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## Monday, August 22

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**08:45-09:00: Opening Session**

**09:00-10:00: Invited talk by Peter Meijer (Metamodal BV): “Camera-based sensory substitution and augmented reality for the blind”**

**10:00-10:30: Morning Tea**

**10:30-12:10: Emerging applications: human body and face analysis**

Paper 38: Srikanth Parupati, Rohith Bakkannagiri, Sriram Sankar and Vinod Kulathumani, “Collaborative acquisition of multi-view face images in real-time using a wireless camera network”

Paper 61: Toshihiko Yamasaki and Tomoaki Matsunami, “Human Attribute Analysis using a Top-view camera based on multi-stage classification”

Paper 65: Shian-Ru Ke, Jenq-Neng Hwang, Kung-Ming Lan and Sheng-Zheng Wang, “View-Invariant 3D Human Body Pose Reconstruction using a Monocular Video Camera”

Paper 42 Sricharan Ramagiri, Rahul Kavi and Vinod Kulathumani, “Real-time multi-view human action recognition using a wireless camera network”

**12:10-14:00: Lunch**

**14:00-15:40: Coverage strategies and handover management in visual sensor networks**

Paper 37: Marcin Bogdanski, Lukas Esterle, Peter R. Lewis, Bernhard Rinner and Xin Yao, "A Socio-Economic Approach to Online Vision Graph Generation and Handover in Distributed Smart Camera Networks"

Paper 23: Aaron Mavrinac and Xiang Chen, "Optimizing Load Distribution in Camera Networks with a Hypergraph Model of Coverage Topology"

Paper 27: Uwe Jaenen, Matthias Huy, Carsten Grenz, Martin Hoffmann and Joerg Haehner, "Distributed Three-Dimensional Camera Alignment in Highly-Dynamical Prioritized Observation Areas"

Paper 31: Claudio Piciarelli, Christian Micheloni and Gian Luca Foresti, "Automatic reconfiguration of video sensor networks for optimal 3D coverage"

**15:40-16:10: Break**

**16:10-18:15: Distributed computer vision and fusion**

Paper 58: Maarten Aerts and Erwin Six, "Staging RANSAC: an indoor camera calibration method"

Paper 9: Jiuqing Wan and Qingyun Liu, "Distributed Data Association in Smart Camera Networks"

Paper 53: Paul J, Shin, Henry Medeiros, Johnny Park and Avinash Kak, "Predictive Duty Cycle Adaptation for Wireless Camera Networks"

Paper 18: Rita Cucchiara, Michele Fornaciari, Razia Haider, Federica Mandreoli and Andrea Prati, "Identification of Intruders in Groups of People using Cameras and RFIDs"

Paper 54: Chih-Wei Chen and Hamid Aghajan, "Multiview Social Behavior Analysis in Work Environments"

## **19:00-20:30: Opening Reception**

*Included in the registration fee.*

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**Tuesday, August 23**

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**08:50-09:00 Opening Message**

**09:00-10:00: Invited talk by Lambert Spaanenburg (Lund University): "The tale of 1000 cameras"**

**10:00-10:30: Morning Tea**

**10:30-12:10: Emerging applications: multi-camera tracking**

Paper 66: Chun-Te Chu, Jenq-Neng Hwang, Kung-Ming Lan and Shen-Zheng Wang, "Tracking Across Multiple Cameras with Overlapping Views Based on Brightness and Tangent Transfer Functions"

Paper 57: Geoffrey Taylor, Ping Wang, Zeeshan Rasheed and Niels Haering, “Rapid Discriminative Detection for Smart Camera Applications”

Paper 6: Siyue Chen and Henry Leung, “Multi-Camera Tracking by Joint Calibration, Association and Fusion”

Paper 49: Kirak Hong, Stephen Smaldone, David Lillethun, Liviu Iftode and Umakishore Ramachandran, “Target Container: A Target-Centric Parallel Programming Abstraction for Video-based Surveillance”

**12:10-14:00: Lunch**

**14:00-16:30: Posters session**

Paper 5: Dominik Rueß, Kristian Manthey and Ralf Reulke, “A Fast and Accurate 3D Feature Tracking System with Wide-baseline Stereo Smart Cameras”

Paper 16: Laurentiu Acasandrei and Angel Barriga, Accelerating “Viola-Jones Face Detection for Embedded and SoC Environments”

Paper 21: Yoichi Tomioka, Atsushi Takara and Hitoshi Kitazawa, “Enhanced Patrol Course Planning Method for Multiple Mobile Surveillance Cameras”

Paper 39: Ali Akbar Zarezadeh and Christophe Bobda, “Probabilistic Framework for Person Tracking on Embedded Distributed Smart Cameras”

Paper 40: Herwig Guggi and Bernhard Rinner, “Distributed Smart Cameras for Hard Real-Time Obstacle Detection in Control Applications”

Paper 53: Paul J, Shin, Henry Medeiros, Johnny Park and Avinash Kak, “Predictive Duty Cycle Adaptation for Wireless Camera Networks”

Paper 15: Michael Wittke, Alvaro Del Amo Jimenez, Sascha Radike, Carsten Grenz and Joerg Haehner, “ENRA: Event-based Network Reconfiguration Algorithm for Active Camera Networks”

Paper 17: Rok Mandeljc, Janez Pers, Matej Kristan and Stanislav Kovacic, “Fusion of Non-Visual Modalities Into the Probabilistic Occupancy Map Framework for Person Localization”

Paper 19: Carmelo Velardo, Claudia Araimo and Jean-Luc Dugelay, “Synthetic and privacy-preserving visualization of video sensor networks output”

Paper 62: Chun-Te Chu, Jenq-Neng Hwang, Shen-Zheng Wang and Yi-Yuan Chen, “Human Tracking by Adaptive Kalman Filtering and Multiple Kernels Tracking with Projected Gradients”

## **14:00-16:30: Demo session**

## **16:00-16:30: Break**

## **16:30-18:10: Smart camera and embedded systems**

Paper 60: Mauricio Casares, Paolo Santinelli, Senem Velipasalar, Andrea Prati and Rita Cucchiara, “Energy-efficient Feedback Tracking on Embedded Smart Cameras by Hardware-level Optimization”

Paper 12: Jorge Fernández-Berni, Ricardo Carmona-Galán, Gustavo Liñán-Cembrano, Ákos Zarándy and Ángel Rodríguez-Vázquez, “Wi-FLIP: A Wireless Smart Camera Based on a Focal-plane Low-power Image Processor”

Paper 71: Jeffrey Blum, Haijian Sun, Adriana Olmos and Jeremy Cooperstock, “End-user viewpoint control of live video from a medical camera array”

Paper 59: Pierre-Jean Lapray, Barthelemy Heyrman, Matthieu Rossé and Dominique Ginjac, “Smart camera design for realtime high dynamic range imaging”

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## **Wednesday, August 24**

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**08:50-09:00 Opening Message**

**09:00-10:00: Invited talk by Rainer Stiefelhagen (Karlsruhe Institute of Technology): “Computers Seeing Humans --- Vision-based Perception of Humans for Smart Environments and Other Applications”**

**10:00-10:30: Morning Tea**

**10:30-12:10: Video coding in visual sensor networks**

Paper 10: Frederik Verbist, Nikos Deligiannis, Marc Jacobs, Joeri Barbarien, Peter Schelkens and Adrian Munteanu, “A Statistical Approach to Create Side Information in Distributed Video Coding”

Paper 44: Edward Shen and Richard Hornsey, “Local Image Quality Metric for a Distributed Smart Camera Network with Overlapping FOVs”

Paper 22: Nikos Deligiannis, Marc Jacobs, Frederik Verbist, Jurgen Slowack, Joeri Barbarien, Rik Van De Walle, Peter Schelkens and

Adrian Munteanu, “Efficient Hash-Driven Wyner-Ziv Video Coding for Visual Sensors”

Paper 20: Ali Akbar Zarezadeh and Christophe Bobda, “Enabling Communication Infrastructure and Protocol on Embedded Distributed Smart Cameras”

**12:10-14:00: Lunch**

**14:00-15:00: Invited talk by Marc De Mey (Ghent University and Royal Flemish Academy of Belgium):  
“Optical Issues in the Paintings of Jan Van Eyck”**

**15:00-18:00: Touristic activity**

*Included in the registration fee.*

**19:30-22:00: Conference dinner**

*Included in the registration fee.*

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**Thursday, August 25**

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**08:50-09:00 Opening Message**

**09:00-10:00: Invited talk by Ben Kröse (Informatics Institute University of Amsterdam): “Distributed Smart Cameras for Health and Weelbeing”**

**10:00-10:30: Morning Tea**

**10:30-11:45: Special Session: Security and Surveillance**

Paper 48: Samuele Martelli, Diego Tosato, Marco Cristani and Vittorio Murino, "FPGA-Based Pedestrian Detection Using Array of Covariance Features"

Paper 50: Li He, Youlu Wang, Senem Velipasalar and M, Cenk Gursoy, "Human Detection Using Mobile Embedded Smart Cameras"

Paper 69: Yan Yang, Farhad Dadgostar, Conrad Sanderson and Brian Lovell, "Summarisation of Surveillance Videos by Key-frame Selection"

**11:45-13:35: Lunch**

**13:35-15:35: PhD forum**

**13:35-15:55 Demo session**

**15:35-15:55: Break**

**15:55-18:00: Visual sensor networks**

Paper 28: Adrian Ilie and Greg Welch, "On-Line Control of Active Camera Networks for Computer Vision Tasks"

Paper 63: Yiming Li and Bir Bhanu, "Fusion of Multiple Trackers in Video Networks"



Paper 25: Faisal Qureshi and Wiktor Starzyk, “Learning Proactive Control Strategies for PTZ Cameras”

Paper 43: Federico Castanedo, Diego Lopez-De-Ipina, Hamid Aghajan and Richard Kleihorst, “Building an Occupancy Model from Sensor Networks in Office Environments”

Paper 34: Jamie Sherrah, Dmitri Kamenetsky and Tony Scoleri, “Evaluation of Similarity Measures for Appearance-Based Multi-Camera Matching”

**18:00-18:15: Best paper award**

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