2011 AVSS KLAGENFURT

Advanced Video and Signal-Based Surveillance

Final Report

8th IEEE International Conference on

Advanced Video and Signal-Based Surveillance

Alpen-Adria Universität Klagenfurt

August 30 – September 2, 2011

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1 Introduction

This report provides detailed organization, financial, technical content and attendance information on the IEEE AVSS 2011 conference to the IEEE AVSS Steering Committee. The information herein is not of strictly confidential nature, but its use should be limited to the scope of the aforementioned committee. All data is updated to **January 15,** 2012.

1.1 Organization Committee

Steering committee
Carlo Regazzoni
Andrea Cavallaro
Jonathan Fiscus
Massimo Piccardi
Fatih Porikli
Bernhard Rinner
Peter Tu

General chairs
Bernhard Rinner
Alpen-Adria Univ. Klagenfurt

Gian Luca Foresti
University of Udine

Technical program chair
Andrea Cavallaro
Queen Mary University of London

Workshops chair
Massimo Piccardi
University of Technology Sydney

Industrial chair
Roman Pflugfelder
Austrian Institute of Technology

Area chairs
Francois Bremond (Security and Safety)
INRIA, Sophia Antipolis, France

Bir Bhanu (Smart and simulated environments)
University of California, Riverside, USA

Gaurav Sharma (Multidimensional signal processing)
University of Rochester, USA

Christian Micheloni (Reactive sensor networks and multimedia)
University of Udine, Italy

Horst Bischof (Pattern recognition, computer vision, and machine learning)
Graz University of Technology, Austria

James llinas (Multisensor data fusion and architectures)
University of Buffalo ,USA

Arun Hampapur (Systems)
IBM, USA

Publications chair
Claudio Piciarelli
University of Udine

Publicity chair
Rita Cucchiara
University of Modena and Reggio Emilia

Liaison chairs
Mohan Kankanhalli
Nat. University of Singapore

Dan Schonfeld
University of Illinois

Finance chair
Laszlo Böszörmenyi
Klagenfurt University

Local arrangements chair
Markus Quaritsch
Klagenfurt University

Honorary chair
Carlo Regazzoni
University of Genoa

2 Technical Program

2.1 Submitted Papers

In total, 144 papers from 438 different authors have been submitted for the main conference. The topics of the papers are distributed as follows.

Topic	*Count*
3D vision	2
Active vision	1
Activity monitoring	6
Advanced industrial, military and civilian systems	4
Advanced interfaces/Visualization tools	1
Ambient intelligence	0
Background/Foreground segmentation	14
Behaviour/Interaction analysis	5
Biometrics, face detection and recognition	10
Cognitive refinement	1
Feature extraction and object classification	2
Forensic tools	0
Hardware and software architectures	1
Heterogeneous sensor processing	0
Human interaction for static and mobile environments	0
Human working activities	0
Image and video analysis and retrieval	7
Infrared/milliwave imaging	1
Integrated physical and cyber security	1
Motion detection and object tracking	16
Multi-camera calibration	1

Topic	*Count*
Multi-camera systems	4
Multi-sensor coordination and control in surveillance networks	1
Multimodal signal processing in surveillance networks	2
Object and video shot detection	2
Object recognition	2
Object/Situation based video coding	1
Pattern recognition and machine learning	5
Performance evaluation	2
Preventive environments	1
Reactive sensor networks	0
Research prototypes	1
Sensor network reconfiguration	0
Sensors	3
Simulated environments	0
Situation/Threat assessment	1
Transports (rail, road, air, maritime)	5
Video and multidim. signal processing	3
Video analytics	14
Event, situation, behaviour, threat modelling/simulation/recognition	16
Audio and multimodal surveillance	4
Other	6

The workshops received

Workshop on Multimedia Systems for Surveillance (MMSS)	6
Resource Aware Sensor and Surveillance Networks (RAWSNETS)	7
Activity monitoring by multi-camera surveillance systems (AMMCSS)	11

The Industrial Surveillance Day received 18 submissions. Unfortunately, 3 companies had to withdraw their demo proposal, so that in the end we had 15 company demonstrations.

The total number of papers (main conference, workshops, industrial demos) is **183**.

2.1.1 Submission Trend

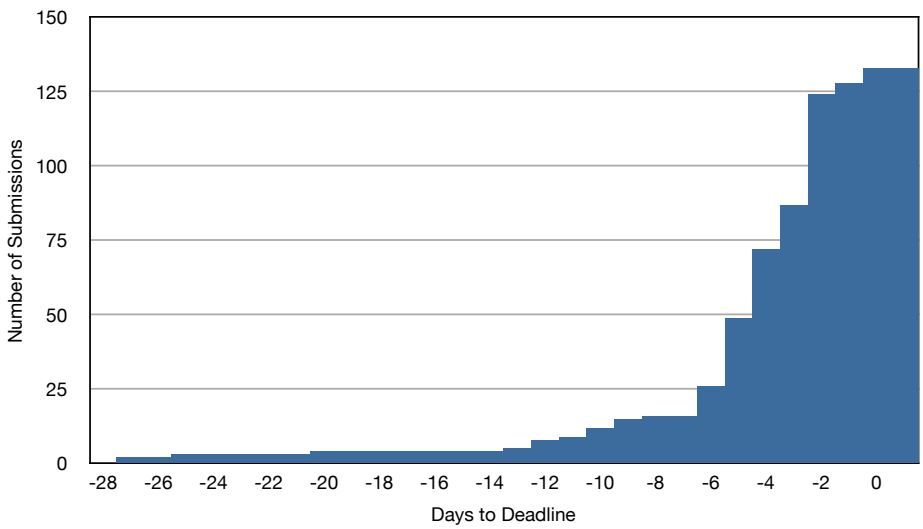

Figure 1: Paper Submission Trend.

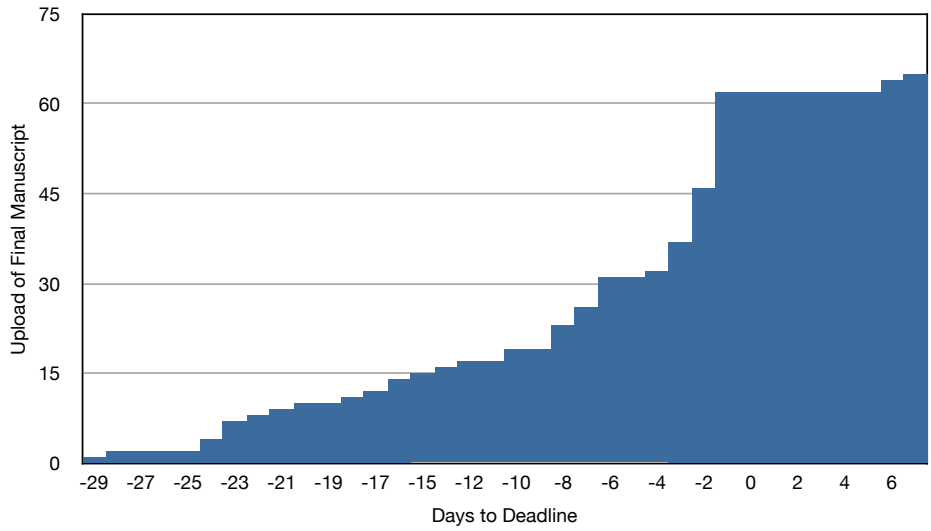

Figure 2: Submission of Camera Ready Papers.

2.1.2 Geographic Distribution

All authors of submitted papers are counted. Authors are counted once for each paper. Papers are counted for a country depending on the first author.

Country	*Authors*	*%*	*Papers*	*%*
USA	81	18.5	23	16.0
Italy	46	10.5	14	9.7
Korea	36	8.2	12	8.3
France	34	7.8	11	7.6
Austria	30	6.8	7	4.9
United Kingdom	27	6.2	10	6.9
Germany	26	5.9	10	6.9
India	24	5.5	14	9.7
Australia	22	5.0	5	3.5
P.R. China	17	3.9	6	4.2
Taiwan	16	3.7	4	2.8
Luxemburg	11	2.5	3	2.1
Japan	10	2.3	2	1.4
Spain	9	2.1	3	2.1
Switzerland	6	1.4	2	1.4
Iran	5	1.1	3	2.1
Ireland	5	1.1	1	0.7
Serbia	5	1.1	1	0.7
Hungary	5	1.1	2	1.4
Finland	3	0.7	1	0.7
Hong Kong	2	0.5	1	0.7
Canada	2	0.5	1	0.7
Sweden	2	0.5	0	0.0
Mexico	2	0.5	1	0.7
Portugal	2	0.5	1	0.7
Tunisia	2	0.5	1	0.7
Belgium	2	0.5	1	0.7
Singapore	1	0.2	0	0.0
New Zealand	1	0.2	1	0.7
Denmark	1	0.2	1	0.7
Pakistan	1	0.2	1	0.7
The Netherlands	1	0.2	0	0.0
Israel	1	0.2	1	0.7
Total	**438**		**144**	

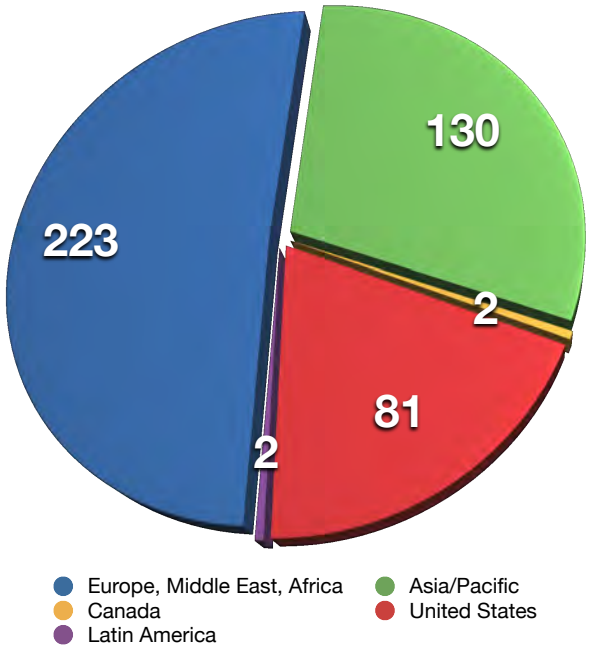

Figure 3: Geographic distribution of authors (submitted papers).

2.2 Technical Program Committee

J. K. Aggarwal
The University of Texas at Austin

George Bebis
University of Nevada

Bir Bhanu
University of California, Riverside

Horst Bischof
Technical University Graz

Francois Bremond
INRIA

Rama Chellappa
University of Maryland

Rita Cucchiara
University of Modena and Reggio Emilia

Larry Davis
University of Maryland

Francesco De Natale
University of Trento

Shiloh Dockstader
ITT

Jean-Luc Dugelay
Institut EURECOM

Clinton Fookes
Queensland University of Technology

Yun Fu
University at Buffalo

Shaogang Gong
Queen Mary University of London

Arun Hampapur
IBM T.J. Watson

Mohan Kankanhalli
National University of Singapore

Nils Krahnstoever
General Electric Global Research

Stan Z. Li
Chinese Academy of Sciences

James Llinas
State University of New York at Buffalo

Ferran Marques
Technical University of Catalonia

Gerard Medioni
University of Southern California

Christian Micheloni
University of Udine

Ramakant Nevatia
University of Southern California

Mark Nixon
University of Southhampton

Fernando Pereira
IST-IT

Justus Piater
University of Innsbruck

Robert Pless
Washington University

Massimo Piccardi
University of Technology, Sydney

Fatih Porikli
Mitsubishi Electric Research Laboratories

Carlo Regazzoni
University of Genova

Amit Roy-Chowdhury
University of California, Riverside

Gaurav Sharma
University of Rochester

A. Murat Tekalp
Koc University

Jean-Philippe Thiran
Swiss Federal Institute of Technology (EPFL)

Peter Tu
GE Global Research

Stefano Tubaro
Politecnico di Milano

Sergio Velastin
Kingston University

Senem Velipasalar
University of Nebraska-Lincoln

Ramesh Visvanathan
Siemens Corporate Research

Ming-Hsuan Yang
UC Merced

2.3 Reviewers

A total of 143 reviewers (including TPC members) served in the paper reviewing process:

Amol Ambardekar
Nadeem Anjum
Vasilis Argyriou
Joao Ascenso
Nikolaos Boulgouris
Lisa Brown
Norbert Buch
Simone Calderara
Mauricio Casares
Ming-Ching Chang
Longbin Chen
Alberto Colombo
Marco Dalai
Fahad Daniyal
Ankur Datta
Luigi Di Stefano
Wei Du
Quanfu Fan
Rogerio Feris
Jaime Gallego
Dashan Gao
Narciso Garcia
Weina Ge
Martin Godec
Alexander Hauptmann
Martin Hirzer
Chang Huang
Ajay Joshi
Gabin Kayumbi
Hanseok Ko
Kyandoghere Kyamakya
Sung Chun Lee
Michal Lewandowski
Gang Li
Ying Li
Ping Liang

Min Liu
Leandro Loss
Emilio Maggio
Aditi Majundar
Lucio Marcenaro
Marco Marcon
Tim Marks
Jose Martinez
Jesus Martinez-del-Rincon
Thomas Mathnerv Pierangelo Migliorati
Raul Mohedano
Monique Thonnat
Enzo Mumolo
Prathap Nair
Jacinto Nascimento
Massimiliano Nolich
Jean-Marc Odobez
Sangmin Oh
Vasu Parameswaran
Montse Pardas
Federico Pernici
Claudio Piciarelli
Felix Pletzer
Fabio Poiesiv
Tim Popkin
Michael Pucher
Markus Quaritsch
Josh Reiss
Peter Roth
Javier Ruiz-Hidalgo
Samuele Salti
Juan Carlos San Miguel Avedillo
Andrew Senior
Ricky Sethi
Oliver Sidla
Bi Song
Mauricio Soto Alvarez
Sabine Sternig
Rainer Stiefelhagen
Xavier Suau
Zehang Sun
Piergiorgio Svaizer
Murtaza Taj
Pavan Turaga
Ashok Veeraraghavan
Vijay Venkataraman
Roberto Vezzani
Ingrid Visentini
Junxian Wang
Youlu Wang
Tao Xiang
Richard Yi
Da Xu
Saeed Yahyanejad
Fei Yin
Yun Zhai
Yingxuan Zhu

2.4 Paper Reviewing

2.4.1 Reviewing Process

Following the last year's reviewing process, all papers have been double-blind reviewed. The required length of full papers is 4 to 6 pages.

We used the EDAS Conference Management Toolkit for online paper submissions and the reviewing process. The reviewers submitted 407 review reports, i.e., 3 reviews for each paper on average.

2.4.2 Paper Decision

Main Conference

For the main conference 67 papers were accepted (i.e., 50% acceptance), but 2 authors withdrew their paper prior to preparation of the program. The Technical Program Chair did not submit any papers, in advance of an AVSS rule being applied from 2012 onwards and covering the Technical Program Chair(s) and the General Chair(s).

Accepted for oral presentation	21	15.7 %
Accepted for poster presentation	44	32.8 %
Rejected / witdrawn	69	51.5 %

The overall acceptance rate is 50 % (compared to 61 % last year).

Workshops

AVSS 2011 hosted three dedicated workshops. The reviewing process has been done independently from the main conference but coordinated with the workshop chair. The workshop on Multimedia Systems for Surveillance (MMSS)—organized by Mohan S. Kankanhalli, Danny Crookes and Anthony TS Ho—focuses on surveillance systems exploiting multimodal information. The workshop on Resources Aware Sensor and Surveillance Networks (RAWSNETS)—organized by Christian Micheloni and Amit K. Roy-Chowdhury—places emphasis on surveillance systems with resource constraints. The workshop on Activity Monitoring by Multi-Camera Surveillance Systems (AMMCSS)—organized by Paolo Spagnolo, Piear Luigi Mazzeo and Arcangelo Distante—focuses on detection and recognition of activities from multi-camera systems.

Given the emerging nature of such themes, the workshops have used a combination of regular and invited submissions: all papers in MMSS and AMMCSS have been peer reviewed, while most of RAWSNETS's papers have been solicited from the respective authors (with the exception of. O. Lanz, "Dynamic Resource Allocation for Probabilistic Tracking via Attentive Sensing and Sampling", and A. Lanza, "Energy-Aware Objects Abandon/Removal Detection", which were received as regular, peer-reviewed submissions).

2.5 Awards

AVSS 2011 awarded two papers: a Best Paper and a Runner up for Best Paper. These papers were selected from the top five papers with the highest score in the reviewing process (having a significant margin to the next papers).

A committee of 4 experts has been invited to provide additional reviews and rank the papers. The Award Committee was chaired by the Technical Program Chair; the members were

- Prof. Larry Davis (Univ. of Maryland)
- Prof. Rita Cucchiara (Univ. of Modena and Reggio Emilia)
- Prof. Horst Bischof (Graz Univ. of Technology)
- Prof. Mohan Kankanhalli (National Univ. of Singapore)

2.6 Program Organization

AVSS 2011 was a single track conference with two poster sessions, six oral sessions and a dedicated industrial surveillance day. Each paper accepted for poster presentation had a 1-minute flash presentation before the poster session. The main purpose of the 1-minute presentation with a single slide is to advertise the posters and attract audience.

Poster presentations:

- 1-minute spotlight presentation: 1 PowerPoint/PDF slide, strictly enforced timing
- Poster Dimensions: maximum A0 (portrait or landscape)

Oral presentations:

- Duration: 20 minutes per paper, 15 minutes presentation time + 5 minutes for questions
- Authors had the option to either use their own laptop or the laptop provided on site.

The main conference featured 6 oral sessions and two poster sessions.

Session	*Topic*	*Papers*
Oral Session 1	Pose, gait and faces	4
Oral Session 2	Object detection	3
Oral Session 3	Object tracking and re-identification	4
Oral Session 4	Activity monitoring	5
Oral Session 5	Background subtraction (Part I)	3
Oral Session 6	Background subtraction (Part II)	2
Poster Session A	Crowd analysis	5
Poster Session A	Audio surveillance	3
Poster Session A	Activity monitoring	6
Poster Session A	Tracking	4
Poster Session A	Active and multiple camera systems	4
Poster Session B	Object detection	6
Poster Session B	Person re-identification	4
Poster Session B	Evaluation and datasets	3
Poster Session B	Visualization and attention	4
Poster Session B	Object recognition	5

2.7 Program at a Glance

Wednesday, Aug. 30

08:00	Registration
09:00 — 12:00	Workshop on Multimedia Systems for Surveillance (MMSS)
	Keynote: Chang-Tsun Li - Surveillance Camera Identification Using Noise Patterns
	Keynote: Laszlo Böszörmenyi - Vision of the Crowds
12:00 — 13:30	*Lunch*
13:30 — 17:30	Workshop on Resource Aware Sensor and Surveillance Networks (RAWSNETS)
	Keynote: Mohan S. Kankanhalli - Design Issues in Multi-Camera Systems
13:30 — 17:30	Workshop: Activity monitoring by multi-camera surveillance systems (AMMCSS)
18:00	Welcome Reception: Boat Trip at Lake Wörthersee

Wednesday, Aug. 31

08:00	Registration
08:30 — 09:00	Posters set-up
09:00 — 09:20	Welcome
09:20 — 10:20	Keynote lecture: Nasir Memon
10:20 — 10:40	*Coffee Break*
10:40 — 12:00	Oral Session 1: Pose, gait and faces
12:00 — 13:30	*Lunch*
13:30 — 14:30	Oral Session 2: Object detection
14:30 — 15:00	Poster Session A Teasers
15:00 — 15:20	*Coffee Break* (+ posters)
15:20 — 16:30	Poster Session A: Crowd analysis, Audio surveillance, Activity monitoring, Tracking, Active and multiple camera systems
16:30 — 17:50	Oral Session 3: Object tracking and re-identification

Thursday, Sept. 1

08:00	Registration
08:30 — 09:00	Posters set-up
09:00 — 10:00	Keynote lecture: Ian F. Akyildiz
10:00 — 10:20	*Coffee Break*
10:20 — 12:00	Oral Session 4: Activity monitoring
12:00 — 13:30	*Lunch*
13:30 — 14:30	Oral Session 5: Background subtraction (Part I)
14:30 — 15:00	Poster Session B Teasers
15:00 — 15:20	*Coffee Break* (+ posters)
15:20 — 16:30	Poster Session B: Object detection, Person re-identification, Evaluation and datasets, Visualization and attention, Object recognition
16:30 — 17:10	Oral Session 6: Background substation (Part II)
17:30	Banquet in Friesach, Best Paper Award ceremony, Introduction of AVSS 2012

Friday, Sept. 2

08:00	Registration
09:00 — 09:15	Welcome Industrial Surveillance Day
09:15 — 10:15	Keynote lecture: Michele Genisio
10:15 — 10:30	*Coffee Break*
10:30 — 12:00	ISD Demo and Exhibit Teasers
12:00 — 14:00	*Business Lunch* with ISD Exhibitors and IMGS-TA1 members
14:00 — 15:00	Keynote lecture: Josef Birchbauer
15:00 — 16:00	ISD Oral Session: Traffic Monitoring
16:00 — 16:15	*Coffee Break*
16:15 — 17:30	Panel discussion: Industry vs. User Perspective?
17:30	Drinks & Farewell

2.8 Plenary Talks

AVSS 2011 featured 2 keynote talks during the main conference, 3 keynotes as part of the workshops and 2 keynotes on the Industrial Surveillance Day:

- Nasir Memon
- Ian F. Akyildiz
- Chang-Tsun Li
- Laszlo Böszörmenyi
- Mohan S. Kankanhalli
- Michele Genisio
- Josef Birchbauer

2.9 Workshops

AVSS 2011 hosted 3 workshops before the main conference:

- Workshop on Multimedia Systems for Surveillance (MMSS)
  Organized by
  - Mohan S Kankanhalli, National University of Singapore, Singapore
  - Danny Crookes, Queen's University Belfast, UK
  - Anthony TS Ho, University of Surrey, UK
- Workshop on Resource Aware Sensor and Surveillance Networks (RAWSNETS)
  Organized by
  - Christian Micheloni, Università degli Studi di Udine, Italy
  - Amit K. Roy-Chowdhury, University of California, Riverside, U.S.A.
- Workshop on Activity monitoring by multi-camera surveillance systems (AMMCSS)
  Organized by
  - Paolo Spagnolo, ISSIA-CNR Italy
  - Piear Luigi Mazzeo, ISSIA-CNR Italy
  - Arcangelo Distante, ISSIA-CNR Italy

2.10 Industrial Surveillance Day

For the first time AVSS 2011 had a dedicated day to foster the collaboration between industry and academia. 15 exhibitors presented their state-of-the-art technology products. The exhibitors were :

- AIT Austrian Institute of Technology
  Searching in large Video-Archives
- Blue Eye Video, Sony
  People flow analysis
- Funkwerk plettac
  PRIMA-S zur Maskierung von Privatzonen in Videobildern

- General Electric, Inha University, Korean Aeronautics University, University of Southern California
  A Systems Level Approach to Perimeter Protection
- IEE S.A.
  People and Object Sensing Solutions based on 3D MLI Sensor(TM) Technology
- intuVision
  GPU Enabled Smart Video Node
- Fraunhofer Institute of Optronics, KIT
  Interactive Person-Retrieval in a Distributed Camera Network
- University of Central Florida, University of Maryland, University of Texas, et al.
  A Large-scale Benchmark Dataset for Event Recognition in Surveillance Video
- Alpen-Adria Universität Klagenfurt, Eye-Tech, infoFACTORY, Lakeside Labs
  Smart Resource-Aware Multi-Sensor Network
- Siemens CT
  Construction Site Monitoring from Highly-Overlapping MAV images
- Graz University of Technology, Joanneum Research, Siemens CT
  OUTLIER – Online Learning and Visualization of Unusual Events
- SLR Engineering
  Intelligent Crossing Sensor and Vehicle Detector
- TechnoAware, University of Genova
  VTrack: Video Analytics for automatic video-surveillance
- Traficon
  Pedestrian sensing for increased traffic safety and efficiency at signalized intersections
- Alpen-Adria Universität Klagenfurt, ASFINAG
  Level of Service Classification for Smart Cameras

In the afternoon, a panel discussed about *Industry vs. User Perspective?* under the moderation of Oliver Sidla, SLR Engineering. The panelists were:

- Wouter Favoreel, R&D Director, Traficon
- Nikolaus Viertl, Project Manager, ASFINAG
- Stuart Rankin, Technology Officer, Home Office
- Csaba Beleznai, Senior Scientist, AIT Austrian Insitute of Technology

3 Conference Proceedings

The conference proceedings were edited by the Publication Chair and published by the IEEE Computer Society. The proceedings were prepared locally on memory sticks and during the conference also online available for attendees of the conference.

- IEEE catalog number: CFP11AVS-ART
- ISBN: 978-1-4577-0845-9

The proceedings comprise 566 pages with 65 papers from the main conference, 19 papers from the workshops, the abstracts of all keynote speeches, and the abstracts of the demos from the industrial surveillance day.

For the convenience of the attendees, a printed booklet with the technical program and information about the venue and the social events was included in the welcome package.

4 Attendance

There were 152 officially registered delegates attending AVSS 2011 (compared to 139 in 2010). The largest representations are coming from Austria, Italy, USA, Germany, UK, and South Korea.

Australia	5	3.29 %	Luxembourg	4	2.63 %
Austria	23	15.13 %	Mexico	2	1.32 %
Belgium	3	1,97 %	Nigeria	1	0.66 %
Canada	3	1.97 %	Poland	1	0.66 %
China	4	2.63 %	Singapore	1	0.66 %
Finland	1	0.66 %	Slovenia	2	1.32 %
France	7	4.61 %	Spain	4	2.63 %
Germany	13	8.55 %	Switzerland	3	1.97 %
India	3	1.97 %	Taiwan	1	0.66 %
Ireland	2	1.32 %	Tunisia	1	0.66 %
Israel	1	0.66 %	UK	12	7.89 %
Italy	19	12.50 %	USA	17	11.18 %
Japan	3	1.97 %	No Country listed	6	3.94 %
South Korea	10	6.58 %	**Total**	**152**	

5 Finances

5.1 Sponsorship

AVSS 2010 is financially and technically co-sponsored by the IEEE Computer Society (PAMI TC) and by the IEEE Signal Processing Society (IVMSP TC).

In addition, we achieved to receive direct funding from Sony (EUR 1890.00) and GE (EUR 698.08). We also received support in form of inkind from Alpen-Adria Universität Klagenfurt and Lakeside Labs for providing IT infrastructure, facility management, food and local staff.

5.2 Registration Fees

	Early Rate (before July 1, 2011)	*Regular Rate*
Full Registration (IEEE Member)	€ 550.00	€ 750.00
Full Registration (Non-Member)	€ 700.00	€ 950.00
Student Registration (IEEE Member)	€ 250.00	€ 350.00
Student Registration (Non-Member)	€ 350.00	€ 450.00
ISD-Only Registration	N.A.	€ 100.00

Each paper is covered by a non-student rate registration by July 1st. One registration may only cover up to three papers.

The registration included:

- Proceedings on a USB thumbdrive
- Welcome package (AVSS 2011 bag, mobile phone desk stand, notebook, pen, Sony marketing material, tourism information, etc.)
- Attendance to all workshops
- Attendance to all conference sessions
- Daily mid-morning coffee break
- Daily lunch: soup, 3 different main dishes, drinks, coffee
- Daily mid-afternoon coffee break
- Welcome reception: boat trip at lake Wörthersee
- Conference Dinner: bus trip to Friesach, guided tour, knight's banquet, drinks, traditional Carinthian treat

5.3 Registration Statistics

Type	*Early Rate*	*Regular Rate*
Full Registration (IEEE Member)	53	4
Full Registration (Non-Member)	31	10
Student Registration (IEEE Member)	25	2
Student Registration (Non-Member)	9	0
ISD-Only Registration		7
Complimentary Registration	11	
Total	**152**	

AVSS 2011 had 152 registered participants (139 in 2010 and 125 in 2009).

5.4 Financial Report

Revenue	*EUR*
Registration Fees	72000.00
Grants, Donations	2588.08
Conference Pub Sales	0.00
Exhibits	0.00
Social Event	200.00
All Other Receipts	0.00
Total Revenue	**74788.08**

Expense	*EUR*
Management Services	4218.65
Registration Expenses	3333.57
Promotion	444.22
Exhibits/Vendors	0.00
Local Arrangements	9943.58
Social Functions	19412.73
Program Expense	7942.48
Administration	3807.41
Society Admin Fee	0.00
Audit Fee	0.00
Committee	0.00
Net Value Added Tax	5461.94
All other Outlays	1510.56
Total Expenses	**58381.54**

The total conference surplus of € 16406.54 has been transferred to IEEE conference management on December 17, 2011.

6 Publicity

The conference website *www.avss2011.org* acted as the main communication channel to inform interested parties about the conference. We updated the news on the start page of website regularly and also provided a RSS Feed with important information. Unfortunately, the number of subscribers of the RSS feed was lower than expected, ranging between 5 and 20.

All keynote speeches of the main conference and also the workshops were video taped and made public available the next day.

For the website statistics we considered the timespan from January 1. until September 18 (two weeks after the conference).

6.1 Website Visits

Pageviews	48 505
Visits	19 551
Unique Visitors	7 428

The webpages with the videos of the keynote talks have been visited 526 times.

We have recorded 310 unique visitors per week on average in the considered period of time. In the week of the conference (28.8. – 2.9.) we recorded on average 211 unique visitors per day.

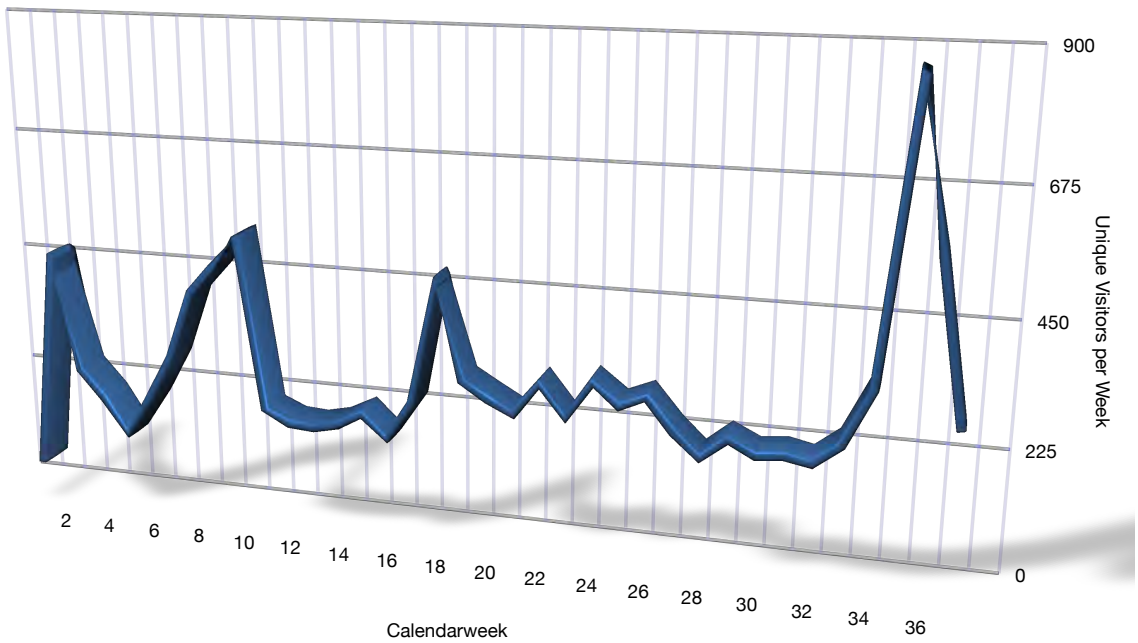

Figure 4: Website visits, average per Week

Significant peaks in the number of page visits can be seen around March 8. (submission deadline) and May 3rd. (author notification) with 295 and 403 visits per day, respectively.

6.2 Website Content

Page	*# Pageviews*
/conference/home/	18 938
/program/program-at-a-glance/	3 559
/papers/call-for-papers/	3 449
/attendees/registration/	1 568
/papers/author-guidelines/	1 528

6.3 Sources of Visitors

Source	*# Visitors*	*%*
Search Engines	2 871	39.45
Links from other sites	1 744	23.96
Direct page access	2 658	36.52

Referring websites

Referring website	*# Visits*	*%*
computer.org	320	9.06
signalprocessingsociety.org	254	7.19
iris.usc.edu	249	7.05
wikicfp.com	215	6.09
conferences.visionbib.com	156	4.42
ice.aau.at	123	3.48
uni-klu.ac.at	118	3.34
edas.info	111	3.14
issia.cnr.it	99	2.80
123.sogou.com	93	2.63
google.com	80	2.27
users.dimi.uniud.it	78	2.21
imagescience.org	72	2.03
ieee.org	66	1.87
icephd.org	59	1.67
All other	1 438	40.73

6.4 Visitors per Country

Country	*Unique Visitors*	*%*
Austria	3 691	18.88
Italy	2 278	11.65
United States	2 255	11.53
Germany	1 388	7.10
United Kingdom	1 194	6.11
France	958	4.90
South Korea	824	4.21
India	751	3.84
China	749	3.83
Spain	665	3.40
Australia	606	3.10
Japan	555	2.84
Total	**19.551**	

7 Local Arrangements

7.1 Venue

AVSS 2011 was organized by the Institute of Networked and Embedded Systems of the Alpen-Adria Universität Klagenfurt. Klagenfurt is the capital of the southern-most province of Austria, Carinthia. The renaissance city has a very special appeal and beauty. Klagenfurt University is closely located to the beautiful Lake Wörthersee. Next to the university is the Lakside Business Park where many national and also international companies are located.

The Alpen-Adria Universität Klagenfurt (AAU) is Carinthias leading educational and research institution. Klagenfurt University draws its sense of identity–nomen est omen–from its geographical location in the south of Austria, at the heart of the Alpine-Adriatic region (Italy/ Slovenia/Austria). It currently hosts more than 10.000 students and some 1.200 staff.

The conference was held in the university's main building. The talks took place in the second largest lecture hall with about 250 seats. The poster presentations were held in the university's assembly hall next to the lecture hall. The conference location is easily accessible by bus (bus stop directly in front of the university) and in walking distance to a number of hotels.

7.2 Reception

The welcome reception took place on Tuesday evening after the workshops. A round trip with the MS Klagenfurt took us from Klagenfurt through Krumpendorf and Pörtschach to Maria Wörth and back to Klagenfurt. On the boat, drinks and finger food was served. The boat trip took about two hours.

7.3 Banquet

For the conference banquet we invited the attendees to a bus trip to Friesach, a municipality with about 5200 inhabitants in the north of Carinthia. Friesach is the oldest town in Carinthia and well known for its well-preserved medieval buildings, like the city walls and the water-leading moat. The city lies at the foot of the Virgilienberg and the Petersberg. The foothills of the Gurktaler Alps provide the basis for the fortifications in the West.

In a short city tour we saw the historic sights of the city before having a knight's meal in a historic building. During the knight's meal we hat some entertainment with juggler, witches and knights.

At the conference banquet we also held the best paper ceremony, and the winners received the knighthood of Friesach.

7.4 Accommodation

We recommended three hotels in different price categories, all of them in walking distance:

- Lindner Seepark Hotel
- Plattenwirt
- AllYouNeed Hotel Klagenfurt

7.5 Restaurants

A number of restaurants are within walking distance of the university, offering a wide range of food (e.g., Italian, Chinese, typical Austrian/Carinthian food) and drinks at reasonable prices.

8 Lessons Learned

This section highlights some issues which we think might be useful for the organizers of future AVSS conferences.

Workshops The organization of dedicated workshops turned out to be very successful. On the one hand the workshops helped to introduce emerging topics to the AVSS community. On the other hand, the workshops helped to increase the number of participants. More than 50 % of the overall conference participants were present at the workshop day.

Industrial Surveillance Day We offered a ISD-only registration rate to attract participants from (local) industries. The demo presentations were highly appreciated.

Co-located summer school A Summer School on Networked Embedded Systems was held immediately after AVSS. More than 10 people participated in both events.

Local arrangements We received positive feedback about the local arrangements—in particular on (i) the video taping and video archive of all keynote lectures, (ii) the 1-minute teaser presentations for all posters and (iii) the catering of lunch.

9 Acknowledgments

AVSS 2011 has been made possible only through the hard work of many people. Thanks to the dedicated work of many people—in particular Andrea Cavallaro as Technical Program Chair, Roman Pflugfelder as Industrial Chair and Massimo Piccardi as Workshop Chair—we have been able to prepare an outstanding conference program which includes keynote talks, oral and poster sessions as well as three co-located workshops. We thank the workshop organizers and the AVSS steering committee for their great help. We are particularly grateful to Heidelies Aschbacher, Markus Quaritsch, Laszlo Böszörmenyi, Sandrina Sinko, Claudio Piciarelli, Rita Cucchiara, Mohan Kankanhalli, Dan Schonfeld and many others for doing a superb job for local arrangements and web management, finance, registrations, publications, publicity and liaison. We warmly acknowledge the support of our sponsors: Sony, GE, Lakeside Labs, Universita degli Studi di Udine and Alpen-Adria Universität Klagenfurt. We are grateful to the IEEE Computer Society and IEEE Signal Processing staff in helping us in organizing this conference.

Impressions of AVSS 2011