Special theme:

Image Understanding

Also in this issue:

Keynote:
Image Understanding in the Context of the European Union’s R&D Strategy

Joint ERCIM Actions:
Julien Mairal Receives the 2013 Cor Baayen Award

Research and Innovation:
SECCRIT: Secure Cloud Computing for High Assurance Services
4 Joint ERCIM eMobility and MobiSense Workshop
by Desislava Dimitrova and Torsten Braun

5 IDEALIST - An international ICT Partner Search System and Network of National Contact Points
by Givi Kochoradze

6 ERCIM Security and Trust Management Workshop
by Rafael Accorsi and Silvio Ranise

7 Julien Mairal Receives the 2013 Cor Baayen Award

KEYNOTE
8 Image Understanding – An EU Perspective
by Libor Král

SPECIAL THEME
The special theme section “Image Understanding” has been coordinated by Michal Haindl, Institute of Information Theory and Automation, Academy of Sciences of the Czech Republic, and Josef Kittler, University of Surrey, UK

9 Image Understanding
by Michal Haindl and Josef Kittler

10 Boat Extraction in Harbours From High Resolution Satellite Images Using Marked Point Processes
by Paula Cráciun and Josiane Zerubia

11 FIM: Frustrated Total Internal Reflection Based Imaging for Biomedical Applications
by Benjamin Risse, Xiaoyi Jiang, and Christian Klämbt

12 AXES - Finding Video Clips Using Speech and Image Recognition
by Peggy van der Kreeft, Kay Macquarrie and Martijn Kleppe

14 Random Mosaics for Network Extraction
by Marie-Colette van Lieshout

15 Computer-Aided Leaf Recognition Visual System
by Tomáš Suk, Petr Novotný and Jan Flusser

16 Automatic Recognition of Human Activities in Realistic Videos
by Adrien Gaidon, Zaid Harchaoui and Cordelia Schmid

18 Egovision4Health - Assessing Activities of Daily Living from a Wearable RGB-D Camera for In-Home Health Care Applications
by Grégory Rogez, Deva Ramanan and J. M. M. Montiel

19 Applying Random Matrix Theory Filters on SenseCam Images
by Na Li, Martin Crane, Cathal Gurrin and Heather J. Ruskin

21 Multi-Modal Human Behaviour Analysis
by Sergio Escalera Guerrero
EvAAL Evaluation Workshop
by Francesco Potorti

For the third consecutive year, the EvAAL competition gathered teams from all around the world to compare their systems in the participating living labs. EvAAL, a project embedded into the AALOA association, was led by the Institute of Information and Technologies (ISTI) of CNR (Pisa, IT) and was mostly financed by the universAAL FP7 project.

EvAAL, which stands for Evaluating AAL Systems through Competitive Benchmarking, aims at establishing benchmarks and evaluation metrics to compare Ambient Assisted Living solutions and assess advances in the field.

During the competitions, data were collected in realistic environments, the living labs: the data sets, which are publicly available, can be used by researcher communities as an aid for the simulation and test of their solutions.

This year, the competition was composed of two tracks, a demo, and a final workshop:
• Competition on Indoor Localization and Tracking for AAL held on 1-5 July 2013 at the Living Lab of the Polytechnic University of Madrid
• Competition on Activity Recognition for AAL, held on 8-12 July 2013 at the CiAmI Living Lab in Valencia
• Demo on Companion Robots for AAL, held on 30 July 2013 at Domocasa Lab in Pisa
• EvAAL workshop, held as a side event of the AAL Forum in September 2013, in Norrköping.

More information:
http://evaal.aaloa.org

Joint ERCIM, ARTEMIS, Euromirco Workshops
by Erwin Schoitsch

SEAA 2013
A special workshop session on Teaching, Education and Training for Dependable Embedded and Cyber-physical Systems was held in cooperation with the ERCIM Dependable Embedded Systems Working Group at the 39th Euromicro Conference on Software Engineering and Advanced Applications (SEAA 2013) Santander, Spain September 4-6, 2013. The workshop session was part of the regular session scheme of SEAA 2013. It included four presentations:
• “Efficient embedded systems education by adopting component based software development paradigm” by Sasikumar Punnekakat, Mälardalen University, Sweden
• “Reuse in Safety Critical Systems: Educational Use Case” by Miren Illarramendi Rezabal, Xabier Elkoro-barrutia Letona and Leire Etxeberria, University of Mondragon, Spain
• “Teaching and Training Formal Methods for Safety Critical Systems” by Michael Lipacezewski and Frank Ortmeier, Otto von Guericke University, Magdeburg, Germany
• “European Perspectives on Teaching, Education and Training for Dependable Embedded and Cyber-physical Systems” by Erwin Schoitsch, AIT, Vienna, and Amund Skavhaug, NTNU, Norway.

The papers will be published in the conference proceedings published by IEEE.

SAFECOMP 2013
An ERCIM/EWICS/ARTEMIS workshop on Dependable Embedded and Cyber-physical Systems (DECS) attracted 26 participants at the 32nd International Conference on Computer Safety, Reliability and Security (SAFECOMP 2013), Toulouse, France, 24 September 2013

After an introduction on “ERCIM, EWICS, ARTEMIS: Embedded Systems Safety, Security and European Strategy” followed a session with four papers on “Dependable Embedded Systems Applications”. One part of workshop was then dedicated to Robotics and Autonomous Systems, mainly reporting from the ARTEMIS project “R3-COP” (Resilient Reasoning Robotic Co-operating Systems), with two sessions (four papers each). Another part of the workshop covered “Systems Safety Analysis and Fault Tolerance” with the presentation of three papers. Proceedings will be available electronically in the HAL Open Archives (http://kwz/me/5q).

Links:
http://seaa2013.ii.metu.edu.tr/
http://kwz.me/0F

Please contact:
Erwin Schoitsch
ERCIM DES WG Chair
AIT Austrian Institute of Technology
GmbH/AARIT
E-mail: Erwin.Schoitsch@ait.ac.at

Call for Participation
IEEE International Symposium on Signal Processing and Information Technology

Athens, 12-15 December 2013

The IEEE ISSPIT 2013 is the thirteenth in a series of international symposia aiming at the coverage of key aspects in the fields of signal processing and information technology.

Topics include:
• Signal processing theory and methods
• Signal processing for communications
• DSP architectures and implementation
• DSP for space applications/highly available architectures
• Multimedia signal processing
• Image and multidimensional signal processing
• Audio and electro acoustics
• Sensor array and multi-channel
• Speech processing
• Radar signal processing
• Neural networks
• Internet software architectures
• Multimedia and image-based systems
• Mobile computing and applications
• E-Commerce and pricing
• etc.

More information:
http://www.isspit.org/isspit/2013/