

# SIGMAP 2007

*International Conference on Signal Processing and Multimedia Applications*

## SCOPE

The purpose of SIGMAP 2007 the *International Conference on Signal Processing and Multimedia Applications* is to bring together researchers, engineers and practitioners interested on information systems and applications in the context of Signal Processing, including theory and practice in the field of telecommunications, image, video, audio, biometrics, etc., and Multimedia Applications related to representation, storage, authentication and communication of multimedia information.

The signal processing field, when combined with multimedia information encompasses a large number of research topics and emerging applications. A list of relevant topics is provided below, though many other topics could be listed.

Ideas on how to analyse and apply signal processing techniques to solve problems involving multimedia information and technology, either in the scope of R&D projects, engineering or business applications, are welcome. Papers describing new methods or technologies, advanced prototypes, systems, tools and techniques and general survey papers indicating future directions are also encouraged.

Papers describing original work are invited in any of the areas listed below. Accepted papers, presented at the conference by one of the authors, will be published in the Proceedings of SIGMAP, with an ISBN. Acceptance will be based on quality, relevance and originality. Both full research reports and work-in-progress reports are welcome. There will be both oral and poster sessions.

The best papers will be selected to appear either in an international journal or in a book to be published by Springer.

Special sessions, case-studies and tutorials dedicated to technical/scientific topics related to the main conference are also envisaged: researchers interested in organizing a special session, companies interested in presenting their products/technology or researchers interested in holding a tutorial are invited to contact the conference secretariat. Additional information can be found at <http://www.sigmap.org>.

## TOPIC AREAS / CONFERENCE TRACKS

Each of these topic areas is expanded below but the sub-topics list is not exhaustive. Papers may address one or more of the listed sub-topics, although authors should not feel limited by them. Unlisted but related sub-topics are also acceptable, provided they fit in one of the following main topic areas:

- Multimedia Communications
- Multimedia Signal Processing
- Multimedia Systems and Applications

### Area 1: Multimedia Communications

- Digital Audio and Video Broadcasting
- Multimedia Streaming (IPv4 / IPv6)
- Mobile Multimedia
- MPEG Standards and related issues
- Universal Multimedia Adaptation
- Layered Coding and Transcoding
- Multiple Description Coding
- Traffic modeling for Multimedia
- Joint source/channel coding
- Error Control and Concealment

### Area 2 : Multimedia Signal Processing

- Image and Video Processing
- Speech, Audio and Music Processing
- 3D and Stereo Imaging
- Signal Processing Education
- Distributed Source Coding
- Multidimensional Signal Processing
- Biometrics and Pattern Recognition
- Multimodal Signal Processing
- Neural Networks and Genetic Algorithms
- Perceptual/Human Audiovisual System Modelling
- Remote Sensing

### Area 3 : Multimedia Systems and Applications

- IPTV, VoIP, Web Conferencing
- Interactive Digital Television
- Audio and Video Quality Assessment
- Video surveillance
- Internet QoS for Multimedia Applications
- Distributed Multimedia Systems
- Multimedia Databases, Indexing, Recognition and Retrieval
- Authentication and Watermarking
- Entertainment and games
- Human-Machine Interface
- E-Learning, E-Commerce and E-Society Applications
- Design and Implementation of Signal Processing Systems

## KEYNOTE SPEAKERS

- Santanu Dutta, nVIDIA Corporation, United States

## SUBMISSION OF PAPERS

Authors should submit a complete paper in English of up to 8 A4 pages, using the submission procedure indicated below. The program committee will review all papers and the contact author of each paper will be notified of the result, by email. Each paper should clearly indicate the nature of its technical/scientific contribution, and the problems, domains or environments to which it is applicable. Authors must also indicate the conference track to which the paper is submitted. The paper must be carefully checked for correct grammar and spelling.

### Paper submission procedure

1. A "blind" paper evaluation method will be used. To facilitate that, the authors are kindly requested to produce and provide the full paper, WITHOUT any reference to the authors. The manuscript must contain, in its first page, the paper title, an abstract and a list of keywords but NO NAMES OR CONTACT DETAILS WHATSOEVER are to be included in any part of this file.

2. The contact author will then use the SIGMAP web-based submission facility available at the conference web site, <http://www.sigmap.org/> to enter the contact information of all paper authors plus the file indicated in point 1, above. The facility will automatically send a submission acknowledgement, by email, to the author indicated as "contact author". Please contact the secretariat if no acknowledgement is received.

If the author is unable to use the web-based procedure then he/she can send the paper by e-mail to the secretariat attaching an additional file containing: the title, author(s), affiliation(s), contact details, a list of keywords and an abstract. Authors must also indicate the conference area (including the topics), to which the paper is submitted.

The camera-ready format will be enforced only for accepted papers, but authors are encouraged to use it also for paper submissions, in order to reduce extra work later. Two templates are provided at the conference web site: one for Latex and another for MS Word. Due to space limitations in the Proceedings, the camera-ready version will be limited to 8 (eight) pages for full papers, 6 (six) for short papers (progress reports) and 4 (four) for poster presentations. If absolutely needed, the number of pages may be increased up to a maximum of 12 (long presentations), 8 (short presentations) and 6 (poster presentations). However, for each page in excess of the maximum allowed, the author will have to pay an additional fee.

## PUBLICATIONS

SIGMAP 2007 papers will be indexed by ISI, INSPEC and DBLP.

All accepted papers will be published in the conference proceedings, under an ISBN reference, in paper and in CD-ROM support.

A book including a selection of the best conference papers will be edited and published by Springer.

## IMPORTANT DEADLINES

Full Paper Submission: 4th April 2007 (new)

Author Notification: 21st May 2007 (new)

Final Paper Submission and Registration: 31st May 2007 (new)

Conference Date: 28-31 July 2007

## SECRETARIAT

SIGMAP Secretariat  
Av. D.Manuel I, 27A 2ºesq, 2910-595 Setúbal - Portugal  
Tel.: +351 265 520 185  
Fax: +351 265 520 186  
E-mail: [secretariat@sigmap.org](mailto:secretariat@sigmap.org)  
Web: <http://www.sigmap.org>

## VENUE

The conference will be held in Barceló Hotel Sants. The Barceló Hotel Sants is a deluxe hotel located in the heart of Barcelona. It stays about 15 minutes from the airport, 4 minutes to Plaza de Catalunya and 500 meters to the Fira de Barcelona. Considering the hotel is exactly above the train station, it allows traveling to anyplace. Most important is the fact that all the noise from the train station is undetected because the hotel is soundproofed. The Barcelo Hotel Sants also offers on site dining and is convenient to many shopping and entertainment venues.

## CONFERENCE CO-CHAIRS

**Joaquim Filipe** (Polytechnic Institute of Setúbal / INSTICC, Portugal)  
**Javier Hernando** (Polytechnic University of Catalonia, Spain)  
**Mohammad S. Obaidat** (Monmouth University, U.S.A.)

## PROGRAM CHAIR

**Pedro Assunção** (Polytechnic Institute of Leiria, Portugal)  
**Sérgio Faria** (Polytechnic Institute of Leiria, Portugal)

## PROGRAM COMMITTEE

Karim Abed-Meraim, Telecom Paris, France  
Driss Aboutajdine, Mohammed V-Agdal University, Morocco  
Ralf Ackermann, SAP Research, Germany  
J. K. Aggarwal, The University of Texas at Austin, United States  
Harry Agius, Brunel University, United Kingdom  
Abbes Amira, Brunel University, United Kingdom  
João Ascenso, Instituto Superior de Engenharia de Lisboa, Instituto de Telecomunicações, Portugal  
Jaakko Astola, Tampere University of Technology, Finland  
Samir Attallah, National University of Singapore, Singapore  
Oscar Au, Hong Kong Univ. of Science and Technology, Hong Kong  
Azeddine Beghdadi, Université Paris 13, France  
Adel Belouchrani, Ecole Nationale Polytechnique, Algeria  
Amel Benazza-Benyahia, (URISA), Tunisia  
Mohammed Bennamoun, The University of Western Australia, Australia  
Younès Bennani, University of Paris, France  
Shuvra Bhattacharyya, University of Maryland, United States  
Marina Bosi, MPEG LA, LLC, United State  
Abdesselam Bouzerdoum, University of Wollongong, Australia  
Jianfei Cai, Nanyang Technological Univesity, Singapore  
Liang-Gee Chen, National Taiwan University, Taiwan  
Shu-Ching Chen, Florida International University, United States  
Naveen Chilamkurti, La Trobe University, Australia  
Ryszard S. Choras, University of Technology & Agriculture, Poland  
Paulo Correia, Instituto Superior Técnico - Instituto de Telecomunicações, Portugal  
José Alfredo Ferreira Costa, Universidade Federal do Rio Grande do Norte, Brazil

Rita Cucchiara, Università di Modena e Reggio Emilia, Italy  
Aysegul Cuhadar, Carleton University, Canada  
Petar M. Djuric, Stony Brook University, United States  
Chitra Dorai, IBM T.J. Watson Research Center, United States  
David Du, National Science Foundation, United States  
Peter Eisert, Fraunhofer HHI, Germany  
Rob Evans, National ICT Australia University of Melbourne, Australia  
Wu-chi Feng, Portland State University, United States  
Anibal Ferreira, University of Porto, Portugal  
Marco Furini, University of Piemonte Orientale, Italy  
Mathew George, Hitachi Global Storage Technologies, United States  
Theo Gevers, Informatics Institute, University of Amsterdam, Netherlands  
Z. Ghassemlooy, Northumbria University, United Kingdom  
Lorenzo Granai, University of Surrey, United Kingdom  
Christos Grecos, Loughborough University, United Kingdom  
Mislav Grgic, University of Zagreb, Croatia  
Patrick Gros, IRISA and INRIA Rennes, France  
William Grosky, University of Michigan, United States  
Thomas Haenselmann, University of Mannheim, Germany  
Pål Halvorsen, Simula Research Laboratory, Norway  
Peter Händel, Royal Institute of Technology, Sweden  
Xian-Sheng Hua, Microsoft Research Asia, China  
Benoit Huet, EURECOM, France  
Jenq-Neng Hwang, University of Washington, United States  
Jiri Jan, University of Technology Brno, Czech Republic  
Philippe Joly, IRIT - UPS, France  
Joemon Jose, University of Glasgow, United Kingdom  
Chehdi Kacem, University of Rennes 1, France  
Hari Kalva, Florida Atlantic University, United States  
John Kender, Columbia University, United States  
Hyoung-Joong Kim, Korea University, Korea  
Paris Kitsos, Hellenic Open University, Greece  
Stefanos Kollias, NTUA, Greece  
Yiannis Kompatsiaris, ITI-CERTH, Greece  
Murat Kunt, EPFL, Switzerland  
C.-C. Jay Kuo, University of Southern California, United States  
Pascal Larzabal, Ecole Normale Supérieure SATIE, France  
Jeongkyu Lee, University of Bridgeport, United States  
Tayeb Lemlouma, IRISA, Rennes 1 University (IUT of Lannion), France  
Clement Leung, Victoria University, Australia  
Xuelong Li, University of London, United Kingdom  
Fernando Lopes, Instituto Superior de Engenharia de Coimbra and Instituto de  
Telecomunicações - Pólo de Coimbra, Portugal  
Yan Lu, Microsoft Research Asia, China  
Rastislav Lukac, Epson Canada Ltd., Canada  
Kai-Kuang Ma, Nanyang Technological University, Singapore  
Antonio De Maio, University of Naples, Italy  
Manuel Perez Malumbres, Miguel Hernandez University, Spain  
Hong Man, Stevens Institute of Technology, United States  
Andreas Maras, University of Peloponnese, Greece  
Andreas Mauthe, Lancaster University, United Kingdom  
Ajmal Mian, The University of Western Australia, Australia  
Robin Morris, USRA-RIACS, United States  
Antonio Navarro, Aveiro University, Portugal  
Roeland Ordeman, University of Twente, Netherlands  
Haldun M. Ozaktas, Bilkent University, Turkey  
Montse Pardas, Universitat Politècnica de Catalunya, Spain  
Raffaele Parisi, INFOCOM Dpt - University of Rome "La Sapienza", Italy  
Luigi Paura, Università di Napoli, Federico II, Italy  
Béatrice Pesquet-Popescu, ENST Paris, France

Athina P. Petropulu, Drexel University, United States  
Ioannis Pitas, Aristotle University of Thessaloniki, Greece  
Ashok Popat, Google, Inc., United States  
Maria Paula Queluz, Instituto Superior Técnico - Instituto de Telecomunicações, Portugal  
Matthias Rauterberg, Eindhoven University of Technology, Netherlands  
Dimitris Rigas, University of Bradford, United Kingdom  
Giuseppe Ricci, University of Lecce, Italy  
Roberto Rinaldo, University of Udine, Italy  
Nuno Rodrigues, Inst Telecomunicações/ESTG IPEiria, Portugal  
Abdulmotaleb El Saddik, University of Ottawa, Canada  
Srinivas Sampalli, Dalhousie University, Canada  
Shin'ichi Satoh, National Institute of Informatics, Japan  
Gerald Schaefer, Aston University, United Kingdom  
Raimondo Schettini, University of Milano Bicocca, Italy  
Timothy K. Shih, Tamkang University, Taiwan  
Eduardo da Silva, Universidade Federal do Rio de Janeiro, Brazil  
Wladyslaw Skarbek, Warsaw University of Technology, Poland  
John Sorensen, Engineering College of Copenhagen, Denmark  
Tania Stathaki, Imperial College London, United Kingdom  
Hari Sundaram, ASU, United States  
Dacheng Tao, The Hong Kong Polytechnic University, Hong Kong  
Qi Tian, The University of Texas at San Antonio, United States  
Abdellatif Benjelloun Touimi, France Telecom Research and Development, France  
Jan Turan, TUKE Kosice, Slovakia  
Vesa Valimaki, Helsinki University of Technology, Finland  
Kainam Thomas Wong, Hong Kong Polytechnic University, Hong Kong  
Marcel Worring, University of Amsterdam, Netherlands  
Kim-Hui Yap, Nanyang Technological University, Singapore  
Rong Yan, IBM Research, United States  
Yuan Yuan, Aston University, United Kingdom  
Habib Zaidi, Geneva University Hospital, Switzerland  
Cha Zhang, Microsoft Research, United States  
Zhengyou Zhang, Microsoft Research, United States

(list not yet complete)