



CALL FOR PAPERS

The *Eleventh* IASTED International Conference on **Signal and Image Processing** ~*SIP 2009*~

August 17 – 19, 2009
Honolulu, Hawaii, USA

SPONSOR

The International Association of Science and Technology for Development (IASTED)

- Technical Committee on Image Processing
- Technical Committee on Signal Processing

PROGRAM CO-CHAIR

Prof. Fernando Cruz-Roldán – University of Alcala, Spain

PROGRAM CO-CHAIR

Prof. Nadine Smith – Penn State University, USA

SPECIAL SESSION

["Multirate Signal Processing for Communication Systems"](#)

Prof. Fred Harris – San Diego State University, USA, and **Dr. Gordana Jovanovic-Dolecek** – National Institute for Astrophysics, Optics and Electronics, Mexico

PURPOSE

This conference is an international forum for researchers and practitioners interested in the advances in and applications of signal and image processing. It is an opportunity to present and observe the latest research, results, and ideas in these areas. SIP 2009 aims to strengthen relationships between companies, research laboratories, and universities.

All papers submitted to this conference will be double-blind peer reviewed by at least two members of the International Program Committee and related technical committees. Acceptance will be based primarily on originality, significance, technical soundness, presentation, and references. The conference chair makes the final decision on the acceptance or rejection of the paper.

SIP 2009 will be held in conjunction with the IASTED International Conferences on:

- [Internet and Multimedia Systems and Applications \(IMSA 2009\)](#)
- [Identification, Control and Applications \(ICA 2009\)](#)
- [Computational Intelligence \(CI 2009\)](#)

LOCATION

O'ahu, home to the major tourist centres of Honolulu and Waikiki, is a tropical destination so beautiful and unique that you may never want to leave. Isolated in the Pacific and flanked at a distance by Eastern and Western cultures, this island paradise reflects its unique history and geography through a wealth of beautiful traditions and culture. From nightly Luaus to the ancient ritual of Hula dancing, Hawaiian charm and hospitality are always on display for the millions of visitors who flock to this island every year. Local cuisine, nightlife, and shopping are all superb, but O'ahu's true beauty lies in the water, sand, and glorious sun of the island itself. With consistently warm and tropical weather, visitors can spend their days relaxing and basking in the sun at Waikiki Beach or Ala Moana. Those looking for more adventure on their holidays can participate in one of Hawaii's many exciting aquatic activities. Ocean kayaking, snorkeling, scuba diving, and more are available to all visitors. If you are a nature lover, you can hike to the top of the Diamond Head volcanic crater to take in breathtaking ocean views, swim with the turtles at Mokule'ia Beach, join a whale watching tour, or enjoy the coral reefs and many unique sea creatures while inside a submarine. The vibrant colours of the hibiscus will live forever in your memory. In Hawaii you will experience Aloha, "the breath of life."

SCOPE

The topics to be covered include, but are not limited to the following:

Signal Processing and Applications

- Detection and Estimation of Signal Parameters
- Signal Identification
- Nonlinear Signals and Systems
- Time-Frequency Signal Analysis
- Signal Reconstruction
- Spectral Analysis
- Filter Design and Structures
- FIR Filters
- IIR Filters
- Adaptive Filters
- Multi-Channel Filtering
- Signal Noise Control
- Multiple Filtering and Filter Banks
- Fast Algorithms
- Adaptive and Clustering Algorithms
- Fast Fourier Transforms
- Discrete Cosine Transforms
- Discrete Hilbert Transforms
- Wavelet Transforms
- Array Signal Processing
- Digital Signal Processing
- Statistical Signal Processing
- Adaptive Signal Processing
- Multidimensional Signal Processing
- Mobile Signal Processing
- Optical Signal Processing
- Real Time Signal Processing
- Higher Order Statistical Analysis
- Cyclo-Stationary Signal Analysis
- Fuzzy Logic Applications in Signal Processing
- Neural Networks for Signal Processing
- Applications in Telecommunications
- Industrial Applications
- Other Applications

Acoustics, Speech Processing, and Applications

- Audio and Speech Processing
- Speech Analysis
- Animation
- Computer Vision

- Speech Synthesis
- Speech Recognition
- Speaker Verification
- Speech Coding
- Speech Compression
- Speech Enhancement
- Echo Cancellation
- Voice Control
- Speech Quality
- Speech Processing Software
- Human-Computer Interaction
- Spoken Language Interfaces
- Synchronization Techniques
- Speech Processing Devices
- Multi-Lingual Speech Processing
- Natural Language Processing
- Machine Learning
- Speech Translation
- Visual Speech Perception
- Fuzzy Applications
- Artificial Intelligence
- Knowledge-based Processing
- Neural Networks
- Soft Computing
- Acoustic Modelling
- Acoustic Imaging
- Acoustic Signal Processing
- Physical Acoustics
- Structural Acoustics
- Acoustical Oceanography
- Hydro Acoustics
- Architectural Acoustics
- Engineering Acoustics
- Bio Acoustics
- Aero Acoustics
- Sonar Detection
- Ultrasonics
- Noise Control Applications

Image Processing and Applications

- Image Coding
- Image Compression
- Image Enhancement
- Image Restoration
- Image Segmentation
- Image Representation
- Pattern Recognition
- Multi-Resolution and Multi-Spectral Processing
- Tomographic Reconstruction
- Motion Detection and Estimation
- Object Tracking
- Image Sequence Processing
- Content-based Image Retrieval
- Image Databases
- Computer Imaging
- Radar Imaging
- Sonar Imaging
- Medical Imaging
- Magnetic Resonance Imaging
- Seismic Imaging
- Color and Texture
- Image Display and Printing
- Image Quality
- Video Processing
- Video Coding
- Video Streaming
- Multimedia Processing
- Digital Image Processing
- Watermarking
- Image Visualization
- Remote Sensing
- Sonar Imaging
- Artificial Intelligence Applications
- Neural Networks Applications
- Fuzzy Logic Applications
- Computer Vision
- Other Applications

INTERNATIONAL PROGRAM COMMITTEE

- W. H. Abdulla – The University of Auckland, New Zealand
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- T. Yang – Embry-Riddle Aeronautical University, USA
- P. Zahradnik – Czech Technical University Prague, Czech Republic
- J. F. Zelasco – University of Buenos Aires, Argentina

ADDITIONAL PAPER REVIEWERS

- J. ASTOLA – TAMPERE UNIVERSITY OF TECHNOLOGY, FINLAND
- S. FRASER – UNIVERSITY OF ABERDEEN, UNITED KINGDOM
- V. PONOMARYOV – NATIONAL POLYTECHNIC INSTITUTE OF MEXICO, MEXICO
- W. L. WOO – NEWCASTLE UNIVERSITY, UNITED KINGDOM

SUBMISSION

Initial Papers

Submit your paper via our website at: www.iasted.org/conferences/submit-654.html.

All submissions should be in Adobe Acrobat (.pdf) format. The IASTED Secretariat must receive your paper by **May 16, 2009**. Receipt of paper submission will be confirmed by email.

Complete the online initial paper submission form designating an author who will attend the conference and provide four key words to indicate the subject area of your paper. At least one of the key words must be taken from the list of topics provided under Scope. Initial paper submissions should be **full papers** with approximately eight pages. Formatting instructions are available at: www.iasted.org/formatting-initial.htm.

All papers submitted to this conference will be double blind reviewed by at least two reviewers. Acceptance will be based primarily on originality and contribution.

All papers submitted to IASTED conferences must be previously unpublished and may not be considered for publication elsewhere at any time during IASTED's review period. Authors are limited to a maximum of three paper submissions. Authors are responsible for having their papers checked for style and grammar prior to submission to IASTED. Papers may be rejected if the language is not satisfactory.

Notification of acceptance will be sent via email by **June 8, 2009**. Final manuscripts are due by **June 29, 2009**. Registration and final payment are due by **July 6, 2009**. Late registration fees or paper submissions will result in the papers being excluded from the conference proceedings.

Final Papers

Send your final manuscripts via email to: finalpapers@iasted.org. The subject line for the final manuscript submission must include your six-digit paper number. The formatting instructions can be found at: www.iasted.org/formatting-final.htm and must be strictly followed. The page limit for final papers is eight single-spaced pages in 10 point Times New Roman font. Only one paper of up to eight pages is included in the regular registration fee. There will be an added charge for extra pages and additional papers.

TUTORIALS

Proposals for three-hour tutorials should be submitted online by **May 16, 2009**. Tutorials are to be submitted via the following website address:
www.iasted.org/conferences/tutorialsubmit-654.html.

A tutorial proposal should clearly indicate the topic, background knowledge expected of the participants, objectives, time allocations for the major course topics, and the qualifications of the instructor(s).

Persons wishing to organize a special session should email a proposal to calgary@iasted.org by **May 16, 2009**. Proposals should include a session title, a list of the topics covered, and the qualifications and brief biography of the session organizer(s). Papers submitted to the special session must be received by **May 16, 2009**, unless

otherwise stipulated by the Special Session Organizer. A minimum of five papers must be registered and fully paid in order for this session to be included in the conference program. More information on special sessions is available at: www.iasted.org/conferences/specialsession-654.html.

JOURNALS

Expanded and enhanced versions of papers published in the conference proceedings can also be considered for inclusion in one of the IASTED journals. Information on the submission of papers to journals is available at: www.actapress.com/SubmissionInfo.aspx.

Whole proceedings as well as single papers can now be purchased online. Please visit ACTA Press: www.actapress.com.

INDEXING

The proceedings will be sent for indexing in the following:

- Cambridge Scientific Abstracts
- Conference Proceedings Citation Index
- EI Compendex
- FIZ Karlsruhe
- INSPEC

IMPORTANT DEADLINES

Submissions Due	May 16, 2009
Notification of Acceptance	June 8, 2009
Final Manuscripts Due	June 29, 2009
Registration Deadline	July 6, 2009

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

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