



Winter 2002  
Volume 24 No1

Newsletter of the International Association for Pattern Recognition Inc  
(An affiliate member of the International Federation for Information Processing)

**ICPR 2002 is COMING SOON!**  
**Quebec City 11-15 August 2002**  
**[HTTP://WWW.ICPR.2002.GEL.ULAVAL.CA/](http://www.icpr.2002.gel.ulaval.ca/)**

You should have received by now the ICPR 2002 Call for Papers either by regular mail or in electronic format. The important dates for participating are:

- Deadline for paper submission:  
**8 December 2001**
- Deadline for tutorial submission:  
**15 January 2002**
- Notification of acceptance:  
**1 March 2002**
- Camera ready papers and author registration:  
**15 April 2002**
- End of early bird registration period:  
**15 April 2002**



**Social Events**

The Organizing Committee is working hard to make this event a memorable event. In addition to the exciting scientific activities that will take place at the Quebec City Convention Center during August 11-15, 2002, participants are invited to attend the Conference Welcome Cocktail on Sunday, August 11, evening, and the Conference Banquet on Wednesday, August 14, evening. Quebec City has a world-class reputation for its fine cuisine and we hope that the banquet will meet this expectation.

### *The Quebec City Area*

Quebec City and the surrounding region offer visitors a multitude of attractions. Whether participants are interested in history, fine dining, outdoor activities or cultural events, their stay in Quebec City will be a unique and unforgettable experience. The Greater Quebec Area comprises five historic areas with buildings representing four centuries of architectural history and the influences of Aboriginal, French and English culture.

Quebec City is located in a wonderful location, near mountains, forests, lakes, rivers and the majestic St. Lawrence. A wide range of outdoor activities is available to nature lovers and outdoor sports enthusiasts only a few minutes from downtown. ICPR participants will be able to gather in natural parks in the Greater Quebec Area to enjoy their favourite outdoor activities: nature walks, cycling, picnicking and roller blading. Near Quebec City, the Citadelle and Old Port, the Saint-Anne de Beaupre area and the Montmorency falls (shown below) are sites worth visiting. Other activities include bird watching at Bonnaventure Island, whale watching near Tadoussac, and Rocher Percé, one of the most visited natural sites in the Province of Quebec.



Through the charming streets of Old Quebec, participants will discover art galleries, artisans' workshops, boutiques belonging to renowned fashion designers, and restaurants offering exotic speciality foods. The crime rate in Quebec City is very low and visitors do not need to worry for their safety during their stay. More tourist information on Quebec City and the Quebec City area can be found at <http://www.quebecregion.com/e/>.

**Hotel Accommodation:** The Quebec Hilton and The Radisson are located in the immediate vicinity of the Convention Center and both offer underground access to the Center and to snack bars, shops, postal station, and other services. These hotels are adjacent to the Parliament Buildings just outside the walls of the old city and are close to a large number of restaurants and cafes.

**Getting to Quebec City:** Quebec City can be accessed easily. There are direct flights to Quebec City from NY, Boston, Montreal and Toronto and numerous connecting flights from these cities to the rest of the world.

For more information on regular continental and international flights and flights to and from Montreal and Toronto, visit Montreal (<http://www.admtl.com/>) and Toronto (<http://www.gtaa.com/>) Airports' websites. A 5% discount is offered to ICPR 2002 participants who book their flights with Air Canada. The Air Canada code for booking reservations will be available soon on the ICPR website. There is also an hourly bus service between Montreal and Quebec (<http://www.leansexpress.com/>), (<http://www.autobus.qc.ca/index.html>).

# FROM

# THE EXCO

It is somehow a strange feeling to write this scheduled report with news from the Executive Committee, in a period when so many tragic events happen throughout the world, especially as the annual ExCo meeting was held in Seattle on September 10, 2001, in the evening. After a long and fruitful meeting, we went to sleep with the feeling of having worked well... just to awake the next morning with the horrible news from New York City, the Pentagon and Pennsylvania. This puts many things into perspective, for us as individuals, but also as scientists. Our thoughts go to all these innocent victims, and to all those who have lost relatives or friends in these sad events.

A number of issues were handled at our ExCo meeting in Seattle. The organizers of the next ICPR, to be held in Quebec City in August 2002, updated us on the preparation of the conference. A number of actions will be taken in the coming weeks and months: standardization efforts for the ICPR review form, contacts with possible new publishers for the ICPR proceedings, special measures considered for participants from developing countries, etc. Another point discussed was that of how the relation between the IAPR and conference or workshop organizers can be clarified, possibly through a written "contract". The ExCo and the C&M Committee will work out clarifications of rules and procedures for IAPR events; this should allow the IAPR to provide better and clearer services to the scientific community.

Most of the IAPR Technical Committees are active; they organize scientific events or other activities of interest to the community. However, we have a problem with TC8 (Applications in Industry), which it seems difficult to reactivate. Problems of confidentiality in industrial applications may be at the root of these difficulties. Anyhow, the ExCo hereby sends out a last call for reactivation of this technical committee. People interested in that task should contact the IAPR 1<sup>st</sup> Vice President, Professor Rangachar Kasturi. If there is no expression of interest in the near future, the ExCo plans to cancel TC8.

The Standing Committees have also been working. A number of proposed amendments to the Constitution and Bylaws have been worked out by the C&B

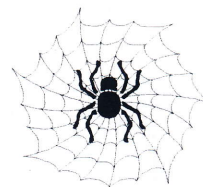
Committee, and should be submitted to the vote of the Governing Board in the near future. We will of course report on the result of this vote in due time. The Publications and Proceedings Committee is working on new propositions for electronic publishing. The Industrial Liaison Committee is actively exploring new ways of getting more involvement from the industrial community.



## NOTICE BOARD

**IAPR NEWSLETTER**

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<http://www.iapr.org>



### DEADLINE SPRING 2002 EDITION

(for copy and individual mailing address changes)

**18 March 2002**

*Newsletter will be mailed from the UK*  
**8/9 April 2002**

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# Discrete Geometry for Computer Imagery DGCI UPPSALA SWEDEN



*The General, Programme and Local Chairs with the Organisers*

The nineteenth Discrete Geometry for Computer Imagery Conference (DGCI 2000) was held at the University of Uppsala, Sweden, December 13-15, 2000. The previous editions of this series of conferences held in various places in France (Strasbourg, Grenoble, Clermont-Ferrand, Marne-la-Vallée).

DGCI 2000 was the first to take place outside France: the end of millennium was the occasion of this major event, perfectly organised by Gunilla Borgefors, Ingela Nyström and Gabriella Sanniti di Baja (all three can also be called "Inguniella"). Many thanks also to Stina Svensson and Lena Wadelius who gave great help.

The conference was located in the very nice and convenient buildings of the University of Uppsala. The three days of the conference were rich of scientific and social events.

The conference brought together 85 participants, coming from 17 countries. The talk and poster sessions (28 oral presentations and 12 posters) covered a large number of

topics such as discrete geometry, discrete topology, discrete models, discrete transforms, surfaces, shape representations and shape understanding, and various applications to image analysis, image synthesis and visualisation. Many fruitful areas of research were discussed during after the talks and during the breaks.

On the side of scientific contributions, the invited speakers showed a wide view on researches in the field of discrete imagery: Prof. Pieter Jonker, Delft University of Technology, The Netherlands, gave a talk devoted to "Morphological Operations on 3D and 4D Images"; Prof. Pierre Soille, Space Applications Institute, Ispra, Italy, gave a precise description on the construction of "Morphological Operators with Discrete Line Segments", and Prof. Jayaram Udupa, University of Pennsylvania, USA, with "Go Digital, Go Fuzzy" presented many very powerful 3D/4D imaging operations.

Several wonderful social events came together with the conference. First of all, the opening session started with

"Lucia celebration" (the Queen of light) at 8.00 AM on December 13th, with the traditional singing and costumes. It was a very marvellous beginning. In the evening, the Lucia Dinner was organised at the Wiik Castle: it started by a fiction about the owners of this castle, several centuries ago, and presented many strange events. Then everybody had to go up from the "oubliettes" to the dining room by very narrow, dark and ghostly stairs, dug directly in the old and wide walls of the castle. After this impressive visit, all the participants found a superb banquet with delicious national dishes and typical drinks and aquavits.



The day after, an open house at the Centre for Image Analysis (directed by Gunilla Borgefors) gave the opportunity to see the extremely interesting theoretical and applied research developed by this group. Then a cordial farewell lunch closed the conference.

We also can add that Uppsala center is a very nice town to visit and walk in; there are some famous places, and the atmosphere with little daylight is very particular for those who are not used to it. Exceptional for all was the missing snow at the beginning of this winter.

Proceedings of the conference were published by Springer in Lecture Notes in Computer Science #1953.

As you have understood, this DGCI'2000 was a success, and the organisers of DGCI'2002 have a nice challenge to defend: the next DGCI Conference will held in Bordeaux, France, on April 3-5 2002, organised by LaBRI-University of Bordeaux: see the web site: <http://www.labri/fr/dgci2002/>

*Annick Montanvert  
ISL Laboratory, Grenoble*

## ICDAR AWARDS 2001

ICDAR Awards recognise individuals who have made outstanding contributions to the field of Document Analysis and Recognition in one or more of the following areas:

- Research
- Training of Students
- Research/Industry interaction
- Service to the Profession

IAPR is delighted to congratulate Professor George Nagy and Professor Venu Govindaraju on their receipt of the 2001 Awards and we print each citation below.

### PROFESSOR GEORGE NAGY

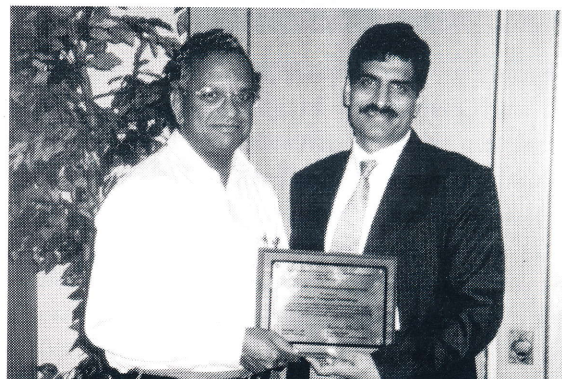
For outstanding contributions for more than three decades which had a tremendous impact on our thinking on OCR and for his zealous commitment to share his valuable insights with generations of students.



*Professor Nagy with students (from left to right) Harsha Veeramachaneni, Umpada Pal, George Nagy, Adnan El-Nasan, Prateek Sarkar, Elisa Barney Smith.*

### PROFESSOR VENU GOVINDARAJU

For his outstanding role in the evolution of the CEDAR which so visibly demonstrated the utility of PR algorithms in complex applications of postal document handling and for his outstanding scientific productivity.



*Professor Govindaraju receiving his award from Professor Ranga Kasturi, Chair Awards Committee.*



## FELLOWSHIP SCHEME

### *Call for Nominations - Deadline 15 February 2002*

The Fellowship Scheme was introduced in 1994 to acknowledge distinguished contributions of IAPR members to IAPR activities and to the running of the Association. The complete list of IAPR fellows is published on the IAPR web site at <http://www.iapr.org/>. The size of the list which amounts to a very small fraction of the IAPR membership reflects the prestigious nature of the IAPR Fellowship award.

Nowadays, the criteria for election make it possible for nominees to qualify not only by virtue of their service to IAPR but also by making notable scientific and technological contributions to the field of Pattern Recognition. The nomination procedure does not require to submit supporting evidence for the contributions made together with the nomination form. However, such evidence must be provided by the nominator if requested by the Fellow Committee.

The completion of the *Fellow Nomination Form* takes a little bit of time and in particular may require some research to be done on behalf of the nominee. It should therefore not be left to the last minute. The form can be retrieved electronically from <http://www.iapr.org/> or its hard copy version can be requested from the IAPR Fellow Committee Chairman, (address below). It is hoped that the Executive Committees of IAPR member societies in particular will play a positive role in helping to identify deserving members of IAPR who should be considered for election to IAPR Fellowship.

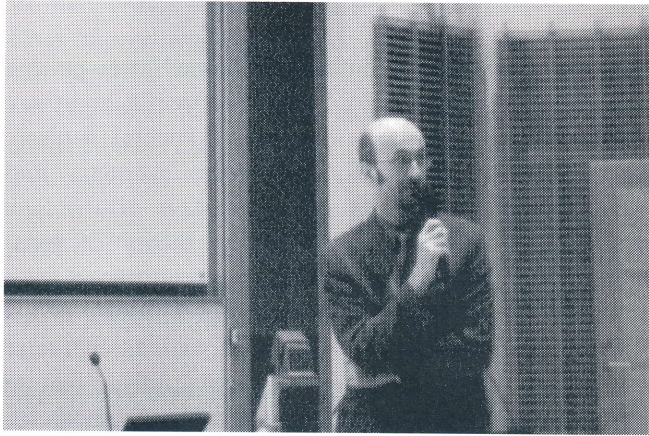
The nominations received will be processed by the IAPR Fellow Committee whose members are: C. Arcelli, D. Chetverikov, R. Haralick, J.P. Haton, and H. Ip. The candidates qualifying for election will be ranked according to their merit and the top tranche corresponding to a pre-specified maximum number of new awards will be submitted for endorsement to the IAPR Executive Committee. The Fellow awards will be presented at the ICPR 2002 in Quebec City

**Dr Carlo Arcelli**  
**Chairman IAPR Fellow Committee**  
**Istituto di Cibernetica, CNR**  
**Via Campi Flegrei 34**  
**I-80078 Pozzuoli**  
**Napoli**  
**Italy**

## THIRD INTERNATIONAL CONFERENCE ON AUDIO- AND VIDEO-BASED BIOMETRIC PERSON

**AUTHENTICATION 6-8 JUNE 2001 HALMSTAD, SWEDEN**

**B** iometrics as a research field has gained in popularity over recent years. An increasing number of conference and journal papers address various topics within biometrics. Also, the biometric techniques developed in research environments are more frequently finding their way into commercial systems. The Third International Conference on Audio- and Video-Based Biometric Person Authentication (AVBPA'01) was therefore a very timely conference, addressing issues of great interest for people in research and industry.



The AVBPA'01 conference was organised by Professor Josef Bigun together with Dr Fabrizio Smeraldi and the local staff at Halmstad University including Eva Nestius, Ulla Johansson and Ulrika Hult. The conference was sponsored by a number of academic organisations and research foundations. More specifically, Halmstad University, the VISIT program of the Swedish Foundation for Strategic Research, the Swedish Society for Automated Image Analysis (SSAB) and, of course, by the IAPR in which AVBPA is an official event within the TC-14 (Signal Analysis for Machine Intelligence). About 100 researchers from 19 different countries (Australia, Brazil, China, Finland, France, Germany, India, Italy, Japan, Korea, Norway, Singapore, Spain, Sweden, the Netherlands, Turkey, UK, Uruguay and USA) attended the conference.

The conference program featured 51 papers, reviewed and selected from 72 submissions. The papers covered a range of techniques and biometric modalities. Although the more well-established fingerprint, speech and face modalities were dominating, there were interesting papers on novel techniques for gait, iris and signature recognition. In all these modalities, learning techniques seemed to have gained in popularity. For example, there

were several papers on face recognition using support Vector Machines. Some of the authors are currently being asked to prepare extended versions of their contributions for possible publication in Pattern Recognition Letters. The conference also featured four invited speakers. The speakers were, in order of presentation: Bernt Ericsson (L.M. Ericsson, Sweden), Josef Kittler (University of Surrey, UK), Satoshi Nakamura ATR, Japan), and Anil Jain (Michigan State University, USA). Proceedings have been published by Springer (LNCS 2091).

**I**n line with the previous two AVBPA conferences, the program offered opportunities for social and recreational activities following the lunch breaks. On Wednesday afternoon, some of the participants went for a stroll along the scenic path "Prins Bertils Stig" (the path of Prince Bertil), while others visited the art exhibitions at "Mjellby konstgård". There were sessions all day, but in the evening a conference banquet was held at Varbergs Fästning, an impressive fortress built in the 4th century. Before the dinner the participants were taken on a guided tour around the fortress. Thursday afternoon offered a bus trip to the beautiful surroundings at "Hallandsås".



The participants greatly appreciated the organisation of the conference, the quality of the papers, and the in-depth knowledge and experience in biometrics shared by the invited speakers. Many fruitful discussions were held and we believe many of the participants left the conference with a greater understanding in the diversified field of biometrics. We thank the organisers for an excellent conference and look forward to a follow-up in 2003 in the UK.

*Kenneth Jonsson  
Fingerprint Cards AB ([www.fingerprint.se](http://www.fingerprint.se)), Sweden*

# IAPR Workshop on Machine Learning and Data Mining 25-27 July 2002 Leipzig

<< Die sommerliche Opfergabe aus Leipzig >>

("Musikalische Opfer" Bach Werke Nr. 2079 Sommer 1747)



One of the origins of Data Mining is pattern recognition in higher dimensional data space. The recent growing applications of data mining are text mining, web mining, and electronic-secretary which automatically classifies thousands of e-mails. In the traditional fields such as computer vision, pattern recognition, and neural network, data mining, knowledge discovery, and machine learning provide new ideas, new understandings and a new framework.

The applications of traditional pattern recognition and artificial intelligence are medical archiving and its applications to computer assisted diagnosis systems and case-based system diagnosis. Although these fields have a long history in artificial intelligence, machine learning and data mining and the increasing performance of the computer provide a new paradigm to pattern recognition.

The second interdisciplinary workshop for these fields has been organized at Leipzig by Dr. Petra Perner of IBAI Germany and Prof. Maria Petrou of University of Surrey, England.

The two invited talks in text mining and data mining in clinical application presented up-to-date subjects. Text mining is an increasing field that is deeply related to the innovation of electronic text and digital libraries. Once texts are transformed to digital forms, it is possible to deal with them as data for pattern recognition. Prof. A. Visa talked about technologies for text mining and showed the challenges for the recognition of similar text parts when combining traditional pattern extraction methods with data mining methods.

Many rules based on cases are used in clinical diagnosis and case-based system diagnosis. These are old and new fields in artificial intelligence and pattern recognition. Dr. U. Sack - a physician- presented new aspects of clinical applications that can only be discovered when using data mining methods.

24 regular talks are devoted to applications and theory; applications are from geographical information systems, technical diagnosis to medical applications, theories are devoted to neural networks, principal component analysis, and robust statistical methods in pattern

recognition and computer vision, such as the extension of EM. New applications of the classification have been presented such as classification of diatoms. In this application computer scientist might help biologist to define new classification criterions. Case-based reasoning and evidence based reasoning become practical applications thanks to the performance of the computer. The theoretical consideration of case-base reasoning is one of challenging problems.

There are, now, many conferences named after pattern recognition, computer vision, neural networks, and there are also many workshops devoted to special subjects related to these fields, for examples, geometry and vision, theoretical aspects or application of machine learning. J. S. Bach established the theory of tonal counterpoint. This music theory is the great present from him to us, which enables us to enjoy great music of the 17th century from Leipzig. The fields such as character recognition, sign language understanding, feature extraction from large image sets and robust methods for computer vision act as parts of a fuga which produces melodies. On the other hand, data mining and machine learning, act as bass or base of a fuga in pattern recognition.

This is a unique workshop to share the common theoretical and practical background on machine learning and data mining in pattern recognition, computer vision, neural networks, and artificial intelligence. Furthermore, the workshop opens new applications such as text mining to pattern recognition community. The ideas shared at the workshop will bring new ideas in 2003 to the city of J. S. Bach.

The proceedings is available as LNAI 2123, and the publications of the first workshop are also available as LNAI 1715. Selected papers are published in the Pattern Recognition Letters January 2001 as the special issue on MLDM in Pattern Recognition. The selected papers of MLDM 2001 will be appear in the journal Artificial Intelligence in Engineering. Contact address for MLDM 2003 as well as for the new IAPR TC 17 Machine Learning and Pattern Recognition is <http://www.ibia-reserach.de>.

*Atsushi IMIYA  
Chiba University Japan.*



# FORTHCOMING IAPR SPONSORED CONFERENCES

## 2nd International Workshop on Pattern Recognition in Information Systems Alicante, Spain, 2 & 3 April, 2002

Huge amounts of information in digital format are currently available; the world-wide-web is an immense source of text, images, video, and sound. Structuring/understanding this multimedia information is a difficult task. Accessibility issues arise in this context, with personal identification techniques playing a key role in human-machine interfaces for security and restricted-access systems. Pattern recognition (PR) and machine learning (ML) provide formal frameworks in which this class of problems can be adequately addressed.

On the other hand, exploratory analysis (mining) and content-based retrieval of multimedia data serve both as important practical application domains for PR and ML techniques, and as a source of challenging research problems. The aim of this workshop is to bring together researchers, practitioners and potential users with interests in this area.

*Topics will include* (but are not limited to):

- Document analysis and classification
- Image classification and retrieval
- Content-based analysis and retrieval
- Classification algorithms
- Nonparametric methods
- Prototype based techniques
- Unsupervised learning
- Feature extraction and election
- Face recognition
- Comparative studies
- Shape analysis
- Neural based pattern recognition
- Graph based methods
- Genetic techniques

*For further information:*

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*Email:* pris2002@dlsi.ua.es  
*Website:* <http://www.dlsi.ua.es/pris2002/>

**Submission deadline:** 15/11/01  
**Camera-ready copy:** 05/02/02

## Third International Workshop on Multiple Classifier Systems Cagliari, Italy, 24-26 June 2002

MCS 2002 is the third workshop of a series aimed to create a common international forum for researchers of the diverse communities working in the field of multiple classifier systems. Contributions from all the research communities working in the field are welcome in order to compare the different approaches and to define the common research priorities. Special attention is also devoted to assess the applications of multiple classifier systems. The papers will be published in the workshop proceedings, and extended versions of selected papers will be considered for publication in a special issue of an international journal.

*Papers describing original work* in the following and related research topics are welcome:

- Foundations of multiple classifier systems
- Methods for classifier fusion
- Design of multiple classifier systems
- Neural network ensembles
- Bagging and boosting
- Mixtures of experts
- New and related approaches
- Applications

*Paper submission:* Three hard copies of the full paper should be mailed to: MCS 2002, Prof. Fabio Roli, Dept. of Electrical and Electronic Eng., University of Cagliari, Piazza d'armi 09123 Cagliari, Italy

In addition participants should submit an electronic version of the manuscript (PostScript or PDF format) to [mcs@diee.unica.it](mailto:mcs@diee.unica.it). Papers should not exceed 10 pages (LNCS format). A cover sheet with the authors' names and affiliations with the complete address of the corresponding author, and an abstract (200 words).

*Important:* Submission implies the willingness of at least one author to register, attend the workshop, and present the paper.

*Email:* [mcs@diee.unica.it](mailto:mcs@diee.unica.it)  
*Website:* <http://www.diee.unica.it/mcs>

**Submission deadline:** 01/02/02  
**Camera-ready copy:** 10/04/02

12th Portuguese Conference on Pattern  
Recognition  
Aveiro, Portugal 27-28 June 2002

RECPAD 2002 continues the cycle of conferences organized every two years by the Portuguese Association for Pattern Recognition (APRP). The conference offer a broad spectrum, having specialised workshops in intermediate years. A special poster session for young scientists will be arranged and undergraduate and graduate students are encouraged to submit their work.

*Topics will include* (but are not limited to):

- Pattern recognition
- Computer vision
- Neural networks
- Mathematical morphology
- Image processing and analysis
- Signal processing
- Image and video coding
- Applications (medical, industrial, document analysis and others)

**Full papers**, in English, should be a maximum of 6 pages according to the electronic format provided on the conference website (below).

**Short papers**, in English, are invited from young scientists who are encouraged to submit their work as an extended abstract.

**All papers** should have a cover page for all papers and should include full contact details of the author. Full papers will be published in the conference proceedings and presented either as oral or poster presentations

**Paper submission:** all papers, in PDF or Postscript format, should be electronically submitted to: [recpad2002@ieeta.pt](mailto:recpad2002@ieeta.pt)

**Further information:** Mrs A Viegas,  
Conference Secretariat  
Departamento de Electronica e  
Telecomunicacoes/IEETA  
Universidade de Aveiro,  
Campus Universitario,  
3810-193 Aveiro, Portugal

**Email:** [recpad2002@ieeta.pt](mailto:recpad2002@ieeta.pt)  
**Website:** <http://www/ieeta.pt/recpad2002>

**Submission deadline:** 28/01/02  
**Camera-ready copy:** 15/04/02

Vision Geometry XI  
Seattle, Washington USA  
7-8 July 2002

This conference is designed to bring together researchers who use geometric theory and techniques to solve problems related to computer vision. Contributions should focus on geometric or topological aspects. Specific solutions as well as overviews of more general topics are welcome.

*Topics will include* (but are not limited to):

Geometry of 2D and 3D Digital Images

- digital geometry and topology
- approximations of curves and surfaces
- geometry-based image segmentation in 2D/3D
- mathematical morphology
- shape description and geometric similarity

Object Geometry

- geometric object models
- geometric object recognition
- 3D and 2D object features
- invariance and geometric transformations
- surface models and shape recovery

Computational Geometry

- complexity of algorithms for vision and image processing
- object recognition and point pattern matching
- convexity problems
- Voronoi diagrams and Delaunay triangulations.

Further areas of interest are integral, stochastic and differential geometry as far as contributions are relevant to computer vision.

**Paper submission:** Please visit the following site for specific information on submission procedures:  
<http://spie.org/Conferences/calls/02/am/conf/AM322.html>

**Further information:**  
Dr. Longin Jan Latecki  
Department of Applied Mathematics  
University of Hamburg  
Bundesstr. 55, 20146 Hamburg, Germany

**Email:** [latecki@math.uni-hamburg.de](mailto:latecki@math.uni-hamburg.de)  
**Website:** <http://www.math.uni-hamburg.de/home/latecki/>

**Submission deadline:** 10/01/02  
**Camera-ready copy:** 10/06/02

**Fifth IAPR International Workshop on  
Document Analysis Systems  
Princeton, New Jersey, USA  
19-21 August 2002**

DAS'02 will be held in Princeton, NJ and will build on the tradition of past workshops: Kaiserslautern, Germany ('94), Malvern, PA ('96), Nagano, Japan ('98), and Rio de Janeiro, Brazil (2000).

*Topics will include* (but are not limited to):

- Descriptions of complete, working DIA systems.
- Studies of system architectures.
- Methods of performance evaluation.
- Algorithms for graphics recognition.
- Layout segmentation.
- Interfaces to knowledge databases and post processors.
- Applications to text, graphics, maps, music, etc.
- Recognition and classification methodologies for DIA systems
- Document image processing for the Internet.
- Document reformatting for multimodal mobile access

The program will include full paper presentations, poster papers, and several invited talks, culminating in parallel working group sessions. The page limit for full papers is a maximum of 12 single-column, single-spaced pages. Each paper must be accompanied by a 300 word abstract summarizing the contribution it makes to the field. Submission of a paper in any category constitutes a commitment that, if accepted, one or more authors will attend and participate in the workshop. Pre-proceedings will be made available on-site. After the workshop, selected full papers will be published in a post-workshop book.

*All submissions* should preferably be sent via email (in postscript or PDF) to: [as2002@research.avayalabs.com](mailto:as2002@research.avayalabs.com)

*Hardcopy submissions* may be made via standard mail to: Dr. Ram Kashi  
Avaya Labs Research  
233 Mt. Airy Rd, Room 2C-46  
Basking Ridge, NJ 07920, USA.

**Email:** [das2002@research.avayalabs.com](mailto:das2002@research.avayalabs.com)  
**Website:** <http://www.research.avayalabs.com/DAS02>

**Submission deadline:** 15/01/02  
**Camera-ready copy:** 15/06/02

**IAPR Workshop on Machine Vision  
Applications  
Nara-ken New Public Hall, Nara, Japan  
11-13 December 2002**

The eighth IAPR Workshop on Machine Vision Applications will be held at the Nara-ken New Public Hall, Japan. The workshop is co-sponsored by the IAPR MVA Organizing Committee and Nara Institute of Science and Technology. The purpose of the workshop is to bring together researchers and practitioners from both academia and industry, and to exchange their knowledge and stimulate each other through intensive discussions.

*Topics will include* (but are not limited to):

Algorithms: Feature Extraction, Range Data and 3D Analysis, Motion and/or Image Sequence Analysis, Neural Network Applications, Color Image Analysis, and related technologies

Architectures: Intelligent Sensors, VLSI Image Processor Chips, Massively Parallel Processing, Architectures for 3D and/or Motion Processing, Image Processing Systems, Software Environment for Image Processor, and related technologies

Applications

- Factory Automation
- Intelligent Transport Systems
- Multimedia
- Medical
- Geographic Information System
- Human Computer Interaction
- Wearable Computing
- Security

*Paper submission:* The workshop will include about 100 papers for oral and poster presentations in English. Submit four copies of an extended abstract of 500-1000 words with at least one main figure by to: Prof. Katsushi Ikeuchi  
Institute of Industrial Science, University of Tokyo  
Komaba 4-6-1, Meguro-ku, Tokyo 153-8505, Japan  
Fax: +81-3-5452-6244

The abstract should contain the following on the first page:

- 1) Title of the paper
- 2) Name(s) and affiliation(s) of the author(s)
- 3) Name and address of the person to be contacted, and also his/her phone/fax number(s) and E-mail address
- 4) Answers to the following questions:
  - a) What is the original contribution of this work?
  - b) Why should this contribution be considered important?

**Email:** [ki@iis.u-tokyo.ac.jp](mailto:ki@iis.u-tokyo.ac.jp)  
**Website:** <http://www.cvl.iis.u-tokyo.ac.jp/mva/>

**Submission deadline:** 10/06/02  
**Camera-ready copy:** 11/10/02



# IAPR SPONSORED CONFERENCES & WORKSHOPS

Please check updated information on: <http://www.iapr.org>

2002	Event	Location	Deadlines	Contact
2-3 April PRIS 2002	2nd International Workshop on PR in Information Systems	Alicante Spain	Abstract Final Manuscript  Deadline passed 05/02/2002	pris2002@disi.ua.es <a href="http://www.disi.ua.es/pris2002">http://www.disi.ua.es/pris2002</a>
3-5 April DGC'I'2002	10th Discrete Geometry for Computer Imagery	Bordeaux France	Abstract Final Manuscript  Deadlines passed	Fax: +33 5 56 84 66 69 <a href="http://www.labri.fr/dgci2002/">http://www.labri.fr/dgci2002/</a> dgci2002@labri.fr
3-5 April ISMM'2002	VI International Symposium on Mathematical Morphology	Sydney Australia	Abstract Final Manuscript  Deadlines passed	Fax: +61 2 9325 3200 <a href="http://www.cmis.csiro.au/ismm2002">http://www.cmis.csiro.au/ismm2002</a> Mark.Berman@cmis.CSIRO.au
22-26 April CG IV'2002	First European Conference on Color in Graphics, Image and Vision	Poitiers France	Abstract Final Manuscript  Deadlines passed	Fax: +39 02 7064 3292 <a href="http://www.itim.mi.cnr.it/Staff/Schettini">http://www.itim.mi.cnr.it/Staff/Schettini</a> centaura@itim.mi.cnr.it
27-29 May VI'2002	15th Int Conference on Vision Interface	Calgary Canada	Abstract Final Manuscript  Deadline passed 01/04/2002	Fax: +1 613 952 0215 <a href="http://www.visioninterface.org/vi2002">http://www.visioninterface.org/vi2002</a> dmitry.gorodnichy@nrc.ca
24-26 June MCS 2002	Multiple Classifier Systems 2002	Cagliari Italy	Abstract Final Manuscript  01/02/2002 10/04/2002	Fax: +39 070 6755900 <a href="http://www.diee.unica.it/mcs">http://www.diee.unica.it/mcs</a> Roli@diee.unica.it
27-28 June RecPad'2002	12th Portuguese Conference on PR	Aveiro Portugal	Abstract Final Manuscript  28/01/2002 15/04/2002	recpad2002@ieeta.pt <a href="http://www.ieeta.pt/recpad2002">http://www.ieeta.pt/recpad2002</a>
7-8 July VI'XI	Vision Geometry XI	Seattle USA	Abstract Final Manuscript  10/01/2002 10/06/2002	Fax: +49 40 822 273200 <a href="http://www.math.uni-hamburg.de/home/latecki/">http://www.math.uni-hamburg.de/home/latecki/</a> latecki@math.uni-hamburg.de
6-9 Aug SSPR/SPR/02	Int Workshop on Syntactical & Structural PR & Statistical PR	Ontario Canada	Abstract Final Manuscript  10/01/2002 01/04/2002	Fax: +61 2 9385 3974 <a href="http://www.ph.tn.tudelft.nl/Organisation/ssspr2002/">http://www.ph.tn.tudelft.nl/Organisation/ssspr2002/</a> amin@cse.unsw.edu.au
11-15 Aug 16'ICPR	16th International Conference on Pattern Recognition	Quebec City Canada	Abstract Final Manuscript  Deadline passed 15/04/2002	icpr2002@gel.ulaval.ca <a href="http://www.icpr2002.gel.ulaval.ca">http://www.icpr2002.gel.ulaval.ca</a>
16 Aug PRRS	2nd International Workshop on PR in Remote Sensing	Niagara Falls Canada	Abstract Final Manuscript  15/03/2002 10/06/2002	Fax: +44 1483 34139 m.petrou@ee.surrey.ac.uk <a href="http://www.ee.surrey.ac.uk/Personal/M.Petrou/2nd.html">http://www.ee.surrey.ac.uk/Personal/M.Petrou/2nd.html</a>
19-21 Aug DAS'02	Fifth IAPR International Workshop on Document Analysis Systems	Princeton NJ, USA	Abstract Final Manuscript  15/01/2002 15/06/2002	das2002@research.avayalabs.com <a href="http://www.research.avayalabs.com/DAS2002">http://www.research.avayalabs.com/DAS2002</a>
11-13 Dec MVA 2002	2002 IAPR International Workshop on Machine Vision Applications	Nara Japan	Abstract Final Manuscript  10/06/2002 11/10/2002	ki@iis.u-tokyo.ac.jp <a href="http://www.cvl.iis.u-tokyo.ac.jp/mva/">http://www.cvl.iis.u-tokyo.ac.jp/mva/</a>

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