

IAPR Newsletter

Volume 31, Number 3
July 2009

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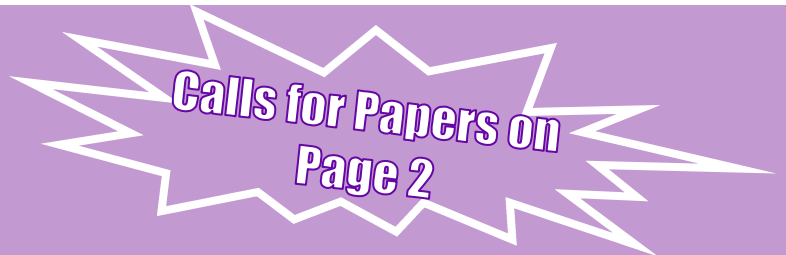
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Calls for Papers

CIP 2010

2nd International Workshop on
Cognitive Information Processing
Elba Island (Tuscany), Italy
Deadline: January 10, 2010
June 14-16, 2010

ICPR 2010

20th International Conference on Pattern Recognition
Istanbul, Turkey
Deadline: January 15, 2010
August 23-26, 2010

ICISP 2010

International Conference on
Image and Signal Processing 2010
Trois-Rivieres, Quebec, Canada
Deadline: January 22, 2010
June 30-July 2, 2010

ICFHR 2010

12th International Conference on
Frontiers in Handwriting Recognition
Kolkata, India
Deadline: February 15, 2010
November 16-18, 2010

ANNPR 2010

4th International Workshop on
Artificial Neural Networks in Pattern Recognition
Cairo, Egypt
Deadline: November 1, 2009
April 11-13, 2010

ICDAR2011

11th International Conference on
Document Analysis and Recognition
Beijing, China
Deadline: ?
September 18-21, 2011

Call for Submissions

IAPR Newsletter

*Articles, announcements, book reviews,
conference and workshop reports*

Contact the editor:

Alexandra Branzan Albu, aalbu@ece.uvic.ca

Deadline: October 2, 2009

The logo for the IAPR Newsletter features the acronym 'IAPR' in a bold, sans-serif font, with a stylized globe icon integrated into the letter 'P'. Below this, the word 'Newsletter' is written in a large, elegant, cursive script.

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Feature

How many IAPR Fellows do you know?



By [Walter G. Kropatsch](#), IAPR Fellow (Austria)
Chair of the IAPR Fellow committee

*With this article, the IAPR Newsletter begins a new series of Feature articles: **Getting to Know IAPR Fellows**. Through this series, IAPR Fellows will share technical information about their research with the IAPR Community.*

As always, your feedback is welcome. Please email your comments and suggestions to me.

~[Alexandra Branzan Albu, ed.](#)

If you are not one of the rare species of IAPR-fellows you may have difficulties to come up with a good estimate. In fact only few people are actively involved in the process of nominating IAPR-fellows.

1. There is first of all the nominator. Any member of an IAPR member society can serve as a nominator, except members of the IAPR Fellow committee and the nominee him/herself. The nominator initiates the nomination of a candidate.
2. Each nomination must be endorsed by at least one endorsing letter. The endorser is the second person who supports the nomination of an IAPR-fellow.
3. All nominations are collected by the six members of the IAPR Fellow Committee, which has the task of ranking the incoming nominations and proposing maximally 0.25% of the total IAPR membership to receive IAPR Fellowship. Currently, this number is 19 Fellows that can be elected until next ICPR.
4. At the ICPR, a part of the banquet is the ceremony to congratulate the recipients on their

achievements and to hand out the certificates. At this time, all the new IAPR fellows are officially announced and some of your friends will remember this event.



IAPR Past President Karl Tombre, IAPR Fellow, presents an IAPR Fellow plaque to IAPR President Brian Lovell at ICPR2008.

The plaque reads :For contributions to video and medical image analysis and service to the IAPR."

And then?

(Continued on page 4)

(Continued from page 3)

Some fellows put "IAPR Fellow" on their business cards. And, the IAPR home page lists the names of all IAPR Fellows with their member society and the citation.

Beyond this, not much is visible from the prestigious IAPR Fellow award, which was introduced in 1994 and since then is biennially conferred on persons to acknowledge their distinguished contributions to the field of pattern recognition and to IAPR activities. Based on this observation, the IAPR Executive Committee and the IAPR Fellow Committee propose to create visual signs to allow IAPR Fellows to show their prestigious award:

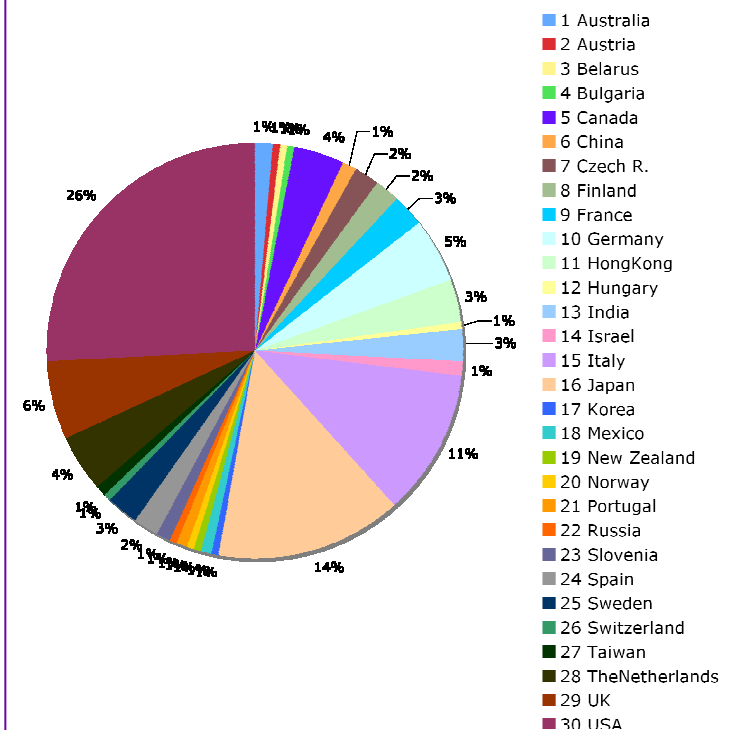
1. Based on an idea of the new Executive Committee, we want to create a pin that will be distributed to all IAPR Fellows. It should be quickly associated with the IAPR, and it should identify the person as a Fellow of the IAPR. While we have some preliminary ideas on design, I can imagine that IAPR members have many excellent and creative ideas. Why don't you make your own proposal? The forum on the IAPR members pages would be a good place to present your proposals.
2. Other professional societies (like IEEE) allow their fellows to put "Fellow" behind their name as author of an article. We want to encourage (at least) the official publications of the IAPR to follow this example.

The distribution of IAPR Fellows among member societies varies. We have asked one of the most successful member societies to tell us more about their policy (see sidebar, "GIRPR Policy"). You can congratulate your Italian colleagues for their high recognition rate.

GIRPR Policy on IAPR Fellowship

GIRPR, the IAPR Italian Member Society, has an "ad hoc" Fellow Committee to identify individual GIRPR members as potential nominees for becoming IAPR Fellows. The committee, renewed every 2-year term, consists of 2 or 3 members and generally includes the GIRPR members that were elected as IAPR Fellows during the previous term.

Obviously, this policy does not prevent individual GIRPR members from being nominated by nominators outside GIRPR, but guarantees that the most valuable GIRPR members are certainly nominated. This policy has had positive results, especially by taking into account that GIRPR is a relatively small Member Society (category A2 until the end of 2007, category B1 since January 2008). In fact, 11% of the IAPR Fellows elected since 1994 are GIRPR members.



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Finally, I asked one of our most recent IAPR fellows to briefly describe what it meant for him to become an IAPR fellow (see sidebar, “*When I became an IAPR Fellow...*”)

To come back to my introductory question, I would like to invite you to think of who in your IAPR neighborhood would deserve to become an IAPR Fellow. Please do not hesitate to submit a nomination. With a successful nomination of an IAPR Fellow you will, for sure, know at least one more IAPR fellow...

When I became an IAPR-Fellow...

Surely, becoming an IAPR Fellow is so far the highest recognition of my work. In fact, to all the Pattern Recognition researchers in India, IAPR is the most learned society in the field and any award or recognition from IAPR is treated as a great achievement. So when I became IAPR Fellow, I received a huge applause from my friends, colleagues and co-researchers. This recognition has imposed on me more visibility.

Our Director is also a IAPR Fellow. and he knew the importance of this Fellowship and considered it as an honour to the Institute. He put it in the annual report of the Institute and mentioned in his Convocation Address.

—[Bhabatosh Chanda](#), IAPR Fellow





News from the IAPR EXECUTIVE COMMITTEE

By [Denis Laurendeau](#) (Canada)

The ExCo held a very fruitful mid-term meeting on July 15-16, 2009, in Nancy, France. Special thanks go to Karl Tombre who hosted the meeting and made the work of the committee easy and efficient.

The ExCo has reviewed the interim reports from the Technical Committees. Based on the contents of these reports, most TCs have been very active in the past months running various activities and events related to their respective fields of expertise.

The ExCo has also discussed ways of improving the web services offered to TCs and more information on the solutions that have been identified will be communicated to the TCs in the next weeks.

The organization of the next ICPR 2010 in Istanbul is going on, and the IAPR community is invited to visit the website at www.icpr2010.org for information on paper/tutorial/workshop submission deadlines and other activities related to the conference (see also the [ICPR poster](#) in this issue).



Speaking of ICPR, and following the discussion that was held at the last GB meeting in Tampa, the ExCo has worked on defining the procedure for submitting bids for hosting the ICPR. Information will be sent to the GB and the IAPR community as soon as the procedure (and accompanying guidelines document) is complete.

The financial status of the IAPR has been reviewed by the ExCo. Based on the report made by the Treasurer, Prof. Kim Boyer, IAPR's finances are in good shape and the plans that were adopted for this budget cycle at the last GB meeting for supporting activities in TCs and work groups can be implemented.

BOOKSBOOKSBOOKS

Book reviews previously published in the IAPR Newsletter

Pattern Recognition and Neural Networks by B.D. Ripley (reviewed in this issue)

Close Range Photogrammetry: Principles, Methods, and Applications by Luhmann, Robson, Kyle, and Harley, Oct '08

Classification and Learning Using Genetic Algorithms: Applications in Bioinformatics and Web Intelligence by Bandyopadhyay and Pal, Oct '08

Learning Theory: An Approximation Theory Viewpoint by Cucker and Zhou, Oct '08

Character Recognition Systems—A Guide for Students and Practitioners by Cheriet, Kharma, Liu, and Suen, Oct '08

Geometry of Locally Finite Spaces by Kovalevsky, Oct '08

Machine Learning in Document Analysis and Recognition by Marinai and Fujisawa (Editors), Oct '08

From Gestalt Theory to Image Analysis—A Probabilistic Approach by Desolneux, Moisan, and Morel, Oct '08

Numerical Recipes: The art of scientific computing, 3rd ed. by Press, Teukolsky, Vetterling and Flannery, Jul '08

Feature Extraction and Image Processing, 2nd ed. by Nixon and Aguado, Jul '08

Digital Watermarking and Steganography: Fundamentals and Techniques by Shih, Jul '08

Springer Handbook of Speech Processing by Benesty, Sondhi, and Huang, eds., Jul '08

Digital Image Processing: An Algorithmic Introduction Using Java by Burger and Burge, Jul '08

Bézier and Splines in Image Processing and Machine Vision by Biswas and Lovell, Jul '08

Practical Algorithms for Image Analysis, 2 ed. by O'Gorman, Sammon and Seul, Apr '08

The Dissimilarity Representation for Pattern Recognition: Foundations and Applications by Pekalska and Duin, Apr '08

Handbook of Biometrics by Jain, Flynn, and Ross (Editors), Apr '08

Advances in Biometrics – Sensors, Algorithms, and Systems by Ratha and Govindaraju, (Editors), Apr '08

Dynamic Vision for Perception and Control of Motion by Dickmanns, Jan '08

Bioinformatics by Polanski and Kimmel, Jan '08

Introduction to clustering large and high-dimensional data by Kogan, Jan '08

The Text Mining Handbook by Feldman and Sanger, Jan '08

Information Theory, Inference, and Learning Algorithms by Makay, Jan '08

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Geometric Tomography by Gardner, Oct '07

"Foundations and Trends in Computer Graphics and Vision" Curless, Van Gool, and Szeliski., Editors, Oct '07

Applied Combinatorics on Words by M. Lothaire, Jul '07

Human Identification Based on Gait by Nixon, Tan and Chellappar, Apr '07

Mathematics of Digital Images by Stuart Hogan, Apr '07

Advances in Image and Video Segmentation Zhang, Editor, Jan '07

Graph-Theoretic Techniques for Web Content Mining by Schenker, Bunke, Last and Kandel, Jan '07

Handbook of Mathematical Models in Computer Vision by Paragios, Chen, and Faugeras (Editors), Oct '06

The Geometry of Information Retrieval by van Rijsbergen, Oct '06

Biometric Inverse Problems by Yanushkevich, Stoica, Shmerko and Popel, Oct '06

Correlation Pattern Recognition by Kumar, Mahalanobis, and Juday, Jul. '06

Pattern Recognition 3rd Edition by Theodoridis and Koutroumbas, Apr. '06

Dictionary of Computer Vision and Image Processing by R.B. Fisher, et. Al, Jan. '06

Kernel Methods for Pattern Analysis by Shawe-Taylor and Cristianini, Oct. '05

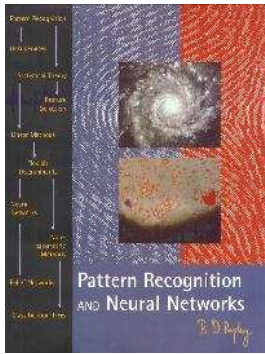
Machine Vision Books Jul. '05

CVonline: an overview, Apr. '05

The Guide to Biometrics by Bolle, et al, Jan. '05

Pattern Recognition Books, Jul. '04

BOOKSBOOKSBOOKS



Pattern Recognition and Neural Networks

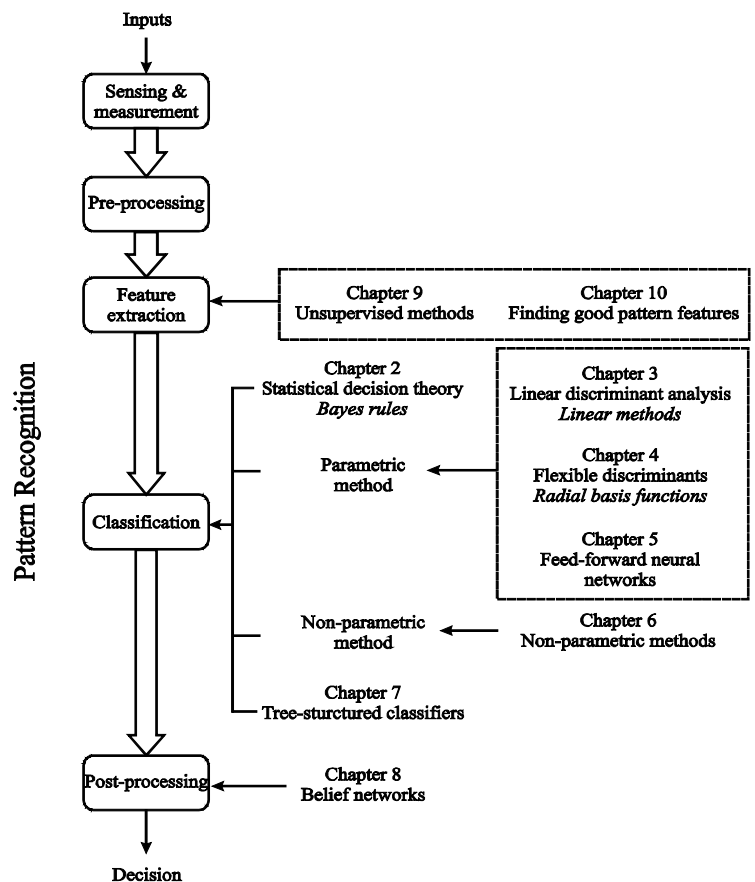
by B.D. Ripley
Whittles Publishing, 2006

Reviewed by
[Zheng Liu](#) (Canada)

When I asked Alexandra for the 2nd edition of this book, I did have a copy of first edition borrowed from the NRC's (National Research Council) library and someone else was on the waiting list. The first version is about 400 pages while the 2nd version is almost the same. Although the title of this book is *Pattern Recognition and Neural Networks*, as the author mentioned in the book, neural network is a method used for pattern recognition. Thus, the description of neural networks is naturally merged into the tasks of pattern recognition rather than being written as an independent part of the book.

To understand how this book is organized, I prefer to use a chart as shown in Figure 1. On the left side, it is a typical procedure for pattern recognition. The organization of the book can be found from the right side of the figure. This book discusses the methods for feature extraction, classification, and post-processing in a pattern recognition process. Chapter 9 and 10 are devoted to the feature extraction and representation. Other six chapters focus on the classification issue. Chapter 2 describes the classification with the Bayes rule, which comes from the statistical decision theory. You may find such a chapter in almost all pattern recognition books just after the introduction. Chapters 3 to 5 are categorized as the parametric method, but they make weaker assumptions than standard parametric models as the author mentioned. Linear discriminant analysis, flexible discriminants, and feed-forward neural networks are introduced in the three chapters

respectively. Chapter 6 contributes to the description of non-parametric methods. Chapter 7 introduces tree-structured classifiers where the feature space is partitioned into regions and each region is assigned a class. Belief networks are often used as a diagnosis tool to understand the relationships between all the observations. This technique may be used for post-processing. The details are provided in Chapter 8.



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The book is well written and organized. It is easy to understand, especially with the examples. Moreover, the datasets are available from the Internet for readers to practice, but there is no software accompanied with this book except a FORTRAN program implementing the k-means clustering algorithm. Nevertheless, this book is still a good reference for graduates in engineering and science as well as those who are new to the pattern recognition field. Without any doubt, this rigorous work by a professor of statistics can serve as a reference for academic and industrial professionals. Before jumping to other classic books on pattern recognition or literatures, these four-hundred pages are worth reading and will give you a solid knowledge to comprehend the information on pattern recognition you get from somewhere else.

Workshop Report: [CCIW '09](#)

2009 Computational Color Imaging Workshop

26-27 March 2009
Saint Etienne, France

Workshop Organizers/Chairs:

[Alain Tremeau](#) (France)
[Raimondo Schettini](#) (Italy)
[Shoji Tominaga](#) (Japan)

Report prepared by the Workshop Organizers/Chairs

This workshop was the second in the CCIW series and was organized by the University Jean Monnet and the Laboratoire Hubert Curien UMR 5516 (Saint Etienne, France) with the endorsement of the International Association on Pattern Recognition (IAPR), the French Association for Pattern Recognition and Interpretation (AFRIF) affiliated with IAPR, and the "Groupe Français de l'Imagerie Numérique Couleur" (GFINC). The first CCIW was organized in 2007 in Modena, Italy (*see report in the [October, 2007, issue of the IAPR Newsletter](#)*).

While planning the CCIW'09 workshop, its organizers/chairs, Alain Tremeau (Univ. of Saint-Etienne, France), Raimondo Schettini (Univ. of Milano-Bicocca, Italy) and Shoji Tominaga (Chiba University, Japan) aimed at bringing together the international community of imaging scientists and technologists to discuss recent advances in the areas of color image processing and analysis, ranging from theoretical developments to practical applications.

We received many excellent submissions. Each paper was reviewed by three reviewers, and then we carefully selected only 23 papers in order to achieve a high scientific level at the workshop. The final decisions were based on the criticisms and recommendations of the reviewers and the

relevance of papers to the goal of the workshop. Only 58% of the papers submitted were accepted for inclusion in the program. These papers provided a good starting point for the valued discussion of the workshop participants. In addition to the contributed papers, four distinguished researchers were invited for this second CCIW to deliver keynote speeches on current research directions in hot topics on computational color imaging: Hidehiko Komatsu (Chiba University, Japan) on "color information processing in higher brain areas"; Qasim Zaidi (State University of New York, USA) on "general and specific color strategies for object identification"; Theo Gevers (University of Amsterdam, Netherlands) on "color descriptors for object recognition"; and Gunther Heidemann on "visual attention models and color image retrieval".

The workshop program included six sessions. The first session on Computational Color Vision Models began with presentations on spatio-temporal tone mapping operator based on a retina model (Alexandre Benoit, Université de Savoie, France), next followed by presentation on color representation in lateral geniculate nucleus (Naokazu Goda, National Institute for Physiological Sciences, Japan).

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In the second session on Color Constancy, the attention of workshop participants was brought to color constancy algorithm selection using CART (Simone Bianco, University Degli Studi di Milano, Italy), illuminant change estimation via minimization of color histogram divergence (Michela Lecca, Fondazione Bruno Kessler, Italy), and illumination chromaticity estimation based on dichromatic reflection model and imperfect segmentation (Johji Tajima, IAPR Fellow, Nagoya City University, Japan).

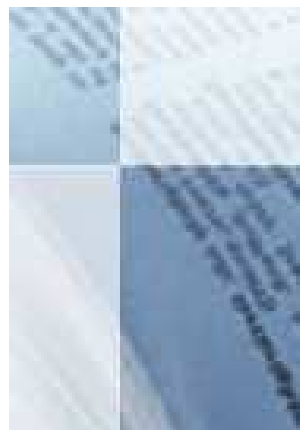
The next session on Color Image/Video Indexing and Retrieval began with a discussion on image re-indexing technique by self organizing motor maps (Sebastiano Battiato, University of Catani, Italy), followed by presentations on mapping functions between color image features and KANSEI (Yen-wei Chen, Ritsumeikan University, Japan), on hue angle metric for perceptual image difference (Marius Pedersen, Gjøvik University College, Norway), and on structure tensor of color quaternion image representations for invariant feature extraction (Jesus Angulo, Ecole des Mines de Paris, France).

The first day of the workshop ended with an open discussion moderated by the workshop chairs on the recent trends and future research directions in computational color imaging.

In the fourth session on Color Image Filtering and Enhancement, the attention of workshop participants was brought to non-linear filter response distributions of natural color images (Alexander Balinsky, Cardiff University, UK), image-driven perceptual color correction (Edoardo Provenzi, Universitat Pompeu Fabra, Spain), computationally efficient technique for image colorization (Vladimir Bochko, University of Joensuu, Finland), and texture sensitive denoising for single sensor color imaging devices (Angelo Bosco, STMicroelectronics, Italy).

The fifth session on Color Reproduction (printing, scanning, displays) began with a discussion on color reproduction using Riemann normal coordinates (Satoshi Oshima, Chuo University, Japan), next followed by presentations on classification of paper images to predict substrate parameters prior to print (Matthias Scheller Lichtenauer, Swiss Federal Laboratories for Materials Testing and Research, Switzerland), colorimetric study of spatial uniformity in projection displays (Jean-Baptiste Thomas, Gjøvik University College, Norway), color stereo matching cost applied to CFA images (Hachem Halawana, Université de Lille, France), compression test with JBIG for printer pipelines (Daniele Ravi, Università degli studi di Catani, Italy), and synthesis of facial images with foundation make-up (Motonori Doi, Osaka Electro-Communication University, Japan).

**Proceedings of the
conference have been
published by
Springer-Verlag in the
Lecture Notes in
Computer Science Series
(Volume 5646).**



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In the final session on Multi-spectral, High-resolution and High Dynamic Range Imaging, the discussed themes included polynomial regression spectra reconstruction of arctic charr's (Birgitta Martinkauppi, University of Joensuu, Finland), adaptive tone mapping algorithm for high dynamic range images (Jian Zhang, Waseda University, Japan), material classification for printed circuit boards by spectral imaging system (Abdelhameed Ibrahim, Chiba University, Japan), and supervised local subspace learning for classification of high-resolution satellite images (Yen-wei Chen, Ritsumeikan University, Japan).

It is our hope that the workshop provided a convenient forum where researchers and practitioners in digital imaging, multimedia, visual communications, computer vision, and consumer electronic industry, who are interested in the fundamentals of color image processing and its emerging applications, could interact and benefit from these interactions. We are looking forward to seeing you at future events devoted to computational color imaging. We are already making plans for organizing the next CCIW workshop in Milano in 2011.

The images below are from
Jian Zhang and Sei-ichiro Kamata's talk

“An Adaptive Tone Mapping Algorithm for High Dynamic Range Images”.

Examples of HDR image
improved by a tone mapping technique.

Fig. 1: The MemorialChurch image



(a) by a bilateral filtering

(b) by the proposed method

Fig2: The Atrium image



(a) by a bilateral filtering

(b) by the proposed method

Conference Report: [PRIP 2009](#)

10th International Conference on Pattern Recognition and Information Processing

19-21 May 2009

Minsk, Belarus

General Chair:

Victor Krasnoproshin (Belarus)

Vice-General Co-Chairs:

Sergey Ablameyko, IAPR Fellow (Belarus)

Rauf Sadykhov (Belarus)

Report prepared by

[Gabriella Sanniti di Baja, IAPR Fellow \(Italy\)](#)



*PRIP 2009 participants in front of the entrance of the Rectorate Building,
State Belarusian University, Minsk, venue for the conference.*

One of the main international events organized by the Belarusian Association for Image Analysis and Recognition is the PRIP conference, which gathers scientists active in theoretical and applied research in the fields of Pattern Recognition and Information Processing. Since the 4th edition, held in 1997, PRIP has been sponsored by IAPR.

The 10th edition of PRIP was held at the Belarusian State University of Minsk under the chairmanship of Victor Krasnoproshin, Sergey Ablameyko, and Rauf Sadykhov. By the submission deadline, 126 papers were uploaded by 256

authors from 30 countries, and the international PRIP Program Committee selected 80 contributions for presentation at the conference, all included in the conference proceedings.

The three-day conference was organized in plenary sessions during which seven invited lectures by IAPR Distinguished Speakers were given and parallel sessions where the regular contributions were all orally presented. A variety of topics were faced during the seven invited lectures. Igor Gurevich (IAPR Fellow, Russia) presented his work with V. Yashina "Image Rep-

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resentation in Image Analysis”. Angelo Marcelli (Italy) talked about “Reverse Handwriting: from Ink to Word”. Gerhard Rigoll (Germany) discussed the work, co-authored by Frank Wallhoff, “Joint Cooperation between Humans and Cognitive Systems for Complex Task Solving”. Gunilla Borgefors (IAPR Fellow, Sweden) presented the lecture, co-authored by R. Strand, “On Maximal Balls in Three Volume Grids”. Ingela Nyström (IAPR 2nd Vice President, Sweden) illustrated the work, done together with F. Malmberg, E. Vidholm and E. Bengtsson, “Segmentation and Visualization of 3D Medical Images through Haptic Rendering”. The lecture of Kim Boyer (IAPR Fellow, IAPR Treasurer, USA) had W. Dijia as co-author and was titled “A New Gaussian Clustering Method for High Dimensional Classification Problems”. The talk given by myself (Gabriella Sanniti di Baja, IAPR Fellow, Italy), done in cooperation with M. Frucci and P. Perner, IAPR Fellow, was titled “Making Image Segmentation Fully Automatic by Case-Based-Reasoning”. Regular papers were focusing on Pattern Recognition and Classification; Image Analysis, Signal and Information Processing; 3D Image Processing and Modeling; Knowledge-based Expert and Decision Support Systems; and Applications of Pattern Recognition and Image Analysis.

PRIP 2009 participants had the opportunity to discuss and exchange opinions not only during the technical sessions, but also in a more relaxed atmosphere during the social events. The nice conference banquet was a pleasant occasion for all participants to appreciate the Belarusian food (and drink a lot of vodka!). And a really unique opportunity was the visit to the Minsk Bolshoi Theater, where attendees enjoyed the ballet Giselle.

Minsk is a beautiful town, clean and full of flowers, and Belarusians are hospitable people and perfect conference organizers. Also the weather, warm and sunny during the whole conference period, contributed to the success of PRIP 2009, and I’m glad I had the opportunity to visit Minsk and attend the conference. The next PRIP conference will be organized in 2011 in Minsk (General Chair: Prof. Rauf Sadykhov from Belarusian State University of Informatics and Radioelectronics). Let me suggest you to put a note on your agenda and to consider a visit to Minsk for PRIP 2011.

Proceedings information:

**“Pattern Recognition and Information Processing”,
V. Krasnoproshin, S. Ablameyko
and R. Sadykhov, Eds.,
Belarusian State University Publishing Center, 2009.
ISBN 978-985-476-704-8**

Conference Report: [MVA 2009](#)

11th IAPR Conference on Machine Vision Applications

20-22 May 2009

Collaboration Complex, Keio University, Yokohama, Japan

General Chair:

Hideo Saito (Japan)

Program Chair:

Ken-ichi Maeda (Japan)

**Report prepared by
Hideo Saito, General Chair**



Collaboration Complex, Keio Hiyoshi Campus

The Eleventh IAPR Conference on Machine Vision Applications (MVA2009) was co-sponsored by the MVA Conference Committee, [IAPR TC-8](#), and Keio University. The venue was the newly built Collaboration Complex, Keio Hiyoshi Campus, which has been built as one of Keio University's 150th Anniversary Commemorative Projects. The oral sessions were held in Fujiwara Hall, with the capacity of over 250; the posters were presented in Multiple Purpose Rooms. In the hall and room for the presentations wireless network is provided to all the participants.

There were 202 participants from 25 countries. The topics of the conference were algorithms and

architectures of machine vision applications. From 149 submissions, 39 oral presentation and 83 poster presentations were selected. In addition to the accepted papers, there were three IAPR invited talks: "Large Scale Image Search" by Dr. Cordelia Schmid of INRIA, France; "Focal Stack Photography: High-Performance Photography with a Conventional Camera" by Prof. Kyros Kutulakos of University of Toronto, Canada; and "Integration of Earth Observation Data: Challenge of GEOSS (Global Earth Observation System of Systems)" by Prof. Ryosuke Shibasaki, of The University of Tokyo, Japan.

The first MVA workshop was held in Tokyo in 1988, and at every MVA conferences after MVA'98, the Most Influential Paper over the Decade Award is given to the authors of papers appearing in the conference 10 years earlier which have been recognized as having had the most significant influence on machine vision technology over the subsequent decade. At MVA2009, five papers presented at MVA'98 were selected for this award: "Reconstruction Textured Urban 3D Model by Fusing Ground-Based Laser Range Image and CCD Image" by Huijing Zhao and Ryosuke Shibasaki; "Optimal Homography Computation with a Reliability Measure" by Kenichi Kanatani;

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“Illumination Invariant Face Recognition Using Photometric Stereo” by Seok Cheol Kee, Kyoung Mu Lee and Sang Uk Lee; “A Map-Based Approach to Extracting Object Information from Aerial Images” by Yukio Ogawa, Kazuaki Iwamura, and Shigeru Kakumoto; and “Feature-based Image Mosaicing” by Naoki Chiba, Hiroshi Kano, Minoru Higashihara, Masashi Yasuda, and Masato Osumi.

The awards were handed out at the banquet held at the Faculty Lounge in “Raiosha”, Keio Hiyoshi Campus, which is located just a few minutes walking distance from the conference venue.

The MVA Conference Committee is now planning to have the next MVA2011 in the Kansai area of Japan. We wish to have a lot of excellent papers and discussions with many researchers from all over the world in the next MVA again.

IAPR Invited Speakers



Dr. Cordelia Schmid



Prof. Kyros Kutulakos



Prof. Ryosuke Shibasaki

Conference Report: [CORES 2009](#)

6th International Conference on Computer Recognition Systems

25-28 May 2009

Paulinum Palace, Jelenia Góra, Poland

Chairmen:

[Juliusz Lech Kulikowski](#) (Poland)

[Marek Kurzyński](#) (Poland)

Report prepared by

[Michał Woźniak](#) (Poland)



Photo from excursion taken by Igor Podolak

The goal of the CORES series of conferences is the development of theories, algorithms, and applications of pattern recognition methods.

These conferences always have served as a very useful forum for the various groups working in different areas of pattern recognition to come together and help each other keep up with this active field of research.

CORES 2009 was organized by Prof. Marek Kurzyński and his team from Chair of Systems

and Computer Networks at Wroclaw University of Technology.

The conference was endorsed by International Association for Pattern Recognition (IAPR) and its Polish member society (Association for Image Processing, TPO).

The beautiful city of Jelenia Góra, the number of

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experts, the casual atmosphere, and the social events led to educational and energetic talks and discussions at CORES 2009.

As usual, this conference contained an excellent mix of theory, algorithms, and applications of pattern recognition methods. There were several plenary papers that neatly summarized the work that has been done so far and discussed the gaps that need to be filled.

Invited talks were presented on topics of increasing importance in our modern world.

At the beginning of the conference, its chair Prof. Juliusz Lech Kulikowski discussed his work entitled "Pattern Recognition Driven by Domain Ontologies". The next plenary paper was presented by Prof. Zdzisław Hippe who talked about some aspects of medical diagnosis "From research on the computer-assisted diagnosing of skin lesions". The next talk was given by Prof. Ewaryst Rafajłowicz who presented very interesting aspects of "Fusion of External Context and Patterns – Learning from Video Streams". The last presenter, Prof. John Oommen (IAPR Fellow), showed "A Novel Self Organizing Map Which Utilizes Imposed Tree-Based Topologies".

The talks and discussions of CORES 2009 gave the attendees an excellent overview of the work done in the field of pattern recognition methods as well as indicated new problems to focus on. Some of the young presenters were awarded for their presentations:

The award for the best presentations given by a young scientist, funded by the Association for image Processing, was granted to:

- Marcin Michalak from the Silesian University of Technology, Institute of Computer Science,

for the paper "Time series prediction using new adaptive kernel estimators".

The distinctions for the best presentations given by young scientists, funded by the Chair of Systems and Computer Networks, Wrocław University of Technology and Microsoft, were granted to:

- Leticia Curiel from the University of Burgos for the presentation A Soft Computing System for Modelling the Manufacture of Steel Components
- Donato Impedovo from Politecnico di Bari for the presentation Pseudo Multi Parallel Branch HMM for Speaker Verification
- Marek Klepaczko from Technical University of Łódź for the presentation Cluster Analysis in Application to Quantitative Inspection of 3D Vascular Tree Images

The next CORES conference will be held in Poland in May 2011. Please visit <http://cores.pwr.wroc.pl> for further developments.

**Proceedings of the conference
have been published by
Springer-Verlag in
the series
Advances in Intelligent
and Soft Computing
with the title
Computer Recognition Systems 3
(Volume 57/2009).**



Conference Report: [CRV 2009](#)

Sixth Canadian Conference on Computer and Robot Vision

25-27 May 2009

Kelowna, British Columbia, Canada

Conference Co-Chairs:

[Frank Ferrie](#) (Canada)

[Mark Fiala](#) (Canada)

Report prepared by:

[John Barron](#), CIPPRS Treasurer (Canada)

Organized by the Canadian Image Processing and Pattern Recognition Society (CIPPRS), this IAPR endorsed event brought together researchers in vision, pattern recognition, medical imaging and robotics from across Canada and around the world. CRV, which was formally known as Vision Interface (VI), is co-located annually with Graphics Interface (GI) and Artificial Intelligence (AI) and has been gathering momentum as a first-rate vision conference for a number of years.

Conference co-chairs Frank Ferrie from the Center for Intelligent Machines (CIM) at the McGill University and Mark Fiala at Ryerson University observed that paper quality was up significantly. "We've seen an increase in the quality of papers over the last number of years and we think this is

IAPR Best Student Paper Award 2009



IAPR Best Student Paper Award 2009 presented to Adam Fourney (Waterloo University) for the paper co-authored with Richard Mann entitled "Non-Accidental Features for Gesture Spotting".

Left to right: Frank Ferrie, Adam Fourney, and Mark Fiala.
Photo taken by John Barron.

a positive sign, both for the conference and the community at large" said Dr. Ferrie. Dr. Fiala further noted that "We're also seeing increased international involvement, indicating increased recognition outside Canada". There were 89 submissions, with 47 accepted, 23 as oral presentations. The conference was attended by 67 people.

The conference featured three days of single-track oral presentations and two parallel poster sessions. The IAPR sponsored Best Paper Award 2009

was given to Dan Levi for "Learning Model Complexity in an Online Environment" by Dan Levi and Shimon Ullman. A cash prize of \$300CDN was presented at the conference banquet. The IAPR Best Student Paper Award

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2009 was given Adam Fourney for "Non-Accidental Features for Gesture Spotting" by Adam Fourney and Richard Mann at Waterloo University with a cash prize of \$200CDN.

Two other best paper awards were also made: the CIPPRS/ACTIRF Best Robotics Paper Award 2009 to Junaed Sattar for "A Vision-Based Control and Interaction Framework for a Legged Underwater Robot" by Junaed Sattar and Geogory Dudek at McGill University and the CIPPRS/ACTIRF Best Vision Paper Award 2009 to Alexander Wong for "Adaptive Monte Carlo Retinex Method for Illumination and Reflectance Separation and Color Image Enhancement" by Alexander Wong, David Clausi and Paul Fieguth at Waterloo University. All first authors of best paper awards received a wall plaque.

The slate of internationally recognized invited speakers included Jim Little from the University of British Columbia (Vision for Robots at Home and at Work), Rui Castro (Learning to Learn: Closing the Loop Between Data Analysis and Acquisition) and Ben Kimia (Shapes and Shock Graphs: From Segmented Shapes to Shapes Embedded in Images).

One of the advantages to of being able to attend three conferences for one conference fee is being able to attend the other conferences' invited speaker talks. This reviewer attended talks by Przemyslaw Prusinkiewicz from the University of Calgary on "Images of Life: How Visual Computing is Shaping Plant Biology" [Graphics Interface] and by Alan Mackworth from the University of British Columbia on "Living with Constraints" [Artificial Intelligence].

The day before the conference saw a [tutorial workshop](#) organized by Mark Fiala on various Computer Vision and Robotics topics. The tutorials were free to conference registrants. Topics included Kalman Filters, SLAM, Particle Filters, Belief Propagation, Learning. Differential Optical Flow and OpenCV. About 35 students attended and a great learning experience was had.

"We're very excited by the renewed energy and direction of this conference." said CIPPRS president Gregory Dudek of McGill University. At the conference banquet Dr. Dudek presented an award for research excellence and service to the community to prominent Canadian researcher Dr. Ioannis Rekleitis. "We're very grateful for Yannis' service and the recognition he has brought to the society through his outstanding research record" said Dr. Dudek.

CRV 2010 will be held next year at the end of May in Ottawa, Canada's national capital. Further information will be posted at www.computerrobotvision.org as it becomes available. Mark your calendars!

**Proceedings of the conference
are available at**

IEEE Xplore

Click [here](#).

**Also,
some CD copies of the
proceedings are still available.**

**Contact [John Barron](mailto:barron@csd.uwo.ca)
<barron@csd.uwo.ca>**

Workshop Report: [GbR 2009](#)

7th IAPR TC-15 Workshop on Graph-based Representations in Pattern Recognition

26-28 May 2009
Venice, Italy

Co-chairs:

[Andrea Torsello](#) (Italy)

[Francisco Escolano](#) (Spain)

[Luc Brun](#) (France)

Report prepared by:

[Andrea Torsello](#) (Italy)




GbR is a biennial workshop, organized by the IAPR Technical Committee 15 (TC-15) on Graph-based Representations, which aims to encourage research works in Pattern Recognition and Image Analysis within the graph theory framework. In May 2009, the 7th edition of workshop was held in the Ca' Dolfin palace in Venice, Italy, and was sponsored by the IAPR.

GbR 2009 has been a very successful workshop and one of the biggest in its history. The workshop received 47 submissions from 18 countries and 5 continents from which the Program committee selected 18 for oral presentation and 19 as posters. The papers presented in the workshop covered the use of graphs at all levels of representation, from low level image segmentation to high level human behavior. There were papers on formalizing the use of graphs for representing and recognizing data ranging from visual shape to music, papers focusing on the development of new and efficient approaches to matching graphs, on the use of graphs for supervised and unsupervised classification, on learning the structure of sets of graphs, and on the use of graph pyramids and combinatorial maps to provide suitable coarse-to-fine representations. Encouragingly, the workshop saw the convergence of ideas from several fields, from Spectral Graph Theory to Machine Learning to Graphics.

The workshop included two keynote addresses. The first keynote speech was presented by Amnon Shashua (The Hebrew University of Jerusalem, Israel) who described a general scheme for message passing update rules for approximate inference in graphical models based on the framework of Fenchel duality. The second keynote speech was delivered by Ramin Zabih (Cornell University, USA) who gave an overview of the latest results concerning the use of graph cut algorithms for linear inverse systems.

The conference was run over 3 days, with very well populated oral sessions right through to the end of the conference. The poster sessions were bustling and were an excellent forum for discussion and feedback.



**Proceedings of the
conference have
been published by
Springer-Verlag
in the
Lecture Notes in
Computer Science
Series
(Volume 5534).**

Conference Report: [ICB 2009](#)

3rd IAPR/IEEE International Conference on Biometrics



2-5 June 2009
Alghero, Italy

General Chair:

[Massimo Tistarelli, IAPR Fellow \(Italy\)](#)

Conference Co-Chairs

[Davide Maltoni \(Italy\)](#)

[Javier Ortega-Garcia \(Spain\)](#)

Report prepared by:

[Massimo Tistarelli, General Chair](#)

The 3rd edition of the main and most prestigious conference in biometrics was sponsored by IAPR as the flagship event of the IAPR Technical Committee 4 (TC-4) on Biometrics.

About 160 delegates, from more than 20 different countries, attended the conference.

The 3rd International Conference on Biometrics follows a very successful track started in Crans Montana, Switzerland back in 1997, with the first edition of the International Audio and Video Based Personal Authentication conference (AVBPA). The AVBPA conference was held every two years and has been moving to several locations around the globe. In 2006 AVBPA was merged with ICBA (International Conference on Biometric Authentication) into a single main conference, named the International Conference on Biometrics (ICB). Since then the ICB conference has been the main scientific forum for presenting the latest research advances in the field.

The conference was held as a single track with 37 oral and 93 poster presentations. Moreover, five

research demos were also presented during the poster sessions.

The first day of the conference was devoted to a tutorial on security and privacy issues. The tutorial speakers were Prof. Emilio Mordini (CSSC Rome, Italy) and Prof. Terry Boulton (University of Colorado, USA). Every morning session was opened with a keynote speech of one hour. The invited speakers are all internationally recognized researchers from both academia and industry:

On Wednesday 3rd, Prof. Heinrich H. Bühlhoff, Director of the Max Planck Institute for Biological Cybernetics, Tübingen, Germany, presented the lecture «*What can machine vision learn from human perception?*»

On Thursday 4th, Prof. Sadaoki Furui from the Department of Computer Science, Tokyo Institute of Technology, presented the lecture «*40 years of progress in automatic speaker recognition technology*»

(Continued on page 24)

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On Friday 5th, Dr. Jean-Christophe Fondeur, head of the R&D Sagem Sécurité, France, presented the lecture «*Lessons learned and challenges in large scale biometrics systems*»

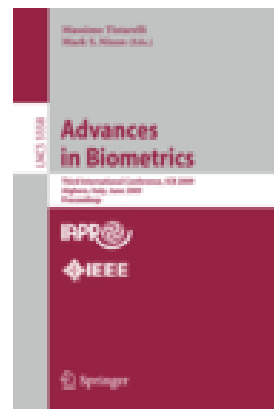
All sessions were followed with great interest by a large audience. Two sessions in particular were very successful and attracted much interest. The former was the first open plenary meeting of TC-4. The meeting was held on Wednesday 4th after the last afternoon session. The meeting was opened by the current TC chair Prof. Tieniu Tan (IAPR Fellow), who presented an overview of the past and current activities of the TC. Some future and planned activities were also presented. The presentation from Prof. Tan was then followed by an open discussion with proposals from the floor, moderated by the TC vice-chair and conference chairman, Prof. Massimo Tistarelli. Several interesting proposals and ideas for future activities were presented. The meeting closed with a broader awareness of the IAPR TC activities as well as the willingness to cooperate to bring the proposals further.

The latter special session was held on Thursday afternoon to present the planning and latest results from a number of biometric competitions carried out over the past two years in conjunction with the ICB conference. Dr. Jonathon Phillips (IAPR Fellow) from NIST, USA, presented the organization and latest results from the [Multiple Biometrics Grand Challenge](#). This presentation was followed by a paper on a specific new algorithm for face recognition submitted and tested under MBGC. Prof. Bernadette Dorizzi presented the [signature verification competition promoted by the Biosecure Foundation](#). Dr Norman Poh presented the [Face Stills and Video Competition](#) organized by the University of Surrey. Dr Raffaele Cappelli, from University of

Bologna in Italy, presented the latest version of the [Fingerprint Verification Competition \(FVC\)](#) also called FVC On-going, which is a continuous on-line competition. Proposals to host similar on-line contests for other biometric modalities have been also suggested. Finally, Dr Krzysztof Kryszczuk presented the [Multimodal Biometric Evaluation based on Feature Classification](#), which is still ongoing.

At the gala dinner held on Thursday evening, the venue for next ICB was announced. ICB 2011 will be jointly organized by Prof. Kevin Bowyer and Prof. Rama Chellappa (IAPR Fellow) in Washington DC, USA. That year, the conference will be named the International Joint Conference on Biometrics, as it will be the main conference in biometrics, merging with the conference on Biometrics: Theory, Applications and Systems (BTAS) which is held every year in US.

**Proceedings of the conference
have been published by
Springer-Verlag in the
Lecture Notes in
Computer Science Series
(Volume 5558)
titled
Advances in Biometrics**



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Four best paper prizes were awarded:

the IAPR Best Biometric Student Paper Award was given to Chris Boehnen, Tanya Peters and Patrick J. Flynn (IAPR Fellow) for the paper “3D Signatures for Fast 3D Face Recognition”

the Best Student Paper Award sponsored by Sagem, was given to Chun Chen and Raymond Veldhuis for the paper “Binary Biometric Representation through Pairwise Polar Quantization”

a Best Paper Award sponsored by Accenture was given ex-quo to Yi Chen and Anil K. Jain (IAPR Fellow) for the paper “Beyond Minutiae: A Fingerprint Individuality Model with Pattern, Ridge and Pore Features” and to Norman Poh, Rita Wong, Josef Kittler (IAPR Fellow) and Fabio Roli (IAPR Fellow) for the paper “Challenges and Research Directions for Adaptive Biometric Recognition Systems”

The papers were selected from two juries. The former, selecting the best student papers, was composed of seven members from the IAPR TC. The latter, selecting the non-student papers, was composed by five members. The conference chairman chaired both committees. None of the members of the committees, including the chair, had any papers included in the list of candidates for the awards.

IAPR Best Biometric Student Paper Award



Tanya Peters accepts the IAPR Best Biometric Student Paper Award on behalf of Chris Boehnen from Prof. Tieniu Tan, IAPR Fellow and Chair of IAPR TC-4.

Conference Report: [IbPRIA 2009](#)

4th Iberian Conference on Pattern Recognition and Image Analysis

10-12 June 2009
Póvoa de Varzim, Portugal

Co-Chairs:

Helder Araujo (Portugal)
Ana Maria Mendonça (Portugal)
Armando Pinho (Portugal)
Maria Ines Torres (Spain)

Report prepared by:
Helder Araujo, Co-chair

The Iberian Conference on Pattern Recognition and Image Analysis--IbPRIA is an international event co-organised every two years, by the Spanish and Portuguese Associations for Pattern Recognition, and sponsored by the International Association for Pattern Recognition (IAPR). IbPRIA 2009 was jointly chaired by Helder Araujo, Ana Mendonça, Armando Pinho, and Maria Torres. The conference focused on results, algorithmic improvements, and promising future directions in pattern recognition and image analysis.

IbPRIA is a single track conference. A total of 106 papers were submitted from which 33 were selected for oral presentation and 29 for poster presentation. Each paper was reviewed at least twice. The conference had keynote presentations by Dr. Samy Bengio from the Google Inc., USA, and by Prof. Joachim Weickert from Saarland University, Germany. Samy Bengio gave a talk about "Large Scale Online Learning of Image Similarity through Ranking" and Joachim Weickert talked about "Inpainting Ideas for Image Compression". A third keynote presentation by Prof. Nando de Freitas was also planned. However Prof. Nando de Freitas could not attend for personal reasons and was replaced by Dr. Ruben Martinez-Cantin, who talked about

"Probabilistic Inference and Learning Techniques for Control, Experimental Design and Planning". All the sessions were highly attended with many technical discussions during the presentations.

**Proceedings of the
conference have been
published by
Springer-Verlag in the
Lecture Notes in
Computer Science Series
(Volume 5524).**



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The paper selected for the IAPR Best Paper Award was the paper “On a Kernel Regression Approach to Machine Translation”, by N. Serrano, J. Andrés-Ferrer, and Francisco Casacuberta. This paper was selected out of a short list of 9 papers which received the highest scores during the review process, and the final decision was taken by a committee of six experts after attending their oral presentations during the two first days of the IbPRIA2009 Conference.

The main event of the social programme was a visit (followed by the Conference Dinner) to the main cellar of a PortWine company. The cellar was located on the steep south bank of the Douro river from where a beautiful view of the city of Porto could be enjoyed.

IAPR Best Paper Prize



Nicolás Serrano, coauthor (with Jesus Andrés-Ferrer and Francisco Casacuberta) of the awarded paper, "On a Kernel Regression Approach to Machine Translation", accepts the IAPR Best Paper Prize from Helder Araujo, current president of APRP.

Workshop Report: MCS 2009

8th International Workshop on Multiple Classifier Systems

10-12 June 2009
University of Iceland, Reykjavik, Iceland

Workshop Chairs:

Jón Atli Benediktsson (Iceland)

Josef Kittler, IAPR Fellow (UK)

Fabio Roli, IAPR Fellow (Italy)

Report prepared by:

Carlo Sansone (Italy)



MCS2009 chair, Jón Atli Benediktsson, during the opening session

MCS 2009 was organized by the Faculty of Electrical and Computer Engineering of the University of Iceland in association with the Center for Vision, Speech and Signal Processing of the University of Surrey, UK and the Department of Electrical and Electronic Engineering of the University of Cagliari, Italy.

The workshop was co-sponsored by the International Association for Pattern Recognition and its Technical Committee TC1: Statistical

Techniques in Pattern Recognition, and by the IEEE Geoscience and Remote Sensing Society and the IEEE Iceland Section.

MCS is a well-established series of IAPR meetings that provides an international forum for the discussion of issues in multiple classifier systems' theory and applications. The Reykjavik workshop was in fact the successful continuation of seven previous workshops organized in Italy

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(Cagliari, three times), UK (Cambridge and Guildford), USA (Seaside, CA) and Czech Republic (Prague).

The 2009 edition achieved its objective to bring together 63 researchers from 17 countries on all five continents, from diverse communities concerned with multiple classifier systems, including pattern recognition, machine learning and statistics. From the applicative point of view, the focus of MCS 2009 was on remote sensing. This particular application uses multiple classifiers for raw data fusion, feature level fusion and decision level fusion.

Outstanding contributions were made by the invited speakers, Melba Crawford from Purdue University and Zhi-Hua Zhou of Nanjing University. Prof. Crawford's expertise in the use of multiple classification systems in remote sensing made the discussions on this topic at MCS 2009 particularly fruitful. Zhi-Hua Zhou also gave a very interesting talk that highlighted the reasons why semi-supervised and ensemble learning can benefit each other.

Apart from the invited talks, MCS 2009's technical program was constituted by 54 regular papers, selected from more than 70 submissions. The presentations were grouped into a poster session, on *MCS Methods and Applications*, and ten oral sessions: *ECOC*, *Boosting and Bagging*; *MCS in Remote Sensing*; *Unbalanced Data and Decision Templates*; *Stacked Generalization and Active Learning*; *Concept Drift, Missing Values and Random Forest*; *SVM Ensembles*; *Fusion of Graphs, Concepts and Categorical Data*; *Clustering*; *Classifier and Feature Selection*; and *Theory of MCS*.

Coming to the social program, the gala dinner was held in a lovely Icelandic restaurant in Videy, a small island near Reykjavik. The excellent quality of the food provided by the Videy House (the first building constructed of stone in Iceland!) together with the performance provided by a group of Icelandic artists was a highlight of this high-quality scientific workshop.

Finally, an announcement for the whole MCS community. Starting from the next edition, MCS comes back to its initial annual format. The 2010 edition will take place in Cairo, Egypt, organized by the Nile University.

**Proceedings of the
conference have been
published by
Springer-Verlag in the
Lecture Notes in
Computer Science Series
(Volume 5519)
titled
Multiple Classifier Systems.**



The
20th
International
Conference on
Pattern Recognition

ICPR

Istanbul
23-26 Aug
2010

**FIRST
CALL FOR
PAPERS**

ICPR 2010 is the
twentieth conference of
the International Association
for Pattern Recognition (IAPR).

ICPR 2010 will be an international forum
for discussions on recent advances in the
fields of Computer Vision; Pattern Recognition
and Machine Learning; Signal, Speech, Image
and Video Processing; Biometrics and Human
Computer Interaction; Multimedia Analysis, Processing
and Retrieval; Medical Imaging and Visualization.

**IMPORTANT
DATES**

**Deadline for paper
submission:**
January 15, 2010

Deadline for tutorial proposals:
February 15, 2010

Deadline for workshop proposals:
November 15, 2009

Notification of acceptance:
March 30, 2010

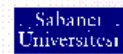
Camera ready papers and author registration:
April 30, 2010

End of early bird registration period:
May 15, 2010

www.icpr2010.org



The International
Association for
Pattern Recognition



PAPER SUBMISSION

Authors will be requested to submit their papers electronically
through the conference website by
January 15, 2010.

ORGANIZING COMMITTEE

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Sergios Theodorakis University of Athens, Greece

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Arun Ross West Virginia University, USA
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Theo Gevers University of Amsterdam, Netherlands
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Sponsorship

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Exhibits

Olca Kursun Bahcesehir University, Turkey

TRACKS

We anticipate that the conference will feature six parallel theme
tracks. Each theme track will address an area of interest to the
pattern recognition community.

TRACK CO-CHAIRS

Track I: Computer Vision

Joachim Buhmann ETH Zurich, Switzerland
Xiaoyi Jiang University of Munster, Germany
Jussi Parkkinen University of Joensuu, Finland
Alper Yilmaz Ohio State University, USA

Track II: Pattern Recognition and Machine Learning

G. Sanniti di Baja Istituto di Cibernetica Eduardo Cagnicco, Italy
Mario Figueredo Instituto Superior Tecnico, Portugal
Blige Gunes Istanbul Technical University, Turkey
D.Y. Yeung Hong Kong University of Science and
technology, China

Track III: Signal, Speech, Image and Video Processing

John H.J. Hansen University of Texas, USA
Maria Petrou Imperial College, UK
Kazuya Takeda Nagoya University, Japan
Murat Tekalp Koc University, Turkey

Track IV: Biometrics and Human Computer Interaction

Lale Akarun Bogazici University, Turkey
Patrick Flynn University of Notre Dame, USA
B. Vijaya Kumar Carnegie Mellon, USA
Stan Z. Li Chinese Academy of Sciences, China

Track V: Multimedia Analysis, Processing and Retrieval

Nozha Boujemaa French National Institute for Research in
Computer Science and Control, France
Benin Yanikoglu Sabanci University, Turkey
B. S. Manjunath University of California, Santa Barbara, USA
Nicu Sebe University of Amsterdam, Netherlands

Track VI: Medical Imaging and Visualization

Rachid Deriche French National Institute for Research in
Computer Science and Control, France
Tianzi Jiang Chinese Academy of Sciences, China
Dimitris Metaxas The State University of New Jersey, USA
Gozde Unal Sabanci University, Turkey

Congress Secretariat:



Turkish congress services website:
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Phone: +90 212 345 11 01 or Fax: +90 212 345 80 33
Web: www.congresson.org E-mail: secretariat@icpr2010.org



Of interest...

Free Books!

The *IAPR Newsletter* is looking for reviewers for the books listed below.

If you have interest and some knowledge in the topic, email us with your mailing address. We will send you a copy of the book—which you may keep—and will expect in return a review for the *Newsletter*.

[Alexandra Branzan Albu](#), IAPR Newsletter *Editor*

The following titles are available to be reviewed:

Tensors in Image Processing and Computer Vision

Series: [Advances in Pattern Recognition](#)

Aja-Fernández, S.; de Luis García, R.; Tao, D.; Li, X. (Eds.), 2009, X, 470 p. 136 illus., 79 in color., Hardcover
ISBN: 978-1-84882-298-6

<http://www.springer.com/computer/computer+imaging/book/978-1-84882-298-6>

Handbook of Remote Biometrics for Surveillance and Security

Series: [Advances in Pattern Recognition](#)

Tistarelli, Massimo; Li, Stan Z.; Chellappa, Rama (Eds.), 2009, XIV, 382 p. 166 illus., 91 in color., Hardcover
ISBN: 978-1-84882-384-6

<http://www.springer.com/computer/computer+imaging/book/978-1-84882-384-6>



The following titles are also due to be published very soon:

Fundamentals of Computerized Tomography Image Reconstruction from Projections

Series: [Advances in Pattern Recognition](#)

Herman, Gabor T.

Originally published by Academic Press, 1980, 2nd ed., 2009, XII, 300 p. 98 illus., Hardcover
ISBN: 978-1-85233-617-2

<http://www.springer.com/computer/computer+imaging/book/978-1-85233-617-2>

Statistical Learning and Pattern Analysis for Image and Video Processing

Series: [Advances in Pattern Recognition](#)

Zheng, Nanning, Xue, Jianru, 2009, Approx. 370 p. 102 illus., 74 in color., Hardcover

ISBN: 978-1-84882-311-2

<http://www.springer.com/computer/computer+imaging/book/978-1-84882-311-2>

Information Theory in Computer Vision and Pattern Recognition

Escolano, Francisco, Suau, Pablo, Bonev, Boyán, 2009, Approx. 410 p. 126 illus., Hardcover

ISBN: 978-1-84882-296-2

<http://www.springer.com/computer/computer+imaging/book/978-1-84882-296-2>(Springer, 2009)

Conference Planner

NOTE: This is not an exhaustive list of conferences. It is a list of conferences sponsored or endorsed by IAPR plus additional conferences that have been brought to the attention of the editor (these non-IAPR events are denoted with an *). The [IAPR web site](#) has more up-to-date information about [IAPR conferences](#) and a link to USC's Institute for Robotics and Intelligent Systems list of [Computer Vision Conferences](#) (A. Branzan Albu, ed.)

Highlighting indicates that paper submission deadline has not yet passed. An asterisk * denotes a non-IAPR event.			
2009			
IWCF09	<i>3rd International Workshop on Computational Forensics</i>	The Hague, The Netherlands	13-14 Aug 09
CAIP 2009	<i>13th International Conference on Computer Analysis of Images and Patterns</i>	Münster, Germany	2-4 Sep 09
PRIB 2009	<i>4th IAPR International Workshop on Pattern Recognition in Bioinformatics</i>	Sheffield, United Kingdom	7-9 Sep 09
ICIAP 2009	<i>15th International Conference on Image Analysis and Processing</i>	Vietri sul Mare, Salerno, Italy	8-11 Sep 09
VSMM 2009	<i>15th International Conference on Virtual Systems and Multimedia</i>	Vienna, Austria	9-12 Sep 09
DGCI 2009	<i>15th International Conference on Discrete Geometry for Computer Imagery</i>	Montreal, Canada	30 Sep-2 Oct 09
CIARP 2009	<i>14th Iberoamerican Conference on Pattern Recognition</i>	Guadalajara, México	15-18 Nov 09
2010			
ANNPR 2010	<i>4th International Workshop on Artificial Neural Networks in Pattern Recognition</i>	Cairo, Egypt	11-13 Apr 10
CIP 2010	<i>2nd International Workshop on Cognitive Information Processing</i>	Elba Island (Tuscany), Italy	14-16 Jun 10
ICISP 2010	<i>International Conference on Image and Signal Processing 2010</i>	Trois-Rivieres, Quebec, Canada	30 Jun-2 Jul 10
ICPR 2010	<i>20th International Conference on Pattern Recognition</i>	Istanbul, Turkey	23-26 Aug 10
ICFHR 2010	<i>12th International Conference on Frontiers in Handwriting Recognition</i>	Kolkata, India	16-18 Nov 10
2011			
ICDAR 2009	<i>11th International Conference on Document Analysis and Recognition</i>	Beijing, China	18-21 Sep 11