

The 9th ACM International Conference on PErvasive
Technologies Related to Assistive Environments

PETRA 2016

Conference Program

June 29 – July 1, 2016
Corfu, Greece

Organized by

The University of Texas at Arlington, Arlington, Texas, USA

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The National Science Foundation (NSF), USA

The College of Engineering, University of Texas at Arlington, USA

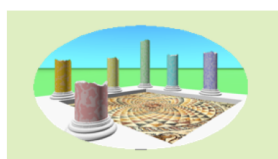
The Human Centered Computing Laboratory (Heracleia) at UTA, USA

The iPerform Industry-University NSF Center at UTA

The National Center for Scientific Research (NCSR)-Demokritos, Greece

University of Piraeus (Department of Digital Systems), Greece

The Ionian University, Greece



Heracleia – Human Centered Computing Lab



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Dear Colleagues,

Welcome to the *9th ACM International Conference on Pervasive Technologies Related to Assistive Environments*, June 29 – July 1, 2016 in Corfu, Greece. We wish to acknowledge support from the National Science Foundation (NSF) that has awarded us a Doctoral Consortium grant to unable US-based graduate student authors to travel and present their results to the conference. We also wish to acknowledge support by the Dean of the College of Engineering at the University of Texas at Arlington (UTA) for travel grants offered to several UTA students.

The PETRA Conference brings together researchers from diverse disciplines who use pervasive computing technologies to improve quality of life and enhance human performance. Results presented include not only basic research in computer vision, machine learning, data mining and big data, but also engineering applications and software solutions that improve, for example, vocational safety and productivity, physical or mental rehabilitation, better drug treatment, and other areas. The conference addresses the needs of both healthy individuals, as well as those with special needs, such as providing safe in-home care for the elderly, or persons with Dementia, Alzheimer's, Parkinson's, chronic arthritis, or other conditions. PETRA also addresses the growing need of people living and working in an increasingly crowded and complex world who require inclusiveness and connectivity with the rest of the world. In summary, PETRA's novel computer-based methods and tools can help people build, stone by stone (PETRA means stone in GREEK), new ways of life to survive in an increasingly challenging world. Best Paper Awards will be presented at the end of the conference for the categories of: *Best Technical Paper*, *Best Paper for Novelty*, *Best Student Paper*, and *Best Poster Paper*.

Invited Speakers



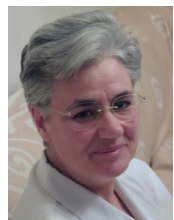
Rada Mihalcea is a Professor in the Computer Science and Engineering department at the University of Michigan. Her research interests are in computational linguistics, with a focus on lexical semantics, graph-based algorithms for natural language processing, and multilingual natural language processing. She serves or has served on the editorial boards of the Journals of Computational Linguistics, Language Resources and Evaluations, Natural Language Engineering, Research in Language in Computation, IEEE Transactions on Affective Computing, and Transactions of the Association for Computational Linguistics. She was a program co-chair for the Conferences of the Association for Computational Linguistics (2011) and the Empirical Methods in Natural Language Processing (2009), and general chair for the Conference of the North American Chapter of the Association for Computational Linguistics (2015). She is the recipient of a National Science Foundation CAREER award (2008) and a Presidential Early Career Award for Scientists and Engineers (2009).



Mihai Burzo is an Assistant Professor of Mechanical Engineering at the University of Michigan-Flint. Prior to joining University of Michigan in 2013 he was an Assistant Professor at University of North Texas. His research interests include heat transfer in microelectronics and nanostructures, thermal properties of thin films of new and existing materials, multimodal sensing of human behavior, computational modeling of forced and natural heat convection. He has published over 50 articles in peer reviewed journals and conference proceedings. He is the recipient of several awards, including the 2006 Harvey Rosten Award For Excellence for “outstanding work in the field of thermal analysis of electronic equipment”, best paper award at the Semitherm conference in 2013 and 2006, Young Engineer of the Year from the North Texas Section of ASME (2006), and Leadership Award from SMU (2002).



Anand Puppala currently serves as Associate Dean - Research in College of Engineering and is a Distinguished Teaching and Scholar Professor in the Civil Engineering department at the University of Texas at Arlington (UTA) in Texas, USA. Dr. Puppala served as President of United States Universities Council on Geotechnical Education and Research (USUCGER) from 2007-2009. He also chaired American Society of Civil Engineers (ASCE)'s Geotechnical Institute's “Engineering Geology and Site Characterization” committee from 2003-2006. Dr. Puppala is the Chair of Soil Mechanics section of the National Academy of Science's Transportation Research Board (TRB). He has been conducting research on sustainable utilization of recycled materials, dams and embankments, stabilization of expansive soils, in situ intrusive methods for site characterization, and pavement material characterization studies. Dr. Puppala's has 330+ publications including 165 Journal and Geotechnical Special Publications.



Magda Tsolaki, MD, PhD, has been a Professor of Neurology since 2010, a Neuropsychiatrist since 1983 and she has worked at the Aristotle University of Thessaloniki since 1982. She has been the main author/co-author of 37 Books, has participated with 372 abstracts in Greek Conferences, with 296 abstracts in English International or European Conferences, is the first author/co-author of 178 papers in Greek journals, and in 234 international journals. She has been a reviewer for Conferences and Journals (117) and has organized 32 conferences on AD. She has formed the Greek Alzheimer Association in 1995 and the Greek Federation of Alzheimer's Disease in 2007. She has given 310 lectures throughout Greece, as well as on TV and radio. She has participated in 29 research programs and 31 clinical trials. In total, she has received 36 awards.

	Room 1 (KERKYRA Ballroom)	Room 2 (NAYSIKA Ballroom)
09:00-09:30	<p align="center">Conference Opening</p> <p align="center">Fillia Makedon, Conference Chair, University of Texas Arlington Ilias Maglogiannis, University of Piraeus, Department of Digital Systems, Greece (Program Committee Co-Chair) Vangelis Metsis, Texas State University, Department of Computer Science (Program Committee Co-Chair)</p>	
09:30-10:30	<p>Session A: <u>Invited Lecture</u>: Speakers: <i>Rada Mihalcea</i> (University of Michigan) and <i>Mihai Burzo</i> (University of Michigan-Flint) Title: “<i>Deception Detection Using Real-Life Trial Data</i>” Session Chair: <i>Fillia Makedon</i></p>	
10:30-10:50	<p align="center">Coffee Break (20 minutes)</p>	
10:50-12:50	<p>Session B: <u>Activity Recognition, Human Tracking and Localization</u> Session Chair: <i>Panos Papapetrou</i></p> <p>B-1 – A Direction Based Framework for Trajectory Data Analysis. (F) Praveen Tripathi, Madhuri Debnath, Ramez Elmasri</p> <p>B-2 Qualitative Tracking of Objects in a Smart Home - A Passive RFID Approach Based on Decision Trees. (F) Frédéric Bergeron, Kévin Bouchard, Sébastien Gaboury, Sylvain Giroux, Bruno Bouchard</p> <p>B-3 - Towards User Activity Recognition Through Energy Usage Analysis And Complex Event Processing. (F) Sylvain Hallé, Sébastien Goboury, Bruno Bouchard</p> <p>B-4 - Silhouette Labeling and Tracking in Calibrated Omnidirectional Video Sequences. (F) Konstantinos Delibasis, Ilias Maglogiannis, Vasilis Plagianakos</p> <p>B-5 - Complete Coverage Path Planning for Arbitrary Number of Unmanned Aerial Vehicles. (S) Dimitris Dedousis, Vana Kalogeraki</p> <p>B-6 - Real-Time Indoor Localization in Smart Homes Using Ultrasound Technology. (S) Florian Sainjeon, Sébastien Gaboury, Bruno Bouchard</p>	<p>Session C: <u>Assistive Robotic Systems and Human-Robot Interaction</u> Session Chair: <i>Maureen Simmonds</i></p> <p>C-1 - Joint Behavioural Control of Autonomous Multi-Robot Systems for Lead-Follower Formation to Improve Human-Robot Interaction. (F) Nnennaya Udochu, Etse-Oghena Akpaibor, Akash Pratap Borate, Aakash Govind Deshpande, Frank Lewis</p> <p>C-2 - Dynamic Adjustment of Physical Exercises Based on Performance Using the Proficio Robotic Arm. (F) Elham Saraee, Margrit Betke</p> <p>C-3 - A Motion and Force Analysis System for Human Upper-limb Exercises. (F) Michail Theofanidis, Alexandros Lioulemes, Fillia Makedon</p> <p>C-4 - Towards an Assistive System for Human – Exoskeleton Interaction. (S) Ciprian Radu, Ciprian Candea, Gabriela Candea</p> <p>C-5 - Design of a New Human-Centered Rehabilitation Machine. (S) Jinhua She, Fajian Wu, Toshihiro Mita, Hiroshi Hashimoto, Min Wu</p>
12:50-14:20	<p align="center">Lunch Break (1 hour 30 minutes)</p>	

FIRST DAY: June 29

	Room 1 (KERKYRA Ballroom)	Room 2 (NAYSIKA Ballroom)
14:20-15:10	Poster Session & Coffee Break (50 minutes)	
15:10-17:00	<p><u>Session D: <i>Pattern Recognition in Assistive Technology Applications</i></u></p> <p>Session Chair: Theodore Giannakopoulos</p> <p>D-1 - Evaluation of Deep Learning based Pose Estimation for Sign Language. (F) Srujana Gattupalli, Amir Ghaderi, Vassilis Athitsos</p> <p>D-2 - Predicting Active Facial Expressivity in People with Parkinson's Disease. (S) Ajjen Joshi, Linda Tickle-Degnen, Sarah Gunnery, Terry Ellis, Margrit Betke</p> <p>D-3 - A New Approach of Facial Expression Recognition for Ambient Assisted Living. (F) Yacine Yaddaden, Abdenour Bouzouane, Mehdi Adda, Bruno Bouchard</p> <p>D-4 - Cognitive Errors Detection: Mining Behavioral Data Stream of People with Cognitive Impairment. (F) Jianguo Hao, Sébastien Gaboury, Bruno Bouchard</p>	<p><u>Session W1: <i>SIPDA: Vision Systems and Data Analytics for Life Quality Improvement Workshop</i></u></p> <p>Workshop Chair: Anastasios Doulamis</p> <p>W1-1 - MyoDrive – A new way of interacting with mobile devices. (S) Akilesh Rajavenkatanarayanan, Ashwin Ramesh Babu, Yoga Vignesh Surathi, Michalis Papakostas</p> <p>W1-2 - Examining User Experiences in a Mobile Augmented Reality Tourist Guide. (F) David Střelák, Filip Škola, Fotis Liarokapis</p> <p>W1-3 - Vision Based Fall Detector Exploiting Deep Learning. (F) Nikolaos Doulamis</p> <p>W1-4 - Real Time Earthquake's Survivor Detection using a Miniaturized LWIR Camera. (S) Panagiotis Agrafiotis, Anastasios Doulamis, George Athanasiou, Angelos Amditis</p>
	<p>D-5 - A Survey of Sensing Modalities for Human Activity, Behavior, and Physiological Monitoring. (F) Alexandros Lioulemes, Michalis Papakostas, Shawn Gieser, Theodora Toutountzi, Maher Abujelala, Christopher Collander, Sanika Gupta, Christopher McMurrough, Fillia Makedon</p> <p>D-6 - An Application for Measuring Frailty of Myeloma Cancer Patients. (S) Andrea Corradini, Martin Bøgelund Hansen, Toma Savic</p>	<p><u>1st NSF Doctoral Consortium Session (Room 2) [16:30 -17:00]</u></p> <p>Session Chair: Eric Becker</p>
20:00-22:00	Welcome Reception	

SECOND DAY: June 30

	Room 1 (KERKYRA Ballroom)	Room 2 (NAYSIKA Ballroom)
09:00-09:50	Session E: <u>Invited Lecture: Anand Puppala, “Lessons Learned from Instrumentation and Monitoring of Civil Infrastructure”</u> University of Texas at Arlington Session Chair: Vassilis Athitsos	
09:50-10:10	Coffee Break (20 minutes)	
10:10-12:10	Session F: <u>Accessibility Tools, Methods and Applications</u> Session Chair: Margrit Betke F-1 - TouchSurfaceModels: Capacitive Sensing Objects by 3D Printers to Trace Tactile Exploration of Blind People. (F) Timo Götzelmann, Christopher Althaus F-2 - Accessible Tourism for the Deaf via Mobile Apps. (F) Franco Milicchio, Mattia Proserpi F-3 - Blind Sight Navigator: A New Orthosis for People with Visual Impairments. (S) Amélie Boudreault, Bruno Bouchard, Sébastien Gaboury, Julie Bouchard, Kim Charest F-4 - BCE-Arabic-v1 Dataset: A Step Towards Interpreting Arabic Document Images for People with Visual Impairments. (F) Rana Saad, Randa Elanwar, N. S. Abdel Kader, Samia Mashali, Margrit Betke F-5 - BlindHelper: A Pedestrian Navigation System for Blind and Visually Impaired People. (S) Apostolos Meliones, Costas Filios F-6 - An Adaptive Smart System to Foster Disabled and Elderly People in Kitchen-Related Task. (S) Francesca Gulla', Silvia Ceccacci, Roberto Menghi, Michele Germani	Session W2: <u>NOTION: Human Behaviour Monitoring, Interpretation and Understanding Workshop (1ST Session)</u> Workshop Chair: Ahmad Lotfi W2-1 - A New Way to Build Multifaceted Ontologies for Elderly Care. (F) Caroline Langensiepen, Ahmad Lotfi, Saisakul Chernbumroong, Pedro Moreno, Enrique Gomez W2-2 - Video Based Fall Detection with Enhanced Motion History Images. (F) Suad Albawendi, Kofi Appiah, Heather Powell, Ahmad Lotfi W2-3 - Multimodal Analysis of Serious Game for Cognitive and Physiological Assessment. (F) Benjamin Chebaa, Alexandros Lioulemes, Maher Abujelala, Dylan Ebert, Scott Phan, Eric Becker, Fillia Makedon W2-4 - Determining Behavioural Trends in an Ambient Intelligence Environment. (F) Abubaker Elbayoudi, Ahmad Lotfi, Caroline Langensiepen, Kofi Appiah
12:10-13:40	Lunch Break (1 hour 30 minutes)	

SECOND DAY: June 30

	Room 1 (KERKYRA Ballroom)	Room 2 (NAYSIKA Ballroom)
13:40-15:30	<p>Session G: Human Affect, Physiology and Biosignal Analysis</p> <p>Session Chair: Timo Götzelmann</p> <p>G-1 - Human Acute Stress Detection via Integration of Physiological Signals and Thermal Imaging. (F) Mohamed Abouelenien, Mihai Burzo, Rada Mihalcea</p> <p>G-2 - Brain-EE: Brain Enjoyment Evaluation using Commercial EEG Headband. (F) Maher Abujelala, Cheryl Abellanoza, Aayush Sharma, Fillia Makedon</p> <p>G-3 - Usability of EEG Systems: User Experience Study. (S) Krzysztof Izdebski, Anderson Oliviera, Bryan Schlink, Petr Legkov, Silke Kärcher, David W. Hairston, Daniel Ferris, Peter König</p> <p>G-4 - Analyzing Thermal and Visual Clues of Deception for a Non-Contact Deception Detection Approach. (S) Mohamed Abouelenien, Rada Mihalcea, Mihai Burzo</p> <p>G-5 - SeismoPen: Pulse Recognition via a Smart Pen. (S) Denys J.C. Matthies, Marian Haescher, Gerald Bieber, Ralf Salomon, Bodo Urban</p> <p>G-6 - A Multi Platform Pain Assessment Tool using Bespoke Gaming Sensors. (S) Fotios Spyridonis, Tor Morten Groenli, Ioannis Th. Paraskevopoulos, Gheorghita Ghinea</p>	<p>Session W2: <u>NOTION: Human Behaviour Monitoring, Interpretation and Understanding Workshop</u> (2ND session)</p> <p>Workshop Chair: Ahmad Lotfi</p> <p>W2-5 - Virtual Carer: Personalized Support for Informal Caregivers of Elderly. (S) Pedro A. Moreno, Saisakul Chernbumroong, Caroline Langensiepen, Ahmad Lotfi, Enrique J. Gomez</p> <p>W2-6 - Fusing Active Orientation Models and Mid-term Audio Features for Automatic Depression Estimation. (S) Christos Smailis, Nikolaos Sarafianos, Theodoros Giannakopoulos, Stavros Perantonis</p> <p>W2-7 - An Interactive Learning and Adaptation Framework for Adaptive Robot Assisted Therapy. (S) Konstantinos Tsiakas, Michalis Papakostas, Benjamin Chebaa, Dylan Ebert, Vangelis Karkaletsis, Fillia Makedon</p> <p>W2-8 - A ROS Framework for Audio-Based Activity Recognition. (S) Theodoros Giannakopoulos, Georgios Siantikos</p>
15:30-16:00	<p>Coffee Break & 2nd NSF Doctoral Consortium Session (30 minutes)</p>	

SECOND DAY: June 30

	Room 1 (KERKYRA Ballroom)	Room 2 (NAYSIKA Ballroom)
16:00-17:30	<p>Session H: <u>Multimodal Interfaces and Human-Computer Interaction</u></p> <p>Session Chair: Oliver Korn</p> <p>H-1 - A System for Multimodal Assistive Domotics and Augmentative and Alternative Communication. (F) Alexandre Bissoli, Yves Coelho, Teodiano Bastos-Filho</p> <p>H-2 - Haptic, Auditory, or Visual? Towards Optimal Error Feedback at Manual Assembly Workplaces. (F) Markus Funk, Juana Heusler, Elif Akcay, Klaus Weiland, Albrecht Schmidt</p> <p>H-3 - Using Head-Mounted Displays and In-Situ Projection for Assistive Systems – A Comparison. (F) Sebastian Büttner, Markus Funk, Oliver Sand, Carsten Röcker</p> <p>H-4 - Mobile In-Situ Pick-by-Vision: Order Picking Support using a Projector Helmet. (S) Markus Funk, Sven Mayer, Michael Nistor, Albrecht Schmidt</p> <p>H-5 - ADAMAAS-Towards Smart Glasses for Mobile and Personalized Action Assistance. (S) Kai Essig, Benjamin Strengge, Thomas Schack</p>	<p>Session W3: <u>PRO-NOW: Large Projects Workshop</u></p> <p>Workshop Chair: Ilias Maglogiannis and Fillia Makedon</p> <p>W3-1 - (<u>Invited Presentation</u>) RADIO: Robots in Assisted Living Environments, EU Project, Vangelis Karkaletsis, National Center for Scientific Research (NCSR)-Demokritos (F)</p> <p>Remotely monitoring for early symptoms of cognitive impairment, frailty and social exclusion can help elderly people safely prolong independent living, as long as it is non-obtrusive. The RADIO project (http://radio-project.eu/) integrates home automation and mobile robotics technologies into a 'RADIO Home' that is able to assist and monitor. The talk presents the technical challenges in implementing this idea and the current status of implementation and piloting. http://radio-project.eu/publications</p> <p>W3-2 Learning from Swedish Healthcare Data. (S) Lars Asker, Panagiotis Papapetrou, Henrik Bostrom</p> <p>W3-3 METALOGUE: A Multimodal Learning Journey. (S) Dimitris Koryzis, Vasileios Svolopoulos, Dimitris Spiliotopoulos</p> <p>W3-4 A New Application of Machine Learning in Health care. (S) Kaj-Mikael Björk, Emil Eirola, Yoan Miche, Amaury Lendasse</p>
21:00	<p>BBQ Gala Dinner</p> <p>Location: By Hotel Pool</p>	

THIRD DAY: July 1

	Room 1 (KERKYRA Ballroom)	Room 2 (NAYSIKA Ballroom)
9:00-10:00	Session I: <u>Invited Lecture</u>: Speaker: Magda Tsolaki, University of Thessaloniki, Greece Title: “Where are we with Assistive Technology in Dementia Today” Session Chair: <i>Ilias Maglogiannis</i>	
10:00-10:20	Coffee Break (20 minutes)	
10:20-12:20	Session J: <u>Pervasive Systems for the Aged & Smart Health Devices</u> Session Chair: <i>Gerald Bieber</i> J-1 - Computerized Assessment of the Skills of Impaired and Elderly Workers. A Tool Survey and Comparative Study. (F) Oliver Korn, Leslie Tso, Christos Papagrigoriou, Yannic Sowoidnich, Robert Konrad, Albrecht Schmidt J-2 - Motivation Effect of Social Media Posts about Well-being and Healthy Living. (S) Dimitris Spiliotopoulos, Paraskevi Fragopoulou J-3 - A Technology-enhanced Service for Person-centered Dementia Care: Preliminary Results from a Field Trial. (S) Hanne E. Thomassen, Babak Farshchian J-4 - FindMyDoc: A P2P Platform Disrupting Traditional Healthcare Models and Matching Patients to Doctors. (S) Myrsini Glinos, Svante Dahlberg, Nikolaos Tselas, Panagiotis Papapetrou J-5 - Empowerment or Concealed Compliance? A Review of Literature on Mobile ICT Solutions for Patient Empowerment. (S) Thor Jarle J. Skinstad, Babak Farshchian J-6 - MediQoC: A Data Driven, Hospital Quality of Care Portal for the Patient Community. (S) Maureen Simmonds, Dimitrios Zikos, Sreehari Hegden J-7 - A Statistical Approach for Activity Recognition in Smart Homes. (F) Fadi Al Machot	Session W4: <u>BRAIN-TECH: Intervention Technologies to Address Neural Deterioration, Trauma or Aging Workshop</u> Workshop Chairs: <i>Eric Becker and Fillia Makedon</i> W4-1 - A New Method for the Assessment of Discourse Comprehension Abilities of Older Adults with Mild Cognitive Impairment. (S) Sofia Segkouli, Ioannis Paliokas, Dimitrios Tzovaras, Charalampos Karagiannidis, Magda Tsolaki W4-2 - Interactive Learning and Adaptation for Robot Assisted Therapy for People with Dementia. (S) Konstantinos Tsiakas, Cheryl Abellanoza, Fillia Makedon W4-3 - Exploring the Potential of Programming Tasks to Benefit Patients with Mild Cognitive Impairment. (S) Stavros Demetriadis, Thrasyvoulos Tsiatsos, Theodosios Sapounidis, Alexandros Gerontidis, Magda Tsolaki W4-4 - Enhancing Memory Retention by Increasing Alpha and Decreasing Beta Brainwaves using Music. (S) Tasnim Makada, Danyal Ozair, Mudassir Mohammed, Cheryl Abellanoza W4-5 - Self-Calibrating Protocols as Diagnostic Aids for Personal Medicine, Neurological Conditions, and Pain Assessment. (S) Thrasyvoulos Karydis, Simmie L. Foster, Andreas Mershin W4-6 Influencing Human Behavior by Means of Subliminal Stimuli using Scent, Light and Brain Computer Interfaces. (S) Judith Amores Fernandez, Pattie Maes W4-7 (<u>Invited Presentation</u>) On the Power of the MUSE EEG Sensor (S) By Dr. Graeme Moffat, Chief Scientist of Muse, and presented by MIT's Dr. Andreas Mershin and Thrasyvoulos Karydis (MIT Media Lab)
12:20-13:50	Lunch Break (1 hour 30 minutes) & 3rd NSF Doctoral Consortium Session	

THIRD DAY: July 1

	Room 1 (KERKYRA Ballroom)	Room 2 (NAYSIKA Ballroom)
13:50-15:40	<p>Session K: <u>Telepresence, Virtual and Augmented Reality</u> Session Chair: Mihai Burzo</p> <p>K-1 - A Grounded Approach for Applying Behavior Change Techniques in Mobile Cardiac Tele-Rehabilitation. (F) Supraja Sankaran, Ines Frederix, Mieke Haesen, Paul Dendale, Kris Luyten, Karin Coninx</p> <p>K-2 - The Role of the Vocal Stream in Telepresence Communication. (S) Banan Bamoallem, Andrew Wodehouse</p> <p>K-3 - An Interim Analysis of the Use of Virtual Reality to Enhance Upper Limb Prosthetic Training and Rehabilitation. (S), Ashley Knight, Stephanie Carey, Rajiv Dubey</p> <p>K-4 - Ogma – A Virtual Reality Language Acquisition System. (S) Dylan Ebert, Sanika Gupta, Fillia Makedon</p> <p>K-5 - Virtual Reality User Experience as a Deterrent for Smartphone Use While Driving. (S) David Morley, Grayson Lawrence, Scott Smith</p> <p>K-6 - Exploring the Optimal Point of View in Third Person Out-of-Body Experiences. (S) Thomas Kosch, Robin Boldt, Matthias Hoppe, Pascal Knierim, Markus Funk</p>	<p>Session W5: <u>AHA: Active and Healthy Aging Living Labs Workshop</u> Workshop Chair: Evdokimos Konstantinidis</p> <p>W5-1 - Exploring User Requirements for a Lower Body Soft Exoskeleton to Assist Mobility. (F) Valerie Power, Leonard O'Sullivan, Adam de Eyto, Samuel Schülein, Corien Nikamp, Christoph Bauer, Jeannette Mueller, Jesús Ortiz</p> <p>W5-2 - Life-long Housing Design: User Feedback Evaluations of Smart objects and Accessible houses for Healthy Ageing. (F) Matteo Zallio, Niccolò Casiddu</p> <p>W5-3 - Testing Intelligent Solutions for the Ambient Assisted Living in a Simulator. (F) Paolo Sernani, Davide Calvaresi, Paolo Calvaresi, Matteo Pierdicca, Enrico Morbidelli, Aldo Franco Dragoni</p> <p>W5-4 - A Living Lab Infrastructure for Investigating Activity Monitoring Needs in Service Robot Applications. (F) Manolis Vasileiadis, Dimitrios Giakoumis, Konstantinos Votis, Dimitrios Tzovaras</p> <p>W5-5 - Thessaloniki Active and Healthy Ageing Living Lab: The Roadmap from a Specific Project to a Living Lab Towards Openness. (S) Evdokimos Konstantinidis, Antonis Billis, Charalambos Bratsas, Anastasios Siountas, Panagiotis Bamidis</p> <p>W5-6 - Moving from Lab Testing of Active & Healthy Ageing Technologies to Real-life Implementation. (S) Antonis Billis, Evdokimos Konstantinidis, Charalambos Bratsas, Anastasios Siountas, Panagiotis Bamidis</p>
15:40-16:00	Coffee Break (20 minutes)	
16:00-16:50	<p>PANEL : NSF (CI-P) Sponsored Panel (Room 2 - 50 minutes) Title: <i>Community-Based Development of Multimodal Human Activity Research Repositories</i> Panel chairs: <i>Vassilis Athitsos and Fillia Makedon</i></p>	
16:50-17:20	<p>Conference Closing & Awards Ceremony (Room 2 - 30 minutes) <i>Best Technical Paper; Best Paper for Novelty; Best Student Paper</i></p>	
<p>Please Take the Online Survey</p> <p>https://goo.gl/uCN6lU</p> 		



Accepted Posters

- P1. Approximation Algorithms for the Vehicle Routing Problem with Time Windows, Capacity Constraint and Unlimited Number of Vehicles.** Bogdan Armaselu, Ovidiu Daescu
- P2. Simultaneous Shear/Pressure Antenna Sensor.** Haiying Huang, Jun Yao, Shahnavaz Eilbeigi
- P3. A Big-Data Platform for Medical Knowledge Extraction from Electronic Health Records: Automatic Assignment of ICD-9 Codes.** Costas Sideris, Sakib Shaikh, Haik Kalantarian, Majid Sarrafzadeh
- P4. ASCMEI.T. – An Online Tool to Capture New Digital and Technological Ideas and Facilitate the Development of New Products to Help Individuals on the Autistic Spectrum.** Lisa Austin, Mark Brosnan, Sarah Parsons, Nicola Yuill, Judith Good
- P5. A Novel Split Bregman Algorithm for MRI Denoising Task in an e-Health System.** Rosanna Campagna, Serena Crisci, Salvatore Cuomo, Pasquale De Michele, Ardelio Galletti, Livia Marcellino, Aniello Murano
- P6. ICU: A Tool for Intent Filtering on Android devices.** Evita Bakopoulou, Panagiotis Thanopoulos, Ioannis Boutsis, Vana Kalogeraki
- P7. Linking Population Models with Public Health Related Control Programs. The Example of Mosquito Population Expansion in Corfu using LORES.** Antonia Spiridonidou, Ioanna Avloniti, Romanos Kalamatianos, Markos Avlonitis
- P8. Verbal or Visual Cues: Impacts of Familiarity and Attention on Efficiency.** Simon Turcotte, Julie Bouchard, Jessica Lapointe, Bruno Bouchard
- P9. Vector Plain Model.** Sylvia Poulimenou, Sozon Papavlasopoulos, Sarantos Kapidakis, Marios Poulos
- P10. EyeOn: An Activity Recognition System using MYO Armband**
Theodora Toutountzi, Chris Collander, Scott Phan, Fillia Makedon
- P11. Interaction Modelling for Wearable Assistive Devices.** Bas J. de Kruif, Leonard O'Sullivan, Emilio Schmidhauser, Konrad Stadler
- P12. “Interactive Memories” – Technology-aided Reminiscence Therapy for People with Dementia.** Peter Klein, Martina Uhlig
- P13. Remote Assistance for Blind Users in Daily Life: A Survey about Be My Eyes.** Mauro Avila, Katrin Wolf, Anke Brock, Niels Henze
- P14. Real-Time Constraints for Activities of Daily Living Recognition.** Frederic Bergeron, Kevin Bouchard, Sebastien Gaboury, Sylvain Giroux, Bruno Bouchard
- P15. Real-Life Constraints in Neuro Processing.** Nikola Serbedzija
- P16. Kinect Versus Proficio: Measuring Hand Position During Exercise Monitoring.** Elham Saraee, Kratesh Ramrakhiani, Ashutosh Sanan, Saurabh Singh, Margrit Betke
- P17. Pilot Study: User Acceptance of a Virtual Coach in a Mirror by Elderly Persons with Dementia.** Dennis Bouvier, Jessica Hinz, Cynthia Schmidt
- P18. Connecting a Consumer Brain-Computer Interface to an Internet-of-Things Ecosystem.** Eirini Mathe, Evaggelos Spyrou
- P19. CPLAY2 – An HCI Game System for the Assessment and Intervention of Children with Cerebral Palsy.** Arth Vyas, Arun Gopinathan, Manasa Nimmagadda, Michalis Papakostas, Fillia Makedon
- P20. Genre-Ation: A Music Genre Identification Application.** Milind Bhattacharya, Sravanthi Garikipati, Meena Valisekka, Michalis Papakostas
- P21. HTKS Game for executive functions disorder using NAO Robot.** Ajay Arjun Baalakrishnan Kalaivani, Anil Kumar Mullapudi, Dylan Ebert, Navaneet Phadnis, Rahul Middha

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









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