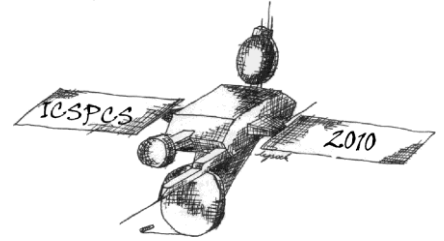


# Call for Papers



## 4<sup>th</sup> International Conference on Signal Processing and Communication Systems, ICSPCS'2010



Gold Coast, Queensland, Australia, 13-15 December 2010

[http://www.dspscs-witsp.com/icspcs\\_2010/index.html](http://www.dspscs-witsp.com/icspcs_2010/index.html)

Communication Systems worldwide have provided a rapidly growing and useful range of services and are continuing to evolve using a multitude of Signal Processing techniques. The 4th International Conference on Signal Processing and Communication Systems, ICSPCS'2010, follows the very successful ICSPCS'2009. A major objective of the Conference will be to pursue the progression from communication and information theory through to the implementation, evaluation and performance improvement of practical communication systems using Signal Processing technology. The Conference is planned to be a forum for presenting research into topics ranging from those of the physical layer to the application layer. All aspects of the protocols and processes required for the future Internet to operate better and the applications to utilize the full potential offered by the current and the emerging networking infrastructure are also encompassed. In addition, we expect that, as during the previous events, there will be several papers dealing with image, video and audio processing for multimedia, medical and forensic applications, as well as with the security of private and corporate data.

**The Conference is technically co-sponsored by IEEE Communications Society, and all presented papers will be published in the IEEE Xplore.**

Previously unpublished contributions to the following technical areas, but not limited to, are solicited:

### Internet

- Traffic modelling
- Protocols
- Embedded Internet devices
- New and enhanced services
- Resource and information management
- Adaptive QoS provisioning
- End-to-end QoS
- Emerging technologies

### Wireless Networks

- Mobile ad hoc networking
- Personal area networking
- Cognitive radio and spectrum sensing
- Broadband Wireless Access
- Cross Layer Design
- Mesh Networks
- Cooperative and Intermittent Networks
- Sensor Networks
- Nano-networks
- Test-beds and new applications

### Information Security

- Security primitives and algorithms
- Security of wireless and distribution networks
- Security of sensor networks
- Authentication and authorization
- Encryption
- Data integrity
- Information assurance

### Unconventional applications of Signal Processing

- Medical applications
- Financial modelling
- Data mining
- Forensic applications
- Traffic modelling
- Bio-signalling
- Molecular communications
- Inter and intra-cell communications

### Fixed networks

- Optical networks and switching
- Network architectures and equipment
- Programmable networks
- Peer-to-peer networking
- Test-beds and trials
- Network gaming
- New and enhanced services

### Communication theory and techniques

- Channel measurements and modelling
- Coding and modulation techniques
- MIMO - theory and trials
- Spread Spectrum and CDMA systems
- OFDM technology
- Space-time coding
- Diversity techniques
- Ultra Wide-Band Communications
- Antennas and propagation

### Multimedia signal processing

- Streamed multimedia applications
- Algorithms and implementations
- Image audio and video processing
- Error concealment techniques
- Management of multimedia services
- Test-beds and trials
- Multimedia games

### DSP algorithms and hardware implementations

- DSP implementation in hardware
- DSP algorithms
- Smart antennas and tracking
- Signal separation

### Ranging and Localization

- Indoor Positioning Technologies and Techniques
- Radio-based Positioning Systems
- Ranging and Localization Algorithms
- Vehicle/Robot Navigation
- Hybrid Positioning and Communication
- RFID Localization/Communication
- UWB Ranging and Localization



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### **Important Dates:**

- **Full Paper Submission Deadline:**  
**30 June 2010**
- **Notification of acceptance:**  
**15 September 2010**
- **Camera-Ready Copy:**  
**15 October 2010**
- **Registration:**  
**15 October 2010**

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**To submit your manuscript, please go to <http://icspcs2010.trackchair.com/>**