

# Call for papers

*The Sixth ACM/IEEE International Conference on Distributed Smart Cameras (ICDSC 2012)*  
<http://icdsc.org>



Technological developments in imaging, processing, and networking have created an opportunity for multi-disciplinary approaches to applications based on vision. The extensive availability and use of cameras in various application domains calls for the study of new embedded processing systems and algorithms.

This sixth edition continues a series of highly successful conferences that were organized in Vienna (Austria), Stanford (USA), Como (Italy), Atlanta (USA) and Ghent (Belgium) in the past five years. This year, it will be held in Hong Kong where the cultures and traditions of East and West converge into a vibrant cosmopolitan known for, among other things, its diverse offering of food and shopping experiences. The conference provides a multidisciplinary collaborative forum for researchers and practitioners to present theoretical and practical results of the latest work on distributed and smart cameras, and relevant applications. The conference will attract researchers from multiple fields such as computer vision, pervasive computing, embedded systems and sensor networks.

The conference program will include invited lectures, special sessions of full/short conference papers, poster sessions, a PhD forum and workshops.

Topics of interest include (but are not limited to):

*Smart camera and network architectures:*

- Camera system designs and architectures
- Image sensing and processing for smart cameras
- Architectures and protocols for camera networks
- Embedded vision programming
- Image processing with network security

*Visual sensor networks:*

- Resource management in camera networks
- Automatic reconfiguration of sensor networks
- Wireless and mobile image sensor networks
- Multi-modal sensor networks
- Learning and information fusion in sensor network
- Visual sensor network applications

*Distributed computer vision and fusion:*

- Distributed capture and vision processing algorithms
- 3D scene analysis
- Multi-view vision for Human-Computer Interfaces
- Distributed appearance modeling and object view-angle coverage
- Multi-sensor data aggregation
- Collaborative extraction, information fusion
- Image processing with computational and energy constraints

*Emerging applications and case studies:*

- Vision-based smart environments
- Surveillance and tracking applications
- Distributed multimedia and gaming applications
- Position discovery and middleware applications
- Context-aware networks
- Sports and other emerging applications

## 1. Conference program

The conference provides a multidisciplinary collaborative forum for researchers and practitioners from disciplines such as Computer Science, Electronic Engineering, Information and Communication Technologies, Government and Education to present theoretical and practical results of the latest work on distributed and smart cameras and relevant applications.

Authors are invited to submit regular full papers as well as contributions to the Doctoral Colloquium and Poster Session. Papers accepted in any of these tracks will also be included in the Conference Proceedings (see more details in Publications section below). The deadline for submitting to these tracks is the same than for main conference paper submission. Contact details are offered further down in this document.

## 2. Awards

As in previous editions there will be a number of awards to reward quality and innovation. There will be several prizes including the Best Full Paper Award for the Distributed and Smart Camera Application Challenge.

## 3. Workshops program

A number of workshops will complement the main conference program. Papers accepted in any of the workshops sponsored by this conference will be included in one proceedings volume that will collect the contributions in all workshops, see more details in the publications section.

## 4. Important dates

Conference papers: 10 June 2012  
Workshop papers: 31 July 2012  
PhD Forum papers: 20 August 2012  
Conference: Oct. 30 – Nov. 2, 2012

## 5. Publications

All papers accepted in the main conference will be electronically available through the IEEE Explore. All

papers accepted in the Workshops program will be published as a proceedings volume.

## 6. Invited speakers

As in previous editions, we have aligned 2–3 distinguished keynote speakers on a variety of topics on image processing, distributed information processing and relevant sensor applications. See more details through the website of the event.

## 7. Special issues

Several journal issues will be published encompassing core areas of the event. See the webpage of the event for more details.

## 8. Organization

### *General Chairs*

Edmund Lam (University of Hong Kong)  
elam@eee.hku.hk  
Abbas Bigdeli (NICTA, Australia)  
Abbas.Bigdeli@nicta.com.au

### *Program Chairs*

Andrea Prati (Universita Iuav di Venezia, Italy)  
Faisal Qureshi (University of Ontario Institute of Technology, Canada)  
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### *Publicity Chairs*

Vincent Tam (University of Hong Kong, Hong Kong)  
Jie Yang (Shanghai Jiaotong University, PRC)  
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