

# ICDSC 2012: Sixth ACM/IEEE International Conference on Distributed Smart Cameras

Oct 30 – Nov 2, 2012, Hong Kong

<http://icdsc.org>

# ICDSC'12

Technological developments in imaging, processing, and networking have created an opportunity for multi-disciplinary approaches to applications based on computer vision. The extensive availability and use of cameras in various application domains calls for the study of new embedded processing systems and algorithms. After the successful 5th ACM/IEEE International Conference on Distributed Smart Camera (ICDSC) in Ghent in 2011 and the previous ones in Vienna (2007), Stanford (2008), Como (2009), and Atlanta (2010), the sixth edition of the ICDSC 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 architecture, offering of food and shopping experiences. The conference will attract researchers from multiple fields such as computer vision, pervasive computing, embedded systems and sensor networks.

**Quality papers will be selected for special issues in the relevant journals.** In the past, they include the IEEE Journal of Special Topics in Signal Processing and the ACM Transactions on Sensor Networks.

#### 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

#### 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

#### 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

#### 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

Three renowned keynote speakers from a diversity of background and expertise will share their insights on relevant research topics. They include **Professor Klara Nahrstedt**, *the Ralph M. and Catherine V. Fisher Professor at the University of Illinois at Urbana-Champaign*, **Professor Ronald Chung**, *the Chairman and Professor of the Department of Mechanical and Automation Engineering and Director of the Computer Vision Laboratory (CVL) at the Chinese University of Hong Kong*, and **Professor Yi Ma**, *the research manager for the Visual Computing Group at Microsoft Research Asia*.

The conference invites researchers and industry-based developers to participate in a demo session and present the latest results implemented in related areas. As with the previous editions, ICDSC 2012 will feature a PhD Forum where students present and defend their research topics and receive feedback from an academic jury.

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Submitted papers must follow the IEEE two-column format with single-spaced, 10-point font in the text. The length of submitted papers for regular paper submission is **6 pages** and for PhD forum and demo papers is **2 pages** including figures and references. The papers should provide sufficient background information including adequate references and clearly indicate the original contribution. Papers must be submitted electronically in PDF format using the EasyChair paper submission site as specified under the “Paper Submission” section of the conference website. Besides, LaTeX and Microsoft Word templates are also provided under the same section of the conference website. **Paper submission implies that one of the authors will present the paper at the conference if the paper is accepted.** Accepted papers (including demo and PhD forum papers) will be published and catalogued at the IEEEXplore.

**Special Session proposal deadline: May 20, 2012**

**Paper submission deadline: June 10, 2012**

**PhD Forum and demo papers deadline: August 20, 2012**

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