: "Henry S. Baird" <baird@parc.xerox.com>

> Subject: CFP: Int. Wkshp Perf. Eval. Issues in Multilingual OCR, Bangalore, India

International Workshop on  
Performance Evaluation Issues in Multilingual OCR

Sunday, September 19, 1999 (just before ICDAR'99)  
Bangalore, India

## WORKSHOP CHAIRS

Tapas KANUNGO University of Maryland, College Park, MD USA  
Henry S. BAIRD Xerox PARC, Palo Alto, CA USA

[ Organizing committee edited for brevity. -AKC ]

## TECHNICAL FOCUS

This workshop will explore evaluation methodologies for multilingual OCR systems. By 'multilingual' we mean to include systems that are capable of reading more than one language in the same document, as well as one-language-per-document systems that can be easily retargeted to new languages. We hope to bring together researchers from many countries to discuss these and related questions:

-- What methodologies should be used to evaluate multilingual OCR systems?

How do we compare accuracies across languages?

-- What ground-truthed data sets are now available in various languages?

What kind of datasets need to be collected? How is this to be achieved? Which organizations might be willing to support such an effort?

-- What multilingual OCR evaluation tools and error visualization tools are available or should be developed?

-- What OCR evaluation methods and metrics will be useful for OCR-based machine translation and cross-language information retrieval?

-- What are the most pressing open research problems, promising dissertation topics, etc?

## WORKSHOP FORMAT

This will be a one-day workshop for a maximum of 70 participants. Each participant will submit an extended abstract which will be distributed at the Workshop. All participants are expected to contribute to the discussions.

At the outset of the workshop, three volunteers will present brief, informal summaries of the i) methodologies, ii) corpora, and iii) tools mentioned in the submitted abstracts. Then we will split up into three working groups, focused on these topics, and proceed to discuss key issues, attempt to resolve questions, compile lists of resources, and draw up recommendations. Finally, in a plenary session, representatives of each group will present their recommendations and invite general discussion. There will be several opportunities for informal discussion and socializing.

After the workshop, the organizing committee will compile a Workshop Summary, based on the working group notes, and make it available on the Web. It is hoped that the workshop will stimulate cooperative follow-on activities that will accelerate the pace of research in multilingual document image analysis.

## EXTENDED ABSTRACT SUBMISSION

Each potential participant or group of participants should submit an extended abstract, electronically via E-mail (in plain ASCII), no later than March 30, 1999 to:

Tapas Kanungo

Center for Automation Research

University of Maryland

College Park, MD 20742

E-mail: [mlocr@cfar.umd.edu](mailto:mlocr@cfar.umd.edu)

The abstract should include the name, address, telephone, fax, and email address of the author(s). It should ordinarily be limited to six printed pages including references (no figures, please). Longer submissions may be admitted in special cases, e.g. for catalogues of resources. Accepted abstracts will be distributed at the Workshop and posted on the Workshop website.

## WORKSHOP WEBSITE

<http://www.cfar.umd.edu/~kanungo/workshop/mlocr.html>

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> From: Paul F Whelan <[whelanp@eeng.dcu.ie](mailto:whelanp@eeng.dcu.ie)>  
> Subject: CFP: IMVIP'99, Irish Machine Vision & Image Proc. Conf., Dublin

Irish Machine Vision and Image Processing Conference 1999

8th - 9th September 1999  
Dublin City University, Dublin, Ireland

## Scope

The 1999 Irish Machine Vision & Image Processing (IMVIP) Conference will be hosted by the School of Electronic Engineering, Dublin City University, bringing together theoreticians and practitioners, industrialists and academics, from the numerous related disciplines involved in the processing and analysis of image-based information.

IMVIP '99 is a single-track conference consisting of high quality previously unpublished contributed papers, presented orally. The conference emphasises both theoretical research results and practical engineering experience in all areas. Full papers will be subject to a double-blind review process by the programme committee. In addition to the contributed programme, there will also be talks by invited speakers.

## Topics

Contributions are sought in all aspects of image processing, pattern analysis and machine vision, including but not restricted to the following topics:

Visually Guided Robot Manipulation and Navigation  
Texture, Colour, Stereo and Motion Analysis  
Image & Video Representation, Compression and Coding  
Bio- and Medical Imaging  
Active Vision and Tracking  
Object and Event Recognition  
2D and 3D Scene Analysis  
Remote Sensing  
Image/Shape Representation and Recovery  
Mathematical Morphology  
Applications, Architectures and Systems Integration

Instructions For Submission

Authors who wish to present a paper at the conference should send four copies of their paper to the address given below by April 30th 1999.

IMVIP '99 Secretariat  
Vision Systems Laboratory,  
School of Electronic Engineering  
Dublin City University,  
Dublin 9, Ireland.

Full papers, not exceeding 15 printed pages (12 pt font, single-spacing) should be submitted for anonymous review. To enable the double-blind review process there should be two title pages. The first should contain the paper title, author's name, affiliation and address, telephone, fax and e-mail, an abstract of 300 words clearly stating the impact of the contribution and up to five keywords. The second title page should consist only of the title, abstract and keywords.

Email: [imvip99@eeng.dcu.ie](mailto:imvip99@eeng.dcu.ie)

Alternatively, the call is available on the IMVIP99 web site which is located at <http://www.eeng.dcu.ie/~imvip99/imvip99.html>.

Dr. Paul F. Whelan  
Vision Systems Laboratory, School of Electronic Engineering  
Dublin City University, Dublin 9, Ireland.  
Ph: +353 1 7045489 email: [whelanp@eeng.dcu.ie](mailto:whelanp@eeng.dcu.ie)  
Fax: +353 1 7045508 <http://www.eeng.dcu.ie/~whelanp/home.html>

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> From: Majid Mirmehdi <[M.Mirmehdi@compsci.bristol.ac.uk](mailto:M.Mirmehdi@compsci.bristol.ac.uk)>  
> Subject: CFP: CGIM'99, Computer Graphics and Imaging, Palm Springs, CA, USA

CALL FOR PAPERS  
2nd Annual IASTED International Conference on  
Computer Graphics and Imaging (CGIM'99)  
October 25 to 27th, 1999 Palm Springs, California USA

Sponsor

The International Association of Science and Technology for  
Development - IASTED

Location

Computer Graphics and Imaging '99 will be held October 25-27, 1999  
in Palm Springs, CA USA.

Purpose

CGIM aims to become a major point of contact for research scientists, engineers and practitioners throughout the world in the field of computer graphics. Participants will share the latest research, developments and ideas in the wide arena of disciplines encompassed under the heading of Computer Graphics and Imaging. CGIM'99 is the second annual conference to be sponsored by IASTED in this area. The conference will include keynote addresses, contributed papers and tutorials on a wide range of topics.

Scope (submissions are not limited to those topics listed)

Rendering  
-Illumination models  
-Volume rendering  
-Rendering algorithms and systems  
Modelling  
-CAD (Computer Aided Design)  
-Modelling of natural phenomena  
-3D object extraction  
-Surface reconstruction  
-Geometric algorithms  
-Computational geometry  
Animation

- Motion control and kinematics
- Particle systems
- Simulation
- Collision detection
- Character animation
- Plausible motion simulation
- Facial animation
- Human figure animation
- Image processing
- Medical imaging
- Image acquisition techniques
- Image and pattern analysis
- Image manipulation
- Computer vision
- Image compression
- Image synthesis techniques
- Visualization
- Visual information systems
- Scientific and mathematical visualization
- Virtual reality
- Holographic imaging
- Interface issues
- Human-computer interaction
- VRML
- Visualization and direct manipulation of virtual objects
- Applications

Conference Chair  
Dr. Xiuzi Ye, SolidWorks Corporation (USA) MIT, Design Laboratory, (USA)  
[xiuzi@deslab.mit.edu](mailto:xiuzi@deslab.mit.edu)

[ Program committee list edited for brevity. --AKC]

#### Submission of Papers

The International Program Committee and the Technical Committee on Computer Graphics and Imaging will make all decisions concerning the acceptance of papers. Three (3) copies of the FULL PAPER should be received at the IASTED Secretariat - CGIM'99, #80, 4500 - 16 Avenue NW, Calgary, Alberta, Canada, T3B 0M6 by April 30, 1999. The paper must be a maximum of 12 pages double-spaced including figures, tables, and references. Alternatively, papers may be submitted in PostScript format as an email attachment to [iasted@cadvision.com](mailto:iasted@cadvision.com). A PostScript output of your paper may be created by choosing any PostScript capable printer driver, and then printing your paper "to a file". Be sure 'CGIM'99 Submission' is in the subject. All Postscript submissions must be formatted for 8.5" X 11" size paper.

Authors should provide a maximum of five keywords describing their work, and must include a statement confirming that if their paper is accepted one of the authors will attend the conference to present it. Please include the full name, affiliation, full address, telephone and fax numbers, and email address of the corresponding author. Notification will be mailed by June 30, 1999. Authors of accepted papers will be required to submit their camera-ready final papers and full registration by August 16, 1999. IASTED reserves the right to reject any final manuscript if its quality is not acceptable. If this should occur, the author(s) will be notified and the registration will be refunded.

#### Review Criteria

The IPC and the TCCGI will review papers with a very critical eye to currency, quality, thoroughness and completeness of research and results. Submissions which are simply proposals for further research, that are based on conjectural or unsubstantiated conclusions, or that are based on substantially incomplete research and/or results will NOT be accepted. Papers which present excellent ideas and research, but do so in a sloppy or careless manner will not be accepted. Student papers are welcome, but will only be accepted if they are of exceptional quality.

[ Guidelines for submitting proposal for tutorials and special sessions can be found on the conference web site. -AKC]

#### Important Deadlines

Papers and Tutorial/Special Session Proposals - April 30, 1999  
Acceptance Notification - June 30, 1999  
Camera-ready manuscripts and Registration - August 16, 1999

For more information, or to be placed on the mailing list, please contact:

IASTED Secretariat - CGIM'99  
#80, 4500 - 16 Avenue NW  
Calgary, Alberta  
Canada T3B 0M6

Tel: 403-288-1195  
Fax: 403-247-6851

Email: [iasted@cadvision.com](mailto:iasted@cadvision.com)

CGIM'99 Web Site:  
go to <http://www.iasted.com>  
and follow the conference link for CGIM'99

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> From: [mtc@cee.hw.ac.uk](mailto:mtc@cee.hw.ac.uk) (Manuel Trucco)  
> Subject: CFP: Polarization & Colour Techniques in Industrial Inspection, Munich, Germany

#### CALL FOR PAPERS

EUROPTO'99 Conference on  
Polarization and Colour Techniques in Industrial Inspection

17-18 June 1999, Munich, Germany

(part of EOS/SPIE Symposium on Industrial Laser and Inspection)

#### IMPORTANT DATES:

Abstracts are due by 27 November 1998

Manuscripts are due by 3 May 1999

#### CONFERENCE CHAIRS:

Elzbieta Marszalec, VTT (Finland), ' ; document.write(""); document.write(addy\_text3072); document.write("<\/a>"); //-->\n

Emanuele Trucco, Heriot-Watt University (UK), ' ; document.write(""); document.write(addy\_text47626); document.write("<\/a>"); //-->\n

#### PAPER SUBMISSION:

See below for up-to-date information. Full information soon available  
at the EUROPTO site: <http://www.europto.org>

#### PROGRAMME COMMITTEE:

David J Braunegg, The MITRE Corporation (USA);

Michael Brill, David Sarnoff Rsearch Center (USA);

Olle Hagman, Lulea Univ. of Tech. (Sweden);

Glenn Healey, Univ. of California (USA);

B Kosmowski, Tech. Univ. of Gdansk (Poland);

R Massen, Massen Mach.Vision Sysys. (Germany);

Volker Mueller, MAZ Hamburg (Germany/China);

Paolo Nesi, Univ. of Florence (Italy);

J Parkkinen, Lappeenranta Univ. of Tech. (Finland);

Olli Silven, Univ. of Oulu (Finland);

Alessandro Verri, Univ. of Genoa (Italy);

Andrew M Wallace, Heriot-Watt Univ. (UK);

Lawrence B Wolff, Johns Hopkins Univ. (USA)

#### INVITED SPEAKERS:

R. Massen, Massen Machine Vision Systems (Germany)

Lawrence B. Wolff, Johns Hopkins University (USA)

#### CONFERENCE TOPICS

Recent developments in the theory and technology of colour and polarization analysis, as well related advancements in hardware and software for machine vision applications, are making colour and polarization increasingly important tools for industrial inspection. Neither techniques, however, can be considered consolidated technologies for practical purposes. This conference aims to present the latest solutions for colour and polarization analysis and measurement, their applications, and to discuss the requirements of colour and polarization-based inspection systems operating in real industrial environments.

Papers reporting novel work on (but not limited to) the following topics are solicited:

RGB vs multi-channel colour measurements  
Colour-based inspection systems and quality control  
Colour display technologies  
Colour physics and analysis  
Colour science for inspection applications  
Colour representation: colour spaces and systems  
Human vision vs industrial colour inspection  
Colour surfaces: texture and colour  
Colorimetric calibration  
Polarization-based material discrimination  
Polarization techniques for defect detection  
Polarization-based surface analysis  
Polarization systems in machine vision  
Shape from polarization  
Polarization techniques in laser scanning

The conference will include a POSTER SESSION.

[ For instructions on submitting an abstract, see the conference web site. -AKC ]

For further information please contact:

EUROPTO Series, Industrial Lasers & Inspection,  
Boulevard St. Michel 15, B-1040 Brussels, Belgium

Phone: +32-2-743 15 73, Fax: +32-2-743 15 50

E-mail: [debby@associationhq.com](mailto:debby@associationhq.com), <http://www.europto.org>

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> From: [junji@epsilon2.csse.muroran-it.ac.jp](mailto:junji@epsilon2.csse.muroran-it.ac.jp) (Junji Maeda)

> Subject: CFP: IWSCI'99, IEEE Soft Computing in Industry, Muroran, Hokkaido, Japan

International Workshop on Soft Computing in Industry'99 (IWSCI'99)

June 16-18, 1999

Muroran, Hokkaido, Japan

Sponsored by: IEEE INDUSTRIAL ELECTRONICS SOCIETY  
INSTITUTE OF ELECTRICAL ENGINEERS OF JAPAN  
MURORAN INSTITUTE OF TECHNOLOGY

IWSCl'99 (International Workshop on Soft Computing in Industry'99) is an international workshop on soft computing (SC) and industrial applications. SC has been broadly studied to realize intelligent systems which are useful for real-world problems. The objectives of the workshop are to promote high quality research and professional interaction for the advancement of science, technology and fellowship. The program will consist of high quality contributed papers on all aspects of SC and applications. Original (previously unpublished) manuscripts on topics in the following categories are solicited:

- Fuzzy Computing -Pattern Recognition
- Neuro Computing -Signal and Image Processing
- Probabilistic Reasoning -Human Interface
- Evolutionary Computing -Time Series Prediction
- Chaos -Robotics
- Immune Networks -Motion Control and Power Electronic Systems
- Hybrid Methods -Biomedical Engineering
- Complex Systems -Virtual Reality
- Reactive Distributed AI -Industrial Applications
- Others

The workshop is not limited to these topics. Authors may specify additional categories. Review will be double-blinded.

#### Paper Submission

Full paper submissions are solicited. Manuscripts are limited to a maximum of 10 pages, A4 format, 12 points. Manuscripts must be received by the Program Chairs by the submission due date: December 15, 1998. Manuscripts received after this date will not be reviewed. Submissions should be formatted: First page: title, authors, mailing address, phone number, and fax numbers, and electronic mail address of each author (please designate one author for correspondence), preferred technical categories. Second page: title, author's name and affiliations, 100-words abstract. Third and succeeding pages: the paper plus references, tables, and figures. Submit three copies of the paper to the following Program Chair:

Yukinori Suzuki  
Department of Computer Science & Systems Engineering  
Muroran Institute of Technology  
27-1, Mizumoto-cho, Muroran 050-8585 Japan  
Phone:+81-143-46-5435  
Fax:+81-143-46-5499  
[yuki@csse.muroran-it.ac.jp](mailto:yuki@csse.muroran-it.ac.jp)

<http://www.csse.muroran-it.ac.jp/iwsci99/>

#### Important Dates

Submission deadline: December 15, 1998  
Notification of acceptance: February 15, 1999  
Camera-ready paper: March 15, 1999

#### Plenary Speakers:

Lotfi A. Zadeh (University of California, Berkeley)  
David E. Goldberg (University of Illinois)

#### General Co-Chairs

Takeshi Furuhashi (Nagoya University)  
[furuhashi@nuee.nagoya-u.ac.jp](mailto:furuhashi@nuee.nagoya-u.ac.jp)  
Junji Maeda (Muroran Institute of Technology)  
[junji@csse.muroran-it.ac.jp](mailto:junji@csse.muroran-it.ac.jp)

#### Program Chair

Yukinori Suzuki (Muroran Institute of Technology)

#### Local Arrangement Chair

Yuji Sakamoto (Muroran Institute of Technology)

[ Various committees and advisory boards edited for brevity. -AKC ]

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> From: "NNSP '99" <[nnspp99@neuro.kuleuven.ac.be](mailto:nnspp99@neuro.kuleuven.ac.be)>  
> Subject: CFP: NNSP'99, Neural Networks for Signal Proc., Madison, WI, USA

1999 IEEE Workshop on Neural Networks for Signal Processing  
August 23-25, 1999, Madison, Wisconsin

NNSP'99 homepage: <http://eivind.imm.dtu.dk/nnspp99>

Thanks to the sponsorship of IEEE Signal Processing Society the ninth of a series of IEEE workshops on Neural Networks for Signal Processing will be held at the Concourse Hotel, Madison, Wisconsin, USA. The workshop will feature keynote addresses, technical presentations, panel discussions and special sessions. Papers are solicited for, but not limited to, the following areas:

#### Paradigms:

Artificial neural networks, support vector machines, Markov models, graphical models, dynamical systems, evolutionary computation, nonlinear signal processing, and wavelets.

#### Application Areas:

Image/speech/multimedia processing, intelligent human computer interfaces, intelligent agents, blind source separation, OCR, robotics, adaptive filtering, communications, sensors, system identification, issues related to RWC, and other general signal processing and pattern recognition.

#### Theories:

Generalization, design algorithms, optimization, parameter estimation, and network architectures.

#### Implementations:

Parallel and distributed implementation, hardware design, and other general implementation technologies.

#### SPECIAL SESSIONS

The workshop features special sessions on

- \* Support vector machines
- \* Intelligent human computer interfaces

#### PAPER SUBMISSION PROCEDURE

Prospective authors are invited to submit 5 copies of extended summaries of no more than 6 pages. The top of the first page of the summary should include a title, authors' names, affiliations, address, telephone and fax numbers and email address.

Camera-ready full papers of accepted proposals will be published in a hard-bound volume by IEEE and distributed at the workshop.

Please send paper submissions to:

Jan Larsen  
NNSP'99, Department of Mathematical Modelling, Building 321  
Technical University of Denmark  
DK-2800 Lyngby, Denmark

#### SCHEDULE

Submission of extended summary: February 1, 1999

Notification of acceptance: March 31, 1999

Submission of photo-ready accepted paper: April 29, 1999

Advanced registration, before: June 30, 1999

#### General Chair

Yu Hen HU  
University of Wisconsin-Madison  
email: [hu@ece.wisc.edu](mailto:hu@ece.wisc.edu)

#### Program Chair

Jan LARSEN  
Technical University of Denmark  
email: [jl@imm.dtu.dk](mailto:jl@imm.dtu.dk)

[ Committee list edited for brevity. -AKC]

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> From: "Klaus Hanke" <[Klaus.Hanke@uibk.ac.at](mailto:Klaus.Hanke@uibk.ac.at)>

> Subject: Call for Participation: Mailing list - Int. Comm. for Architectural Photogrammetry.

The International Committee for Architectural Photogrammetry - CIPA has started a public mailing list to discuss all topics related to architectural and archaeological photogrammetry.

The Mailing List of CIPA is meant to be a market place of ideas, proposals, reports and mutual general information for all members of CIPA, the International Scientific Committee of ICOMOS for Architectural Photogrammetry and related sciences, as Surveying Engineering, Heritage Recording, Documentation and its Management, Geocoded Information Systems, CAD/CAAD, etc.

The main purposes of this list are:

1. to distribute informations from and to its members and friends. Examples are: Reports, Announcements, News, ....
2. to offer a forum of discussion for the Experts in CIPA, who pose and answer questions, make proposals, develop ideas, give advise, ....
3. to find partners for recording, documentation, monitoring for change detection and measurement of architectural and archaeological, mobile and immobile heritage and for eventual reconstruction from images. Images have the best memory!

All incoming messages will be read and answered also by the chairpersons of the CIPA Expert Groups and the CIPA Working Groups in question.

In order to make it easy to find out who these people are, who has been addressed primarily, please add the number of the Expert Area concerned, which you find explained in CIPA's webpages: <http://cipa.uibk.ac.at>.

There you find also additional information about this mailing list and how this works.

Send all contributions and answers to the listaddress:

[CIPA-L@uibk.ac.at](mailto:CIPA-L@uibk.ac.at)

In case of problems contact the moderator of the list:

[Klaus.Hanke@uibk.ac.at](mailto:Klaus.Hanke@uibk.ac.at)

To perform the following functions, send e-mail to:

[maiser@uibk.ac.at](mailto:maiser@uibk.ac.at) (NOT to 'listaddress') and type the function into the

message area (NOT as a 'subject')!

Enter the list CIPA-L: subscribe CIPA-L  
Leave the list CIPA-L: unsubscribe CIPA-L

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> From: "Gerhard K. Kraetzschmar" <[gkk@neuro.informatik.uni-ulm.de](mailto:gkk@neuro.informatik.uni-ulm.de)>  
> Subject: Call for Participation: IJCAI-99 Workshop

Dear reader of this news group or list:

We plan to organize a workshop at IJCAI-99 in Stockholm.  
The topic is  
Adaptive Spatial Representations for Dynamic Environments  
and we believe it may be of interest to you. Please read the  
draft for the workshop proposal in the attachment for more information  
on the workshop.

You can contribute to the workshop by submitting a paper, giving one of  
the survey talks, or one of the commenting statements in a session.

Note: IJCAI permits only active participants for workshops.

If you come to the conclusion that you are indeed interested in the  
workshop and want to actively participate, please take the time to respond  
with a short email that indicates your interest and kind of contribution.  
Please send the email to  
[gkk@acm.org](mailto:gkk@acm.org)  
and include "IJCAI-WORKSHOP" in the subject line. Thanks a lot.

Please do respond soon, because the due date for the proposal is in a  
few days, and we need to collect a list of tentative participants for it.

--  
Sincerely Yours, Gerhard

Dr. Gerhard K. Kraetzschmar University of Ulm  
Fon: intl.+49-731-502-4155 Neural Information Processing  
Fax: intl.+49-731-502-4156 Oberer Eselsberg  
Net: [gkk@neuro.informatik.uni-ulm.de](mailto:gkk@neuro.informatik.uni-ulm.de) 89069 Ulm  
[gkk@acm.org](mailto:gkk@acm.org) Germany  
WWW: <http://www.informatik.uni-ulm.de/ni/staff/gkk.html>

Proposal for IJCAI-99 Workshop

Adaptive Spatial Representations of Dynamic Environments

Workshop Description:

Spatial representations of some sort are a necessary requirement for  
any mobile robot in order to achieve tasks like efficient,  
goal-oriented navigation, object manipulation, or interaction with  
humans. A large number of approaches, ranging from CAD-like and  
topological representations to metric, probabilistic methods and  
biologically-oriented representations, has been developed in the past.  
Most approaches were developed for solving robot navigation tasks  
and successfully applied in a wide variety of applications. In many  
approaches, the spatial representation is a strong simplification of  
the environment (e.g. occupied and free space) and does not permit an  
easy representation of the spatial structure of task-relevant objects.  
Furthermore, these approaches can model only static elements of the  
environment in an adequate manner. Dynamic elements, such as doors,  
changed locations of particular objects, moving obstacles, and humans,  
are usually dealt with in one of two ways:

- A purely reactive level temporarily has a transient representation  
for an anonymous object. The representation is present only as  
long as the object can be actively sensed; it vanishes  
thereafter and does not settle into some kind of permanent  
representation. (Doors, moving obstacles, humans.)
- Repeated exposure of the robot to both the old and new location of  
an object that changed its position leads to a slow adaptation  
of (long-term) spatial memory. (Moved, relocated objects)

The current representations are sufficient for many tasks that have  
been researched in the past and led to many successful applications.  
However, in order to achieve truly useful robots, e.g. for the office  
domain, the robot will have to acquire AND MAINTAIN more complete  
models of its environment. It will have to know the precise locations  
(or have a good estimate of it) of objects and subjects it has seen,  
if they are relevant for completing a task. Examples: Location of  
tools (screwdriver), books, special equipment (video beamer), persons,  
doors, etc.

Thus, for any existing spatial representation, the following  
questions arise?

- Which structural aspects of the environment can be modeled? How?
- Can the representation model dynamic aspects at all? Could it be extended?
- Which kinds of dynamic aspects can be modeled?
- How are the spatial dynamics of an object modeled?
- How is uncertainty dealt with?
- How are the dynamics used to predict various spatial aspects of  
objects?
- Which methods can be used to update/maintain the representation  
based on sensory information?

- What computational effort is required for updating the representation?

For many of the current approaches, we have little knowledge about how these questions must be answered. The goal of the workshop is to bring together researchers who develop and use various kinds of spatial representations in mobile robots and make them think about how to answer the above questions for their approaches. A secondary goal is to provide a forum on which various kinds of representations can be compared.

Workshop Actuality and Target Audience:

Currently, various successful, though specialized applications of mobile robots (RHINO, etc.) are known. However, improved adaptive spatial representations will be needed to build service robots for more complex tasks in more complex environments. We consider such representations an essential step for making progress towards this goal. Thus, the target audience includes

- researchers working in mobile robots, especially map building, spatial modelling, navigation, object manipulation, and human-robot interaction,
  - AI researchers working on topological and other symbolic methods, metric and probabilistic representations, and uncertainty.
- The workshop also appeals to researchers that have
- studied spatial data structures in CAD, GIS, and image processing or
  - studied spatial representations in biological systems and are now applying their models in robotic systems.

Preliminary Workshop Agenda:

Depending on submissions, available time, and IJCAI constraints on the schedule, we plan four to five sessions, each one will most likely be centered around one of the following themes:

- CAD/GIS-Inspired Representations (Frank/Samet)
- Topological Representations (Kuipers/Cohn/Nebel)
- Metric and Probabilistic Representations (Burgard/Kaelbling)
- Biologically-Inspired Representations (Recce/Tani/Mallot)

In each session (90 minutes) covering one of the above four approaches, we plan to implement the following session program:

- Invited survey talk by an experienced research scientist (25+5 min)
- Two short talks selected from the workshop paper submissions (10+5 min)
- Two to three rebutting/commenting statements by representatives from the other approaches (5 min each)
- Session discussion (15 min), moderated by session chair

A general discussion session (45 to 60 minutes) will try to summarize results, draw conclusions, and define future activities, like workshops, definition of benchmark problems, and others.

Primary Contact:

Gerhard K. Kraetzschmar  
University of Ulm, Neural Information Processing  
James-Franck-Ring, 89081 Ulm, Germany  
Fon: +49-731-50-24155  
Fax: +49-731-50-24155  
Net: [gkk@acm.org](mailto:gkk@acm.org) or [gkk@neuro.informatik.uni-ulm.de](mailto:gkk@neuro.informatik.uni-ulm.de)

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> From: "Brian Lovell" <[lovell@elec.uq.edu.au](mailto:lovell@elec.uq.edu.au)>  
> Subject: ICPR98 Website Update

14th International Conference of Pattern Recognition

I have updated the ICPR98 Website, [www.cssip.uq.edu.au/~icpr98](http://www.cssip.uq.edu.au/~icpr98), with some information that may be of interest to you. I'm in the process of writing a conference report for the IAPR newsletter, which I will drop on the site in due course. So far the following items are available.

1. List of Prizes and Fellowships awarded at ICPR98.
2. List of Participants at the conference with their affiliations.
3. Proceedings Order Form for additional copies of the proceedings. There are still about 20 copies left which you can obtain for AUD200 (about USD120) including international shipping.
4. Table of Contents of the Proceedings in html and MS Word 6.0 formats. This might help you update your bibliographies.
5. Photos of the Conference including the group photo. All photos are available in thumbnail size as well as full size.

Links to each of these items have been placed in the left pane of the frame. Please inform me of any errors or omissions. Hope you find the information of interest. Thank you for supporting ICPR98 and I hope you found it both technically useful and enjoyable. See you again in Barcelona for ICPR2000.

Brian Lovell  
Local Organisation Chair  
14th International Conference on Pattern Recognition

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That's all for now.

Your TC10 chairman,

--  
Atul K. Chhabra Phone: (914)644-2786  
Bell Atlantic Network Systems, Fax: (914)644-2561

Advanced Technology Email: [atul@basit.com](mailto:atul@basit.com)  
500 Westchester Avenue  
White Plains, NY 10604, USA

TC10 WWW URL: <http://www.iapr-tc10.or.kr/>  
TC10 member enrollment: <http://www.iapr-tc10.or.kr/membership/>  
TC10 News submissions to: [atul@basit.com](mailto:atul@basit.com)