

IAPR Newsletter

Volume 33, Number 2
April 2011

Calls for papers on Page 2

In this issue...

Getting to know...Wenyin Liu, IAPR Fellow Page 3
Dr. Wenyin Liu takes us through his research progression from document analysis to anti-phishing.

From the ExCo..... Page 6
Ingela Nyström expresses the sympathy and concern of the world community over the natural disasters that have struck Japan and shares news from the IAPR Executive Committee.

BOOKS BOOKS BOOKS Page 7
A list of book reviews previously published in the *IAPR Newsletter*.

New book reviews in this issue:

Review #1 Page 10
Zheng Liu reviews **Multi Sensor Data Fusion with MATLAB** by Jitendra R. Raol

Review #2..... Page 12
Marcus E. Hennecke reviews **Embedded Computer Vision** by Branislav Kisacanin, Shuvra S. Bhattacharyya, and Sek Chai (Eds.)

IAPR Conference and Workshop Reports:

CIP 2010: 2nd International Workshop on Cognitive Information Processing Page 14

AND 2010: 4th Workshop on Analytics for Noisy Unstructured Text Data..... Page 16

ICFHR 2010: 12th International Conference on Frontiers in Handwriting Recognition Page 19

DICTA 2010: International Conference on Digital Image Computing: Techniques and ApplicationsPage 23

ICPR2012.....Page 25
Call for papers for ICPR2012 plus calls for nominations for the K.S. Fu and J.K. Aggarwal Prizes.

ICDAR Page 26
Call for Proposals to Host ICDAR 2015 and Call for Nominations for ICDAR 2011 Awards.

Of Interest... Page 28
Lots of free books available for review.

Conference Planner Page 29
Chart of some upcoming IAPR and non-IAPR conferences of interest to the IAPR community.

Calls for Papers

PSL 2011

1st Workshop on Partially Supervised Learning
Ulm, Germany
Deadline: May 6, 2011
September 15-16, 2011

GREC 2011

9th IAPR International Workshop on Graphics RECOgnition
Seoul, Korea
Deadline: May 15, 2011
September 15-16, 2011

SIMBAD 2011

1st International Workshop on Similarity-Based Pattern Analysis and Recognition
Venice, Italy
Deadline: May 15, 2011
September 28-October 2 2011

IJCB 2011

IEEE/IAPR International Joint Conference on Biometrics
Washington, DC, USA
Deadline: May 27, 2011
October 11-13, 2011

DICTA 2011

International Conference on Digital Image Computing: Techniques and Applications
Noosa, Queensland, Australia
Deadline: June 20, 2011
December 6-8, 2011

DAS 2012

10th IAPR International Workshop on Document Analysis Systems
Gold Coast, Queensland, Australia
Deadline:
March 27-29 2012

ICFHR 2012

13th International Conference on Frontiers in Handwriting Recognition
Bari, Italy
Deadline: February 28, 2012
September 18-20, 2012

ICPR 2012

21st International Conference on Pattern Recognition
Tsukuba Science City, Japan
Deadline: March 31, 2012
November 11-15, 2012

Calls for Nominations

K.S. Fu Prize

To be presented at ICPR 2012
Deadline: April 6, 2012

J.K. Aggarwal Prize

To be presented at ICPR 2012
Deadline: April 11, 2012

Call for Submissions

IAPR Newsletter

Articles, announcements, book reviews, conference and workshop reports

Contact the editor:

Alexandra Branzan Albu, aalbu@ece.uvic.ca

Deadline: June 17, 2011

To contact us:

Newsletter Editor:

Alexandra Branzan Albu

aalbu@ece.uvic.ca

www.ece.uvic.ca/faculty/abranzan-albu.shtml

Associate Editor for Book Reviews:

Arjan Kuijper

arjan.kuijper@igd.fraunhofer.de

www.gris.tu-darmstadt.de/~akuijper/

Layout Editor:

Linda J. O’Gorman

logorman@alumni.duke.edu

The logo for the IAPR Newsletter features the acronym 'IAPR' in a bold, sans-serif font, with a circular emblem containing a globe behind the letter 'P'. Below this, the word 'Newsletter' is written in a large, elegant, cursive script.

Published in association with the IAPR website, www.iapr.org

***IAPR Newsletter* Publication Schedule:**

The IAPR Newsletter is published four times per year during the third week of January, April, July, and October.



Getting to know...Wenyin Liu, IAPR Fellow

From Document Analysis to Anti-Phishing

By [Wenyin Liu](#), IAPR Fellow (Hong Kong)

*Dr. Wenyin Liu, IAPR Fellow
ICPR 2010, Istanbul Turkey*

For contributions to graphics recognition, performance evaluation, document analysis, approaches to anti-phishing, and services to IAPR

I started my research career in the area of engineering document analysis, or more particularly, engineering drawing recognition. Supervised by Prof. Dov Dori, IAPR Fellow, my PhD study was quite productive, yielding three major contributions. The first one was the sparse pixel tracking algorithm for engineering drawing vectorization, which was published in [IEEE T-PAMI \(1999\)](#). The second one was the generic graphics recognition algorithm and its applications on a variety of graphic objects, including lines of various shapes (e.g., straight, circular, and polyline) and various styles (e.g., solid, dashed, dash-dotted, dash-dot-dotted), text areas, arrowheads, leaders, dimension sets, and hatched areas (published in [CVIU 1998](#), [IEEE T-PAMI 1998](#), and [IEEE T-SMC 1999](#)). The third one was the performance evaluation protocol of graphics recognition algorithms (published in [MVA 1997](#)), which has been successfully used for the arc segmentation contest series (2001, 2003, [2005](#) and [2009](#)). All of these works have been implemented in the *Machine Drawing Understanding System (MDUS)*, which won the first place in the [Dashed Line Detection Contest](#) during *GREC1995*. The updated version of MDUS is also committed as an open source project at code.google.com/p/vrliu/.

After graduation, I extended my research area to online graphics recognition and web document analysis. For online graphics recognition, we have developed a system named *QuickDiagram* (previously, *SmartSketchpad*) for quick circuit diagram input and understanding, which involves quite a number of methods for stroke processing, symbol recognition, and syntax and semantic recognition. When a user is sketching a (complete or partial) symbol or wire (connecting two symbols) of the diagram, the system can recognize and beautify it immediately. After the entire circuit diagram is complete, it can be analyzed and understood via Nodal Analysis and PSpice code can be generated. The *QuickDiagram* system has

Liu Wenyin has a BEng and MEng in computer science from Tsinghua University, Beijing and a DSc from the Technion, Israel Institute of Technology. He was a full time researcher at Microsoft Research China and is now an assistant professor in the computer science department at the City University of Hong Kong. He was awarded the IAPR/ICDAR Outstanding Young Researcher Award in 2003 and became a Fellow of IAPR in 2010. His research interests include question answering, anti-phishing, graphics recognition, and performance evaluation.

(Continued on page 4)

(Continued from page 3)

also been released as an open source project at code.google.com/p/quickdiagram/.

On some day in 2004, while I was reading a newspaper, the news that certain banks' websites had been mimicked and some victims had suffered the loss of their private information and money to phishers inspired me to explore the threat of phishing and the problem of anti-phishing. Immediately, I thought we could apply the document analysis approach to anti-phishing. Particularly, if a suspicious webpage is very similar to a legitimate webpage (or what we called phishing target), we are more confident that it is a fraudulent, fake webpage. From then on, we have developed quite a few practical solutions to anti-phishing.

The first approach we invented is a so-called active and visual strategy for anti-phishing, which was published in the [International World Wide Web Conference \(2005\)](#) and [IEEE Internet Computing Magazine \(2006\)](#). Compared with black-list-based solutions that wait for phishing attacks to arrive at the end user, our active and visual strategy actively goes out to search for and detect possible phishing attacks that look similar to the protected, true websites. In this method, suspicious URLs are found not only at email servers and browsers but also at DNSes, and possible suspicious domain names are enumerated according to the protected true domain names and their variations. Webpages at these suspicious URLs then undergo visual comparison with the protected true webpages to further test whether they are phishing or not. Similar webpages are more likely phishing webpages. An image-based webpage similarity assessment method was published in [IEEE Transactions on Dependable and Secure Computing \(2006\)](#).

Following the active and visual strategy, we also foresaw the problem of Unicode-based phishing, and then provided a set of counter measures, including the coloring-based method. Unicode has become a useful tool for information internationalization, particularly for applications in web links, webpages, and emails. However, many Unicode glyphs look so similar that this feature could be utilized maliciously to trick people's eyes. We proposed to use Unicode string coloring as a promising countermeasure to this emerging threat. This solution assigned colors to a set of required languages/scripts such that each language/script is displayed uniquely in color, while the color difference among different languages is maximized. Fixed and adaptive coloring schemes were used to render Unicode strings in web links and documents so as to distinguish mixed Unicode characters from different language/script groups and vividly illustrate potential homograph obfuscation intentions for end users and for possible forensic usages. A paper is published in [Asia-Pacific Web Conference \(2008\)](#).

Most of the existing anti-phishing solutions (including our previous ones) need to know the phishing target in order to determine whether a suspicious webpage is a phishing page or not. Why not try to find phishing targets automatically? We then proposed the problem of phishing target discovery as an important task for anti-phishing. Now we have proposed quite a few solutions to this problem. Given a suspicious URL, we could determine if it is a phishing webpage, and if so, which true webpage (or the phishing target) it is attacking. One of these solutions was published in the journal of [Future Generation Computer Systems \(2010\)](#) and some others are under review. There are many advantages of finding phishing targets. On the one hand, if we find the

(Continued on page 5)

(Continued from page 4)

phishing target of a suspicious webpage correctly, we can inform the target's owner such that they can immediately take necessary actions as countermeasures. On the other hand, if we can find the target, we can also confirm that the suspicious webpage is a phishing webpage and prevent the end user's personal information from being leaked.

All of these anti-phishing solutions have been implemented and commercialized in practical systems. So far, our commercial anti-phishing product, SiteWatcher, includes three versions, namely, SiteWatcher Client for end-users, which pops up a warning and colors suspicious URLs, SiteWatcher Enterprise, which is used for company users to find what websites are attacking their protected true websites, and SiteWatcher Service, which can recognize whether a user-query URL is a phishing URL or not and its phishing target if it is. SiteWatcher Client has more than 50,000 downloads from a few free-ware websites including [download.com](#). Two licenses of SiteWatcher Enterprise have been sold, and a prestigious bank in Hong Kong is actively using it everyday. SiteWatcher Service is deployed at [www.SiteWatcher.cn](#) and [SiteWatcher.cs.cityu.edu.hk](#), which has received more than 20,000 queries. For the past five years, this anti-phishing project has received attention

from media; more than 20 media outlets (in Chinese, English, and Japanese, in TVs, newspapers, and magazines) have reported on it.

I am very happy that my research work is not only impacting the academic society but also the industrial society, and even end-users' daily lives. Like all researchers, I am always looking for problems in my daily life, and I have been excited to have identified and solved new problems in pattern recognition. Especially, I am very proud of bringing new vitality to document analysis.

Other articles in the Getting to Know...Series:

In Memoriam...Piero Mussio, IAPR Fellow
by Paolo Bottoni and Stefano Levialdi,
January 2011

Image Analysis with Discrete Tools by
Gabriella Sanniti di Baja, July 2010

Has the time for telepresence finally come?
by Larry O'Gorman, April 2010

*Biometrics: The key to the gates of a
secure and modern paradise* by Nalini K.
Ratha, January 2010

*Recognition of Human Activities: A
Grand Challenge* by J.K. Aggarwal,
October 2009



News from the IAPR EXECUTIVE COMMITTEE

by Ingela Nyström (Sweden)

Uppsala April 17, 2011

On March 11, an earthquake struck northeastern Japan. In the days that followed, we received news of tsunamis and more earthquakes involving nuclear plants. This is one of the most terrible natural disasters. On behalf of the Executive Committee, the Governing Board, and the IAPR community as a whole, we here express our deep sympathy to our Japanese colleagues. Our thoughts are with all Japanese people in these difficult times.

The MVA 2011 conference is planned for June this year in Nara, which is quite distant from the hit area. The organisers intend to hold the conference as originally planned. Please, see their website www.mva-org.jp/mva2011/ for latest information.

In connection with ICPR 2012 in Tsukuba, a number of satellite conferences are planned in various places in Japan. For example, S+SSPR 2012 is planned to be held in Sendai, one of the cities that has suffered the most from the earthquakes and tsunamis. What can be arranged for S+SSPR 2012 and the other conferences remains to be seen. A [message from the President of the Japan National Tourism Organization](#) says "Once the situation in Japan stabilises, we will strive to resume all promotional activities as soon as possible."

We sincerely hope that everything will work out for the best for our friends and for Japan. We are among the many people around the world that are amazed at how the Japanese people have reacted calmly to this disaster. I also hope that our Japanese colleagues will ask for assistance from the IAPR community in whatever respect we can be of support.

Professor Herb Freeman has resigned as member and chair of the IAPR Advisory Committee due to health related problems. We sincerely hope that Professor Freeman will get better soon and will be able to participate in future IAPR activities (as he has done for the last 40 years!). His contribution as Chair of the Advisory Committee is acknowledged and his dedication in running the committee will be an inspiration for everyone.

It is our pleasure to inform you that Professor Walter Kropatsch has accepted to Chair the Advisory Committee for the remaining of the current term. The Advisory Committee will continue their work on preparation of guidelines for the best paper awards given by the IAPR as described in my last column.

Between ICPRs the ExCo has one physical meeting. Traditionally, this meeting is hosted by the Past President. So this year, we have been invited by Professor Brian Lovell to his lab in Brisbane, Australia. We will meet for two days in early August. On the agenda is to check the status of the Standing and Technical Committees, review the finances, and discuss any other issues that may arise. As input to this meeting, we have requested mid-term reports by mid-June from all committees.

This edition of the IAPR Newsletter contains an [IAPR Fellow article by Wenyin Liu, one of IAPR's newest Fellows](#), a number of conference reports and some book reviews among the other things to read. Please, visit the IAPR webpage www.iapr.org/ on a regular basis. There you will find plenty of information of interest to our field.

BOOKSBOOKSBOOKS

Book reviews previously published in the IAPR Newsletter

Multi-Sensor Data Fusion with MATLAB by Jitendra R. Raol (reviewed in this issue)

Embedded Computer Vision, Series: *Advances in Computer Vision and Pattern Recognition* by Branislav Kisacanin, Shuvra S. Bhattacharyya, and Sek Chai (Eds.) (reviewed in this issue)

NETLAB: Algorithms for Pattern Recognition Series: Advances in Computer Vision and Pattern Recognition by Ian T. Nabney, Jan '11

Image Processing: the Fundamentals, 2nd Edition by Maria Petrou and Costas Petrou, Jan '11

Progress in Pattern Recognition, Series: Advances in Pattern Recognition, by Sameer Singh and Maneesh Singh, Editors, Oct '10

Algebraic Geometry and Statistical Learning Theory by Sumio Watanabe, Jul '10

Statistical Learning and Pattern Analysis for Image and Video Processing by Nanning Zheng and Zianru Xue, Jul '10

Augmented Vision Perception in Infrared: Algorithms and Applied Systems by Riad Ibrahim Hammoud, editor, Apr '10

Handbook of Texture Analysis by Majid Mirmehdi, Xianghua Xie, and Jasjit Suri, editors, Oct '09

Markov Random Field Modeling in Image Analysis By Stan Z. Li, Oct '09

Pattern Recognition and Neural Networks by B.D. Ripley Apr '09

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

(Continued on page 8)

(Continued from page 7)

- 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
- 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

(Continued on page 9)

(Continued from page 8)

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

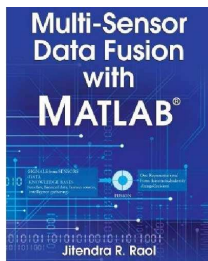
Machine Vision Books Jul. '05

CVonline: an overview, Apr. '05

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

Pattern Recognition Books, Jul. '04

BOOKSBOOKSBOOKS



Multi-Sensor Data Fusion with MATLAB

by **Jitendra R. Raol**
CRC Press, 2009

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

This book is one of the most recent monographs on data fusion. It has comprehensive coverage of data fusion techniques. But, what makes it remarkable is the MATLAB code that comes with the book, so I expect to see how the fusion algorithms are implemented and practiced for those examples. The book consists of five parts: 1) theory of data fusion and kinematic-level fusion; 2) fuzzy logic and decision fusion; 3) pixel- and feature-level image fusion, 4) a brief on data fusion in other systems, and 5) appendix. The first four parts focus on relatively independent aspects of data fusion technique and applications while the appendix provides the basic mathematical fundamentals and information required by the other parts. Each part has an introductory chapter.

Part I has five chapters in total. As data fusion deals with kinematic states and dynamic states, the term "kinematic-level fusion" is used as the title of Part I. The concepts and theory of data fusion are presented in Chapter 2, which discusses the process, architectures, models, and methodologies for data fusion. A big picture of data fusion is explicitly depicted in this chapter. Chapters Three and Four mainly focus on the fusion aspects for target tracking.

Part II presents the topic of fuzzy logic and its application to decision fusion. Starting with the

introductory chapter (Chapter 5), the rest of Part II is composed of three chapters: theory of fuzzy logic, decision fusion, and performance evaluation of fuzzy logic based decision systems. A tutorial on the theory of fuzzy logic is presented first. The use of fuzzy logic to estimate the unknown states of a dynamic system is described in Chapter 7. The approaches for performance evaluation are highlighted in Chapter 8.

Chapters 9 to 11 constitute Part III, i.e. pixel- and feature-level image fusion. Again, the introduction gives the basic information. Two subsections of Chapter 10, "10.2.2 metrics for performance evaluation" and "10.3.3 performance evaluation", seem to be more suitable for next chapter (Chapter 11), which is titled as "performance evaluation of image-based data fusion systems". And the section "10.5 feature-level fusion methods" can be better organized as well. This is my personal point of view. Chapter 11, as implied by its title, is supposed to describe the performance metrics for image fusion, but it describes the registration and fusion for target tracking applications. As far as the content is concerned, this part does provide the essential information on image fusion.

(Continued on page 11)

(Continued from page 10)

Part IV presents a brief on data fusion for mobile intelligent autonomous systems and intelligent monitoring systems.

Unlike other books with similar titles, MATLAB exercises are not provided for each chapter. Instead, the illustrative examples are available only as independent subsections in Chapters 3, 8, and 10, while not in some others, for instance Example 11.2. [MATLAB solutions](#) can be downloaded from the book's website as a compressed file. Although only a limited number of MATLAB examples/exercises are available in this edition of the book, I still value the importance these exercises for understanding what is behind those equations.

Overall, this book is featured with the integrity of relevant information and can serve as a good reference for graduate students and researchers in the field of data fusion. Readers will benefit from the MATLAB examples, especially if more exercises are available in future editions.

**See
Of Interest...
on Page 28
for a list of
FREE BOOKS!**

BOOKSBOOKSBOOKS

Embedded Computer Vision

by

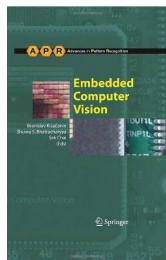
Branislav Kisacanin, Shuvra S. Bhattacharyya, and Sek Chai (Eds.)

Springer, 2009

Series: *Advances in Computer Vision and Pattern Recognition*

Reviewed by

[Marcus E. Hennecke](#) (Austria)



Embedded computer vision is a very active and multi-faceted field of study. What differentiates embedded computer vision from the general field of computer vision? Depending on the application, one will receive different answers. Is an embedded system simply a computer with monitor and keyboard removed? Or, is it a highly integrated system with specialized computing hardware? Does it perform simple image processing, or does it run highly complex recognition and even understanding algorithms? I was curious as to what definition this book would adopt.

At first it seemed my expectations were disappointed. On the surface the book is simply a collection of papers from different authors, each taking a different approach of the subject. Reading through yet another definition of and motivation for embedded vision systems started to get tiring. However, as we shall see this is not a bug but rather a feature.

The book is a result of the Embedded Computer Vision Workshop 2007. It was recognized that there is a lack of appropriate literature describing the current state of the art in this field. While the proceedings of the workshop do go a step in the right direction, it was felt that something more comprehensive is needed. Thus, the editors of the book asked the contributors to the workshop to

write more extensive versions of the papers as chapters for the book. These chapters form the central Part II of the book. Part I sets the stage and serves as an introduction to the topic. It contains three chapters from different authors. Then, Part III looks ahead to what might come up in the future.

As each chapter was written by a different set of authors, and different aspects of embedded computer vision or different applications are covered. Each chapter starts again with its own introduction and motivation of the topic. This seems cumbersome at first. However, that the various authors do not always share the same view of embedded computer vision reflects the many facets of the field. This may sometimes force the reader to rethink their concept of embedded computer vision. For example, in Chapter 3 Alan J. Lipton writes about video analytics in a networked environment. At first it seems as though this topic should have no space in a book about embedded computer vision as video analytics is traditionally done on the server. However, the goal of the chapter is to show that more and more video analytics is done in the camera or in the network equipment to reduce network traffic. Thus, it becomes embedded.

(Continued on page 13)

(Continued from page 12)

The three chapters of Part I cover the broad spectrum of embedded computer vision. The first chapter focuses on hardware considerations and takes a look at the imaging sensors, the connection to the processor, and the processing hardware. Design methodology is the topic of the next chapter, and in the third and last chapter of Part I, video analytics in networks is covered.

Part II of the book contains seven chapters of which three present particularly efficient algorithms for use on resource-constrained platforms such as robust local features, motion history histograms, and multimodal mean background modeling. Other chapters are more hardware-centric and compare implementations of low level vision on DSPs, FPGAs, and mobile PC processors, show how to implement SAD-based stereo matching on FPGAs, make considerations for implementations on fixed-point DSPs, and present OpenVL to improve the real-time performance of computer vision applications.

The third part of the book is titled “Looking Ahead” and is comprised of three chapters which each present challenges for a particular set of applications. The first chapter of this part focuses on the particularly resource-constrained mobile

applications. Another fast growing market is video analytics, the topic of the second chapter.

The book provides a very good overview of the current state of the art in embedded computer vision and of the major trends and growing markets. After reading the book one has not turned into an expert on embedded computer vision, but it is a good start and provides an extensive list of references to look for if one wants to go into more detail. Overall I would recommend this book to anyone interested in getting into this exciting field.

**See
Of Interest...
on Page 28
for a list of
FREE BOOKS!**

Workshop Report: [CIP 2010](#)

2nd International Workshop on Cognitive Information Processing

14-16 June 2010
Elba Island, Tuscany, Italy

General Co-Chairs:

[Fulvio Gini \(Italy\)](#)

[Sergios Theodoridis \(Greece\)](#)

Report prepared by the General Co-chairs

The 2nd edition of the IAPR-sponsored workshop on Cognitive Information Processing (CIP) was organized in Italy by a bunch of people from the University of Pisa, with the precious help of a number of colleagues from abroad. The General co-Chairmen were Prof. Fulvio Gini (University of Pisa) and Prof. Sergios Theodoridis (University of Athens). The Technical Program Co-Chairs were Dr. Maria Sabrina Greco (University of Pisa) and Prof. Merouane Debbah (SUPELEC, France).

CIP 2010 was sponsored by the International Association for Pattern Recognition (IAPR), the European Association for Signal Processing (EURASIP), and the Institution of Engineering and Technology (IET). It also had the technical co-sponsorship of the IEEE Aerospace and Electronics Systems Society and the IEEE Signal Processing Society.

CIP 2010 took place in Italy, on the beautiful Tuscan island of Elba, at the Grand Hotel Elba International, which dominates the Bay of Naregno. It aimed at bringing together researchers from the machine learning, pattern recognition, statistical signal processing, communications, and radar communities in an effort to promote and encourage cross-fertilization of ideas and tools.

The workshop featured keynote addresses and technical presentations, invited (oral and poster)



CIP 2010 General Co-chair Prof. Sergios Theodoridis (left) with Prof. Abdelhak Zoubir,

and regular (poster), all of which have been included in the [workshop proceedings](#). The technical program spanned from learning theory to collaborative sensing techniques, from cognitive radio to cognitive radar. The workshop enjoyed six distinguished talks given by world-wide known researchers and six special sessions (five oral and one poster) organized by top-quality researchers. We are indebted to all the special session organizers for their outstanding contributions. The list of plenary talks and special sessions, and related information, are reported at: www.conference.iet.unipi.it/cip2010/.

(Continued on page 15)

(Continued from page 14)

Response to the call for papers was quite interesting, also taking into account the time overlap with various other related workshops (ICML, ICA, EEGLAB, CrownCom, MIKON, IRS, SPW, FUNEMS, N++ Event, SPAWC). We received 112 submissions from 31 countries, 35 were invited papers and 77 regular papers. All the papers were evaluated by a review process in which we obtained on the average 5.2 reviews per paper. The Technical Program Committee finally selected 83 papers for presentation, including 34 invited papers and 49 regular papers, plus 38 student papers. The acceptance rate for regular papers was about 63%. The number of attendees was 120.

The invited papers were organized in five special oral sessions and one poster special session, covering the most innovative research fields related to cognitive information processing. All of the regular papers were scheduled for poster presentation.

CIP 2010 hosted a Student Paper Competition. The 38 student papers were evaluated and ranked, based on the relevance of the topic, the quality of the technical content, the style of writing, and the originality. Various prizes and 10 travel grants for the best student papers were presented during the conference banquet.

CIP 2010 was certainly an enjoyable and productive gathering and the organized social events guaranteed to the attendees the possibility to experience the wonderful panorama of the Elba Island.

Proceedings of
CIP 2010
are available online
through
IEEEExplore

Keynote Speakers

Christopher Bishop

Microsoft Research Cambridge, UK
IAPR DISTINGUISHED SPEAKER
Third Generation Machine Intelligence

Nello Cristianini

University of Bristol, UK
IAPR DISTINGUISHED SPEAKER
Modelling and Design of Cognitive Behaviour

Alfonso Farina

SELEX-SI, Italy
IET-ITALY DISTINGUISHED SPEAKER
Situation Awareness for Homeland Security:
from KBS to Cognitive System Technology

Georgios B. Giannakis

University of Minnesota, USA
EURASIP FELLOW DISTINGUISHED SPEAKER
Distributed and Sequential Sensing of
Spatio-temporal Spectra for Cognitive Radios

Marco Luise

University of Pisa, Italy
Perpetual Motion Machines, the Cramer-Rao
Bound
and Localization of Cognitive Radios

Michael C. Wicks

AFRL Sensors Directorate, Rome Research Site,
Rome, NY, USA
Spectrum Crowding and Cognitive Radar

Workshop Report: [AND 2010](#)

4th Workshop on Analytics for Noisy Unstructured Text Data held in conjunction with [CIKM 2010](#)

26 October 2010
Toronto, Canada

Co-Chairs

[Roberto Basili](#) (Italy)

[Daniel Lopresti](#) (USA)

[Christoph Ringlstetter](#) (Germany)

[Shourya Roy](#) (India)

[Klaus U. Schulz](#) (Germany)

[L. Venkata Subramaniam](#) (India)

Report prepared by the Workshop Co-Chairs

Noisy unstructured text data is ubiquitous in real-world communications. Text produced by processing signals intended for human use, such as printed/handwritten documents, spontaneous speech, and camera-captured scene images, are prime examples. Application of Automatic Speech Recognition (ASR) systems on telephonic conversations between call center agents and customers often see 30-40% word error rates. Optical Character Recognition (OCR) error rates for hardcopy documents can range widely from 2-3% for clean inputs to 50% or higher depending on the quality of the page image, the complexity of the layout, aspects of the typography, etc.

Recognition errors are not the sole source of noise; natural language and its creative usage can create problems for computational techniques. Electronic text from the Internet (emails, message boards, newsgroups, blogs, micro-blogs, wikis, chat logs and web pages), contact centers (customer complaints, emails, call transcriptions, message summaries), mobile phones (text messages), etc., are often highly noisy and not ready for straight-forward electronic processing.

Keynote

“The Nature of Noise in Linguistic Corpora”



[Randy Geobel](#) (Canada)

They contain spelling errors, abbreviations, non-standard words, false starts, repetitions, missing punctuation, missing case information, and pause-filling words such as “um” and “uh” in the case of spoken conversations. To raise and address some of those issues, the AND series of workshops were initiated in January, 2007. Since then, the AND community has been active in the area of noisy text analytics.

The 4th Workshop on Analytics for Noisy

(Continued on page 17)

(Continued from page 16)

Unstructured Text Data (AND 2010) was organized as a part of the Nineteenth International Conference on Information and Knowledge Management (CIKM). The first two editions were one-day workshops held in conjunction with the International Joint Conference on Artificial Intelligence (IJCAI) in 2007 in Hyderabad, India and the ACM SIGIR Conference in 2008 in Singapore. The third was a one and a half day workshop held in conjunction with the International Conference on Document Analysis and Recognition (ICDAR) in 2009. Like the first three, the 2010 edition was very successful. Over 50 attendees from various academic institutions and business organizations from eighteen different countries participated in the workshop.

AND 2010 began with a welcome note from Dan Lopresti. Dan talked about the uniqueness of this forum and the workshop and how it brings together two different but related communities doing “Document Image Analysis” and “Text Analytics.” This was followed by the keynote by Randy Goebel, Professor, University of Alberta, Canada. Randy Goebel who works in the areas of knowledge representation, logic-based non-deductive reasoning, machine learning, visualization, belief revision, systems biology, and computational linguistics delivered an extremely interesting talk titled “The Nature of Noise in Linguistic Corpora,” where he talked in detail about the what really constitutes noise in a given corpus. He talked about his recent work on developing computational methods for extracting linguistic structures from relatively large language corpora, including the use of well-known, standard, *labeled* language resources, such as those from the [Linguistic Data Consortium](#), as well as a spectrum of *unlabeled* resources, including the [Google n-gram repository](#) and a variety of more specific search engine query and answer

Panel Discussion

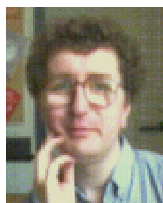
“Why is it Impossible to Handle Noisy Text With Existing Techniques: the Way Forward”



[Seamus Ross](#) (Canada)



[Yuji Matsumoto](#) (Japan)



[Gareth Jones](#) (Ireland)

resources (e.g., from [Sogou](#)).

The workshop papers were organized into three sessions. Earlier, all submissions to the workshop had been reviewed by three members of the program committee. Out of a total of 21 submissions 11 were selected for the workshop. The papers covered a wide range of topics. Being collocated with CIKM 2010, AND 2010 clearly had the flavor of both Information Retrieval and Knowledge Management. This year there were at least three papers dealing with noisy aspects of social network data, like Twitter data. Further, in line with earlier years, there were papers on analyzing noisy data from automatic speech recognizers and OCR. The papers covered application domains ranging from automatic scoring of student essays to opinion mining to information extraction.

(Continued on page 18)

(Continued from page 17)

The final session of the day was the panel discussion led by three leading researchers, Yuji Matsumoto (Information Science, Nara Institute of Science and Technology, Japan), Seamus Ross (Faculty of Information, University of Toronto, Canada), and Gareth Jones (Dublin City University, Ireland). The session began with the moderator Christoph Ringlstetter introducing the panelists, setting the tone for the discussion, and then inviting the panelists to give their opening remarks before opening up the discussion to all workshop participants. The panel discussion was aptly titled “Why is it impossible to handle noisy text with existing techniques: The way forward.” The panelists raised and tried to answer some very pertinent questions like, What is noise in text documents? Does noise influence research decisions? Should such noise be processed or corrected? There was enthusiastic participation in the panel discussion.

Finally Venkat Subramaniam gave the closing remarks and announced the IAPR Best Student Paper Award winner. This year’s winner was Julien Fayolle for the paper [“Reshaping automatic speech transcripts for robust high-level spoken document analysis”](#) by Julien Fayolle, Fabienne Moreau, Christian Raymond and Guillaume Gravier.

Overall, AND 2010 was an interesting and valuable workshop attended by some of the leading researchers working in relevant areas. It is expected that selected papers from the workshop will appear in a special issue of International Journal of Document Analysis and Recognition.

**AND 2010
IAPR Best Student Paper Award**

went to

[Julien Fayolle \(France\)](#)



for the paper

[“Reshaping automatic speech transcripts for robust high-level spoken document analysis”](#)

By Julien Fayolle, Fabienne Moreau, Christian Raymond and Guillaume Gravier.

[Proceedings of
AND 2010](#)
are available on the
ACM Digital Library

Conference Report: [ICFHR 2010](#)

12th International Conference on Frontiers in Handwriting Recognition

November 16-18, 2010
Kolkata, India

General Chairs:

[B. B. Chaudhuri](#), IAPR Fellow (India)
[S. N. Srihari](#), IAPR Fellow (USA)
[L. Schomaker](#) (The Netherlands)

Program Chairs:

J. H. Kim, IAPR Fellow (South Korea)
M. Shridhar (USA)
E. Anguetil (France)
F. Kimura, IAPR Fellow (Japan)

Report prepared by Bidyut Baran Chaudhuri, IAPR Fellow (India)

ICFHR 2010 was organized by the Computer Vision and Pattern Recognition Unit of Indian Statistical Institute. ICFHR is one of the major conferences of the IAPR Technical Committee on Reading Systems (TC-11) and is organized in alternate years around the globe. This is the first time that this ICFHR was held in India and it received very good response.

Researchers from 36 different countries

participated in this prestigious event. In total, 162 papers covering the diverse fields of handwriting recognition were submitted to this Conference and based on peer reviews 37 (22.8%) of them were accepted for oral presentation and another 80 (49.4%) papers were accepted for poster presentation in its single track sessions. The majority of submissions came from several countries



During the inaugural ceremony for ICPR2010, wicks of a lamp-cluster were ignited for an auspicious beginning to the conference.

Here (from left) are Prof L. Schomaker (candle in hand), Prof D. Doermann, Prof. B Chaudhuri, and Mr P Chattaraj. In the background is Indian Statistical Institute Director Prof Bimal Roy.

like China, France, Germany, India, Japan, and Spain. A total of 129 participants from various countries attended the event.

In the keynote address entitled "The evolution of Document Authentication", Prof. David Doermann of University of Maryland, surveyed the topic, proposed new approaches, and raised new challenges on automatic authentication of documents. Two other

invited talks entitled "Neuromuscular Studies of Handwriting Generation" and "Contribution of Ancient Indians to Writing" were respectively delivered by Prof. R. Plamondon, IAPR Fellow, of École Polytechnique de Montréal and Prof. M. A. Lakshmithathachar of Samskrti Foundation.

(Continued on page 20)

(Continued from page 19)

For this edition of ICFHR, six pre-conference tutorials and seven competitions were organized. The tutorials held were on

- Markov Models for Handwriting Recognition
- Handwritten Text / Word Recognition Systems -- Conception, Approaches, and Evaluation
- Information Retrieval from Handwritten Documents
- Signature Verification - Forensic Examiners' Perception and Solutions for Off-line and On-line Signatures
- Multimodal Computer Assisted Transcription of Handwriting Images and
- Hands-on Session Build Your Own Handwriting Recognizer.

The competitions were organized on:

- Arabic Handwriting Recognition
- Forensic Signature Verification
- Quantitative evaluation of binarization algorithms of images of historical documents with bleeding noise
- Handwriting Segmentation
- Handwritten Historical Document Recognition
- On-Line Arabic Handwriting Recognition,
- H-DIBCO 2010 - Handwritten Document Image Binarization Competition.

Also, this time, IAPR sponsored awards were announced for the best student paper and winners of software competitions. Moreover, Itesoft, a European company providing solutions to automatic document processing tasks offered three awards, viz., Best Paper Award, Best Poster Paper Award and Best Industrial Paper Award.

In addition to its intense technical activities, evening programs presenting some of the rich

cultural heritages of India were highly appreciated by the participants. On the evening of November 15th, the choreographic presentations by the famous 'Mamata Shankar Ballet Troupe' was followed by the Welcome Dinner. In the next evening, a catamaran-cruise was organized along with local folk songs and a light dinner on the river Ganges. The Banquet ceremony was held on the evening of November 17th along with a classical Indian music recital on Sitar with Tabla (a pair of traditional Indian drums). In the concluding phase of this Banquet ceremony Prof. Sebastiano Impedovo invited all the participants to attend the [13th ICFHR](#) in the historical Italian city Bari, September 18-20, 2012.

Finally, in the concluding ceremony on the last day several participants spoke highly of the warm hospitality extended by the organizers.

[Proceedings of ICFHR 2010](#)
are available online
through
IEEEXplore

ICFHR 2010 Awards

IAPR-sponsored awards:

IAPR best student paper award

Document-Zone Classification in Torn Documents
Sukalpa Chanda, Katrin Franke, and Umapada Pal

IAPR awards for Software Competitions

Arabic Handwriting Recognition Competition
Pattern Recognition and Human Language Technology (PRHLT) group from the
Universitat Politècnica de València (UPV), Spain
Adrià Giménez Pastor, Ihab Khoury, and Alfons Juan Císcar

Forensic Signature Verification Competition (4NSigComp2010): Scenario 1
Parascript LTD, USA
Contact: Tim Strunkov

Forensic Signature Verification Competition (4NSigComp2010): Scenario 2
Parascript LTD, USA
Contact: Tim Strunkov

Quantitative Evaluation of Binarization Algorithms of Images of Historical Documents with Bleeding
Noise Competition
Synchromedia Laboratory for Multimedia Communication in Telepresence of
Ecole de Technologie Supérieure (ETS), Montreal, Quebec, Canada
Reza Farrahi Moghaddam, Rachid Hedjam and Mohamed Cheriet

Handwriting Segmentation Competition
NifiSoft, Saint-Etienne, France
Abdelâali Hassaïne

Handwritten Document Image Binarization Competition (H-DIBCO 2010)
National University of Singapore & Institut for Infocomm Research, Singapore
B. Su, S.Lu and C. L. Tan
and
Ben-Gurion University, Computer Science Department, Israel
I. Bar-Yosef, K. Kedem and I. Dinstein

For additional information on the competitions, please refer to
International Conference on Frontiers in Handwriting Recognition (ICFHR 2010) -
Competitions Overview
by H. El Abed, V. Märgner, and M. Blumenstein
http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5693646

ICFHR 2010 Awards (continued)

ITESOFT Awards:

ITESOFT best paper award

(Joint winner)

(i) *Tracking and Retrieval of Pen Tip Positions for an Intelligent Camera Pen*

Kazumasa Iwata, Koichi Kise, Masakazu Iwamura, Seiichi Uchida, and Shinichiro Omachi

(ii) *Retrieving Handwriting Styles: A Content Based Approach to Handwritten Document Retrieval*

Anurag Bhardwaj, Achint Oommen Thomas, Yun Fu, and Venu Govindaraju

ITESOFT best poster paper award

Techniques to Enhance Images for Mokkan Interpretation

Jun Takakura, Akihito Kitadai, Masaki Nakagawa, Hajime Baba, and Akihiro Watanabe

ITESOFT best industrial paper award

Path Evaluation and Character Classifier Training on

Integrated Segmentation and Recognition of Online Handwritten Japanese Character String

Yojiro Tonouchi

Conference Report: [DICTA 2010](#)

Digital Image Computing: Techniques and Applications

December 1-3, 2010
Sydney, Australia

General Co-Chairs:

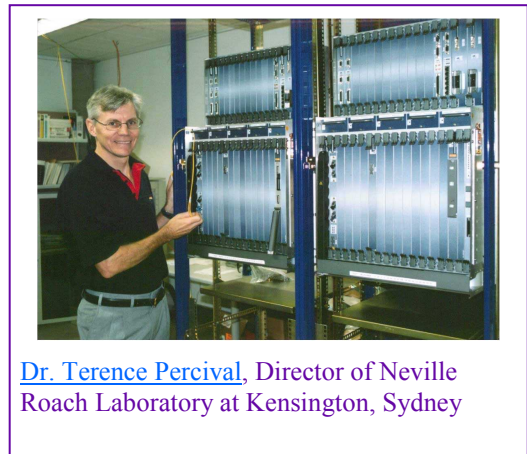
[Jian Zhang](#) (Australia)
[Chunhua Shen](#) (Australia)
[Glenn Geers](#) (Australia)

Report prepared by the General Co-Chairs

DICTA is the main Australian conference on digital image processing, machine vision and related areas and is hosted by the Australian Pattern Recognition Society. From its establishment in 1991 until 2007, DICTA had been a biannual meeting. Since 2008, DICTA has been an annual conference with the 2010 edition being the third in the current annual conference and the twelfth meeting overall.

DICTA 2010 was held at the Mercure Sydney Hotel in Australia and was endorsed by the IAPR and IEEE (Institute of Electrical and Electronics Engineers, Inc). It was sponsored by DSTO (Defence Science and Technology Organisation), NICTA (National ICT Australia) and CiSRA (Canon Information Systems Research Australia). In 2010, one hundred and ninety four submissions were received and each paper manuscript was reviewed by at least two members of the Review Panel. More than 400 reviews were conducted. One hundred and four papers were accepted for presentation and inclusion in the DICTA 2010 proceedings. The Proceedings were published by the IEEE Conference Publishing Services (CPS) and are included in the IEEE Xplore on-line database. A selection of the high quality papers will be published in a forthcoming Special Issue of Journal IET (Institution of Engineering and Technology).

The conference attracted 135 delegates from 12 countries across 5 continents. It was officially



[Dr. Terence Percival](#), Director of Neville Roach Laboratory at Kensington, Sydney

opened by Dr. Terence Percival, Director of Neville Roach Laboratory (Kensington), Sydney, National ICT Australia.

Six international keynote speakers—Drs. Philip Torr, Shaogang Gong, James Kowk, Thomas Sikora, and Nico Karssemeijer —provided interesting perspectives on a range of topics including vision based scene understanding, intelligent visual surveillance, kernel methods for large data sets, social media from image processing perspective and computer aided detection in medical screening.

Five Best Paper Awards were made at DICTA 2010. Additionally, due to the high quality of submissions, two Best Paper Runner-up awards were also made.

(Continued on page 24)

(Continued from page 23)

The Best Paper Prize sponsored by the APRS and IAPR was awarded to Abeer Sarker and Leonard Hamey for their paper entitled “Improved Reconstruction of Flutter Shutter Images for Motion Blur Reduction”.

The Best Student Paper Prize sponsored and presented by NICTA was awarded to Shih Ching Fu (student) and Peter Kovesi (supervisor) for

Keynote Speakers



[Philip Torr](#) (UK)



[Shaogang Gong](#) (UK)



[James Kwok](#) (China)



[Thomas Sikora](#) (Germany)



[Nico Karssemeijer](#) (The Netherlands)

their paper entitled “Robust Extraction of Optic Flow Differentials for Surface Reconstruction”.

The Best Colour Paper Prize sponsored and presented by CiSRA was awarded to Jun Zhu, Dengsheng Zhang and Guojun Lu for their paper entitled “An Enhancement to Close-Form Method for Natural Image Matting”.

The two Best Paper Prize Runners sponsored by DSTO was awarded to Hadi Aliakbarpour and Jorge Dias for their paper entitled “IMU-Aided 3D Reconstruction Based on Multiple Virtual Planes” and Yanzhi Chen, Anthony Dick, and Anton Van Den Hengel for their paper entitled “Image Retrieval with a Visual Thesaurus”.

Congratulations to all our Prize Winners!



Murk Bottema, APRS President and APRS member-in-large Brian C. Lovell, IAPR Fellow, present the APRS/IAPR Best Paper Prize to Leonard G. C. Hamey, (Abeer Sarker, and Leonard Hamey) from Macquarie University, Australia

[Proceedings of
DICTA 2010](#)
are available online
through
IEEEXplore

Please check the ICPR 2012 web site www.icpr2012.org frequently.

ICPR

The 21st International Conference on Pattern Recognition

2012

November

11-15, 2012

Tsukuba International Congress Center
Tsukuba Science City, JAPAN

General chairs

Jan-Olof Eklundh (Sweden), Yuichi Ohta (Japan), Steven Tanimoto (USA)

Program chairs

Alberto Del Bimbo (Italy), Kim L. Boyer (USA), Katsushi Ikuuchi (Japan)

Track chairs

Computer & Robot Vision

Richard Bowden (UK)
Sing Bing Kang (USA)
Long Quan (China)

Virtual Reality & Medical Applications

Tobias Höllerer (USA)
Gudrun Klunker (Germany)
Naokazu Yokoya (Japan)

Pattern Recognition & Applications

Noboru Babaguchi (Japan)
Rita Cucchiara (Italy)
Qiang Ji (USA)

Advisory committee

Horst Bunke (Switzerland), Masakazu Ejiri (Japan), Ranga Kasturi (USA),
Josef Kittler (UK), Takashi Matsuyama (Japan),
Gabriella Sanniti di Baja (Italy), Yoshiaki Shirai (Japan),
Ching Y. Suen (Canada), Johji Tajima (Japan)

Workshop Co-Chairs

Tutorial Co-Chairs
Demos, Exhibits and Contests Co-Chairs
Publication Co-Chairs
Finance Co-Chairs
Publicity and Sponsorship Co-Chairs
Award Chair
Web Chair
Local Arrangement Co-Chairs

Yoichi Sato (Japan), Rahul Sukthankar (USA)
Andreas Dengel (Germany), Eisaku Maeda (Japan)
Robert Fisher (UK), Yasuyo Kita (Japan)
Hideo Saito (Japan), Yoshimitsu Aoki (Japan)
Hiroshi Sako (Japan), Keiji Yamada (Japan)
Atsushi Imiya (Japan), Kazuhiro Fukui (Japan)
Ken-ichi Maeda (Japan)
Kenji Suzuki (Japan)
Itaru Kitahara (Japan), Takeshi Kurata (Japan)

Important Dates

Deadline for paper submission
Notification of paper acceptance
Camera ready papers and author registration
Deadline for workshop proposal
Deadline for tutorial proposal
Deadline for contests proposal

March 31, 2012
June 15, 2012
July 15, 2012
January 6, 2012
April 30, 2012
July 15, 2011

The International Conference on Pattern Recognition (ICPR) is the major scientific event organized under the auspices of the International Association for Pattern Recognition (IAPR).

The aim of this conference is to bring together international experts to share their experiences and to promote research and development in Pattern Recognition.

ICPR2012 Paper Submission Deadline:
March 31, 2012



The International Association for Pattern Recognition (IAPR) is pleased to announce a call for nominations for the King-Sun Fu Prize in honor of the memory of Professor King-Sun Fu.

Deadline for submission of nomination and endorsement forms: April 6, 2012



The International Association for Pattern Recognition (IAPR) is pleased to announce a call for nominations for the third J.K. Aggarwal Prize in honor of Professor J.K. Aggarwal.

Deadline for submission of nomination and endorsement forms: April 11, 2012



ICDAR

Call for Proposals for ICDAR 2015

INTERNATIONAL CONFERENCE ON DOCUMENT ANALYSIS AND RECOGNITION (ICDAR)

CALL FOR PROPOSALS TO HOST ICDAR2015

Deadline: June 1, 2011

Submission Method: email to lopresti@cse.lehigh.edu

The ICDAR Advisory Board is seeking proposals to host the 13th International Conference on Document Analysis and Recognition, to be held in 2015 .

ICDAR is the premier IAPR event in the field of Document Analysis and Recognition with 300 to 500 participants.

Any consortium interested in making a proposal to host an ICDAR should first familiarise themselves with the "[Guidelines for Organizing and Bidding to Host ICDAR](#)".

The current version of this document can be found at:

www.iapr-tc11.org/mediawiki/images/ICDAR_Guidelines_2011_04_04.pdf

The submission of a bid implies full agreement with the rules and procedures outlined in that document.

Proposals should be emailed to Dr. Daniel Lopresti at lopresti@cse.lehigh.edu by June 1, 2011.

ICDAR Advisory Board

Prof. Jean-Marc Ogier (Chair, TC10)

Prof. Daniel Lopresti (Chair, TC11)

Dr. Simone Marinai (Chair, IAPR C&M Committee)

Prof. Andreas Dengel (Past Organiser)

Dr. Apostolos Antonacopoulos (Past Organiser and Editor of ICDAR Guidelines)

ICDAR

Call for Nominations for ICDAR 2011 Awards

INTERNATIONAL CONFERENCE ON DOCUMENT ANALYSIS AND RECOGNITION (ICDAR)

CALL FOR NOMINATIONS FOR ICDAR 2011 AWARDS

Nominations Due: June 15, 2011

The ICDAR Award Program is an established program designed to recognize 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

Every two years, two awards categories are presented. Namely, the IAPR/ICDAR Young Investigator Award (less than 40 years old at the time the award is made), and the IAPR/ICDAR Outstanding Achievements Award. Each award will consist of a token gift and a suitably inscribed certificate. The recipient of the Outstanding Achievements award will be invited to give the opening keynote speech at the current ICDAR conference, introduced by the recipient from the previous conference.

Nominations are invited for the 2011 ICDAR Awards in both categories.

The nomination packet should include the following:

1. A nominating letter (1 page) including a brief citation to be included in the certificate.
2. A brief vitae (2 pages) of the nominee highlighting the accomplishments being recognized.
3. Supporting letters (1 page each) from 3 active researchers from at least 3 different countries.

A nomination is usually put forward by a researcher (preferably from a different Institution than the nominee) who is knowledgeable of the scientific achievements of the nominee, and who organizes letters of support.

The submission procedure is strictly confidential, and self nominations are not allowed.

Please send these, preferably as a single pdf file, to jean-marc.ogier@univ-lr.fr. The deadline for receipt of nominations is June 15th, 2011 but early submissions are strongly encouraged. For further information, please contact:

Pr Jean-Marc Ogier
Université de La Rochelle
Pôle Sciences et Technologie
Laboratoire L3i,
Avenue Michel Crépeau
17042 La Rochelle cédex 1 FRANCE

The final decision will be made by the Awards Committee.

The ICDAR 2011 Awards Committee

Jean-Marc Ogier
Dan Lopresti
(others members will be finalized soon)

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*.

[Arjan Kuijper](#), IAPR Newsletter Associate Editor for Book Reviews

The following titles are available to be reviewed:

Fundamentals of Digital Image Processing: A Practical Approach with Examples in MATLAB

Chris Solomon and Toby Breckon

Wiley-Blackwell, 2010

eu.wiley.com/WileyCDA/WileyTitle/productCd-0470844736.html

Biodata Mining and Visualization: Novel Approaches

Ilkka Havukkala

World Scientific, 2010

www.worldscibooks.com/lifesci/6709.html

Distributed Video Sensor Networks

B. Bhanu, C.V. Ravishankar, A. K. Roy-Chowdhury and H. Aghajan (Eds.)

Springer, 2011

www.springer.com/computer/image+processing/book/978-0-85729-126-4

Computer Vision-Guided Virtual Craniofacial Surgery

by Ananda S. Chowdhury and Suchendra M. Bhandarkar

Advances in Computer Vision and Pattern Recognition Series

Springer, 2011

www.springer.com/computer/image+processing/book/978-0-85729-295-7

Automatic Digital Document Processing and Management

by Stefano Ferilli

Advances in Computer Vision and Pattern Recognition Series

Springer, 2011

www.springer.com/computer/image+processing/book/978-0-85729-197-4

Human Recognition at a Distance in Video

by Bir Bhanu and Ju Han

Advances in Computer Vision and Pattern Recognition Series

Springer, 2010

www.springer.com/computer/image+processing/book/978-0-85729-123-3

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.

2011

S4 *		1st Short Spring School on Surveillance	Modena, Italy	17-19 May 11
GbR 2011	GbR 2009 report In Jul '09 issue	TC-15 Workshop on Graph-based Representations in Pattern Recognition	Münster, Germany	18-20 May 11
SCIA 2011	SCIA 2009 report in Oct '09 issue	17th Scandinavian Conference on Image Analysis	Ystad Saltsjöbad, Sweden	23-27 May 11
MVA 2011	MVA 2009 report in Jul '09 issue	12th IAPR Conference on Machine Vision Applications	Nara City, Japan	13-15 Jun 11
MCS 2011	MCS 2010 report in Jul '10 issue	10th International Workshop on Multiple Classifier Systems	Naples, Italy	15-17 Jun 11
MCPR 2011	MCPR 2010 report in Jan '11 issue	3rd Mexican Conference on Pattern Recognition	Cancun, Mexico	29 Jun-2 Jul 11
ISMM 2011 *		10th International Symposium on Mathematical Morphology	Intra, Lake Maggiore, Italy	6-8 Jul 11
ICVSS 2011 *		International Computer Vision Summer School	Sicily, Italy	11-16 Jul 11
CAIP 2011	CAIP '09 report in Jan '10 issue	14th International Conference of Computer Analysis of Images and Patterns	Seville, Spain	29-31 Aug 11
IMVIP 2011 *		Irish Machine Vision and Image Processing Conference 2011	Dublin, Ireland	7-9 Sep 11
ICIAP 2011	ICIAP 2009 report in Oct '09 issue	16th International Conference on Image Analysis and Processing	Ravenna, Italy	14-16 Sep 11
GREC 2011	GREC 2009 report in Oct '09 issue	9th IAPR International Workshop on Graphics Recognition	Soeul, Korea	15-16 Sep 11
PSL 2011		1st Workshop on Partially Supervised Learning	Ulm, Germany	15-16 Sep 11
ICDAR 2011	ICDAR 2009 report in Oct '09 issue	11th International Conference on Document Analysis and Recognition	Beijing, China	18-21 Sep 11
JCB 2011		IEEE/IAPR International Joint Conference on Biometrics	Washington, DC, USA	26-28 Sep 11
ISVC11 *		7th International Symposium on Visual Computing	Las Vegas, Nevada, USA	26-28 Sep 11
SIMBAD 2011		1st International Workshop on Similarity-Based Pattern Analysis and Recognition	Venice, Italy	28-30 Sep 11

Conference Planner (continued)

Highlighting indicates that paper submission deadline has not yet passed.
An asterisk * denotes a non-IAPR event.

2011 (continued)

CIARP 2011	CIARP 2010 report in Jul '10 issue	16th Iberoamerican Congress on Pattern Recognition	Pucón, Chile	15-18 Nov 11
DICTA 2011	DICTA 2010 report in this issue	International Conference on Digital Image Computing: Techniques and Applications	Noosa, Queensland, Australia	6-8 Dec 11
2012				
ICFHR 2012	Report on ICFHR 2012 in this issue	13th International Conference on Frontiers in Handwriting Recognition	Bari, Italy	Sep 12
ICPR 2012	ICPR 2010 Special Issue: Oct '10	21st International Conference on Pattern Recognition	Tsukuba Science City, Japan	11-15 Nov 12