

7th IEEE International Conference on Advanced Video and Signal based Surveillance (AVSS)

for Security, Safety and Monitoring in Smart Environments

Boston, USA ★ Aug 29-Sept 1, 2010



AVSS is the IEEE conference series on video and signal based surveillance. AVSS is a forum of reference for the field and offers the opportunity to meet and foster collaboration. Starting in 1998, most recent previous editions were held in Genoa, Italy (2009), in Santa Fe, USA (2008), in London, UK (2007), and in Sydney, Australia (2006). 2010 AVSS will be technically cosponsored by IEEE Computer Society (PAMI TC) and by the IEEE Signal Processing Society (IVMSP TC). It has a tradition of participation from the worlds of research, industry, and relevant government agencies. AVSS welcomes contributions in the following areas: a) sensors and data fusion, b) processing, detection and recognition, c) analytics, behavior and biometrics d) interaction and description, e) applications, f) systems, performances and ethical issues, and it also gives unique emphasis to cross-disciplinary and visionary papers. This conference focuses on underlying theory, methods, systems, and application areas. The list of topics of interest includes, but is not limited to:

A1 Sensor networks
A2 Microphone arrays
A3 Infrared/milliwave/terahertz/visible/3D imaging
A4 Heterogeneous sensor processing
A5 Multi-sensor calibration
A6 Multi-sensor data association/estimation
A7 Distributed/cognitive/bio-inspired data fusion
B1 Multidimensional signal processing
B2 Change detection
B3 Motion detection
B4 Feature extraction
B5 Sound, object, scene recognition
B6 Pattern recognition and machine learning
B7 Target tracking
C1 Sound, video, multimodal analytics
C2 Situation and threat assessment
C3 Activity analysis and monitoring
C4 Interaction analysis for static and mobile environments
C5 Event, situation, behavior, threat modeling/recognition
C6 Biometrics: face, iris, fingerprint, ear, gait, voice

D1 Metadata management
D2 Archival and retrieval
D3 Multimodal displays
D4 Advanced interfaces & visualization tools
D5 Object and situation based coding
D6 Wireless, mobile interfaces
E1 Reactive and preventive environments
E2 Integrated physical and cyber security
E3 Transports (rail, road, air, maritime)
E4 Unmanned vehicles and robotics
E5 Ambient intelligence
E6 Protection of Infrastructures
F1 Industrial, civilian, military systems
F2 Research prototypes
F3 Hardware and software architectures
F4 User requirements
F5 Performance evaluation
F6 Privacy in surveillance

Paper Submission

Full length papers between 4 and 6 pages in length are solicited. Detailed submission instructions will be posted on the conference website in due time. Each submission will be double-blind peer-reviewed by at least two experts. The conference proceedings will be published by the IEEE Computer Society. The AVSS 2010 website <http://www.avss2010.org> will provide you with further details.

Call for People Counting Challenge

AVSS 2010 will include a special session covering an open evaluation. Video sequences provided by PETS will be distributed and performance evaluation will be carried on by NIST. Tracks will be considered of designated people as they traverse a multi-camera field in airport surveillance video. Details will be available on the AVSS web site.

Call for Workshops

AVSS 2010 will include a number of workshops. Proposal for special session chairs, a list of authors who have agreed to present paper in the session, and abstract of each paper. Proposals for workshops should be submitted to Andrea Cavallaro before March, 5 2010.

Important dates

Paper submission:	March 26, 2010
Notifications to authors:	June 1, 2010
Camera ready papers due:	July 2, 2010
Early registration deadline:	July 2, 2010
Conference dates:	Aug 29 - Sept 1, 2010

Further Information

Web site: <http://www.avss2010.org> — Contact email: info@avss2010.org
Conference venue: Boston University ECE Department & Cambridge Hyatt Hotel

General Chair:

Fatih Porikli, *MERL*

Program Chairs:

Janusz Konrad, *Boston Un.*
James Davis, *Ohio State Un.*

Area Chairs:

George Bebis, *Un. of Nevada, Reno*
Tsuhan Chen, *Cornell*
Isaac Cohen, *Honeywell*
Dariu Gavrilla, *Un. of Amsterdam*
Massimo Piccardi, *Un. Tech Sydney*
Stan Sclaroff, *Boston Un.*
Chris Stauffer, *BAE Systems*

Challenge Chais:

Erik Blash, *US AFRL*
John Fiscus, *NIST*

Workshops Chair:

Andrea Cavallaro, *Queen Mary*

Industrial Panel Chair:

Anthony Hoogs, *Kitware*

Panelists:

Ajay Divakaran, *Sarnoff*
Niels Haering, *ObjectVideo*
Arun Hampapour, *IBM*
Swarup Medisani, *HLR*
Visvanathan Ramesh, *Siemens*
Steve Sablak, *PELCO*

Local Arrangement Chair:

Prakash Ishwar, *Boston Un.*

Publication Chair:

Kuntal Sengupta, *TYCO*

Demo Chair:

Venkatesh Saligrama, *Boston Un.*

Finance Chair:

Senem Velipasalar, *UNL*

Web Chair:

Ioannis Tziakos, *Queen Mary*

Liasons:

Enis Cetin, *Bilkent Un.*
Shiloh Dockstader, *ITT*
Kazuhiko Sumi, *MELCO*
Jian Zhang, *NICTA*

Honorary Chair:

Carlo Regazzoni, *Un. of Genoa*