



GOODTECHS

Smart Objects and Technologies
for Social Good

Conference on Smart Objects and Technologies for Social Good

NOVEMBER 30–DECEMBER 1, 2016

VENICE, ITALY

INTERNET OF THINGS

SMART CITIES

E-HEALTH

APPLICATIONS FOR FUTURE INTERNET



RESEARCH MEETS INNOVATION

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WELCOME MESSAGE

GENERAL CHAIRS

Dear colleagues,

It is our honor and pleasure to welcome everyone to the GOODTECHS 2016 Conference. This is the 2nd edition of a conference that wants to become a point of attraction for researchers in the area and it is held in the beautiful city of Venice, a worldwide renowned historical, academic and cultural center.

In GOODTECHS we are interested in experiences with the design, implementation, deployment, operation and evaluation of smart objects and technologies for social good. Clearly, we are not considering only the so called first world as the scenario for this evolution; we also refer to those areas where ICT is currently less widespread, hoping that it may represent a societal development opportunity rather than a source for further divide.

It is our honor to have prominent international scholars as speakers. The conference program embodies technical papers selected through peer reviews by the TPC members and keynote speakers that will provide even more insight into this area.

We would like to thank the EAI for the support and all the members of the conference committees and the reviewers for their dedicated and passionate work. None of this would happen without the support and curiosity of the authors that have sent their papers to this event.

Finally, we would like to encourage current and future authors to continue working in this direction and to participate in forums like this conference to exchange knowledge and experiences, and to make ICT actually helpful to society.

Ombretta Gaggi, Università degli Studi di Padova, Italy
Pietro Manzoni, Universitat Politècnica de València, Spain
Claudio Palazzi, Università degli Studi di Padova, Italy
GOODTECHS 2016 General Co-Chairs

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Dario Maggiorini, Associate Prof. at the University of Milan

Dario Maggiorini is Associate Professor at the University of Milan, Italy. He joined the Department of Computer Science in 2003 where he is now co-directing the PONG - Playlab fOr inNOvation in Games. In the past, Dario has been working on the Quality of Service in IP networks, multimedia content delivery, application-level networking, and software architectures for service provisioning. Currently, his research interests focus mainly on software and network architecture to support entertainment applications and on content, service, and gaming provisioning in distributed environments.

Laura Anna Ripamonti, Assistant Prof. at the University of Milano

Laura Anna Ripamonti is Assistant Professor at the Department of Computer Science of the Università di Milano - Italy, where she is scientific coordinator, together with Dr. Dario Maggiorini, of the research laboratory PONG - Playlab fOr inNOvation in Games and of a master degree on Video Games. She has graduated in Engineering and Managerial Sciences at Politecnico di Milano and then got a PhD in Computer Science from Università degli Studi di Milano - Italy. Her research interests focus on video games, with a special interest for MMORPGs (Massively Multiplayer Online Role-Playing Games) and Applied Games. In particular, she investigates the relations connecting game design issues to social interaction and AI applications. Since 2010, she lectures in game design to master students in computer science.

Dr. Gabriele Elia, Head of Open Innovation & Research at TIM

The title of his speech "Internet of Things, BigData, Artificial Intelligence, Security and Privacy" Dr. Elia manages the Open Innovation research group at the Innovation Department of Telecom Italia, coordinating the operations of TIM Wcap, one of the main accelerator and incubator program young startup in Italy, and the TIM Joint Open Labs, where TIM and university researchers in five main universities campuses (Politecnico di Torino, Politecnico di Milano, Università di Catania, Scuola Superiore Sant'Anna di Pisa, Università di Trento) work together following open innovation paradigm. His interests are fast prototyping and research on Mobile Internet and Internet of Things. Gabriele worked on internet services research and innovation since joining CSELT, and has been involved in a number of innovative IPs project among which the launch Telecom Online and TIN.IT in middle '90, the launch of ADSL services, IPTV and Mobile TV. He received a Master Degree in Electronical Engineering and a PhD in Computer Science and Systems Engineering at Politecnico di Torino.

PROGRAM OVERVIEW

DAY 1 – WEDNESDAY, 30 NOVEMBER 2016

| | |
|----------------------|---|
| 8:30 – 8:55 | REGISTRATION |
| 8:55 – 9:00 | OPENING SESSION |
| 9:00 – 10:45 | SESSION 1 |
| 10:45 – 11:15 | COFFEE BREAK |
| 11:15 – 13:00 | SESSION 2 |
| 13:00 – 14:00 | LUNCH - Location: Conference Venue |
| 14:00 – 15:00 | KEYNOTE SPEAKER |
| 15:00 – 16:00 | SESSION WiP 1 |
| 16:00 – 16:30 | COFFEE BREAK |
| 16:30 – 18:30 | SESSION 3 |
| 19:30 – 19:45 | Meeting in front of the Conference Venue |
| 20:00 | GALA DINNER at the LE MASCHERE |

DAY 2 – THURSDAY, 1 DECEMBER 2016

| | |
|----------------------|---|
| 8:30 – 9:00 | REGISTRATION |
| 9:00 – 10:45 | SESSION 4 |
| 10:45 – 11:15 | COFFEE BREAK |
| 11:15 – 13:00 | SESSION 5 |
| 13:00 – 14:00 | LUNCH - Location: Conference Venue |
| 14:00 – 15:00 | KEYNOTE SPEAKER |
| 15:00 – 16:00 | SESSION WiP 2 |
| 16:00 – 16:30 | COFFEE BREAK |

PROGRAM OVERVIEW

DAY 2 – THURSDAY, 1 DECEMBER 2016

16:30 – 18:15 **SESSION 6**

18:15 – 18:30 **CLOSING and the BEST PAPER AWARD**

8:30 – 8:55 REGISTRATION

8:55 – 9:00 OPENING SESSION

9:00 – 10:45 SESSION 1

- *Enabling Smart Objects in Cities towards Urban Sustainable Mobility-as-a-Service: A Capability - Driven Modeling approach*
- *Android-Based Liveness Detection for Access Control in Smart Homes*
- *Enabling Social- and Location-Aware IoT Applications in Smart Cities*
- *The use of wearable devices in workplace- A Systematic Literature Review*
- *Crowd Sensing of Weather Conditions and Traffic Congestion based on Data Mining in Social Networks*

10:45 – 11:15 COFFEE BREAK

11:15 – 13:00 SESSION 2

- *A Microservice Architecture Use Case for Persons with Disabilities*
- *Data Dissemination in a Wireless Video Surveillance Platform for Elderly Monitoring: Implementation and Experiments*
- *IoT: Science Fiction or real revolution?*
- *Object Detection and Spatial Coordinates Extraction using a Monocular Camera for a Wheelchair Mounted Robotic Arm*
- *A review of Websites and Mobile Applications for People with Autism Spectrum Disorders: towards shared guidelines.*

13:00 – 14:00 LUNCH

14:00 – 15:00 KEYNOTE SPEAKER

"Internet of Things, Big Data, Artificial Intelligence, Security and Privacy"
by Gabriele Elia – TIM

15:00 – 16:00 SESSION WiP 1

- *PIR Probability Model for a Cost/Reliability Tradeoff Unobtrusive Indoor Monitoring System*
- *IOM-Internet of Mobility: A Wearable Device for Outdoor Data Collection*
- *IoT-Based Health Monitoring system for Active and Assisted Living*
- *Delay Tolerant Networking for the Socio-Economic Development in Rural South Africa*

16:00 – 16:30 COFFEE BREAK

16:30 – 18:30 SESSION 3

- *On the Retweet Decay of the Evolutionary Retweet Graph*
- *Preserving Privacy in a P2P Social Network*
- *Segmentation of Mosaic Images based on Deformable Models using Genetic Algorithms*
- *Designing an engaging and informative application about first aid: Gamification and humor as design elements in a serious game*
- *An analysis of ego network communities and temporal affinity for online social networks*
- *A Serious Games system for the analysis and the development of visual skills in Children with CVI*

19:30 – 19:45 MEETING to leave for the Restaurant In front of the Venue

20:00 GALA DINNER at “Le Maschere” restaurant

8:30– 9:00

REGISTRATION

9:00– 10:45

SESSION 4

- *A Smart Wearable Navigation System for Visually Impaired*
- *Smartphones as Multipurpose Intelligent Objects for AAL: Two Case Studies*
- *Indoor Activity Monitoring for Mutual Reassurance*
- *Design and evaluation of an ICT platform for cognitive stimulation of Alzheimer's disease patients*
- *Understanding needs, identifying opportunities: ICT in the view of Universal Design*

10:45– 11:15

COFFEE BREAK

11:15– 13:00

SESSION 5

- *Analysis of Stereoscopic Visualization in a consumer-oriented Head Mounted Display*
- *Computer Vision for the Blind: a Comparison of Face Detectors in a Relevant Scenario*
- *Maps for Easy Paths (MEP): Enriching Maps with Accessible Paths Using MEP Traces*
- *Voice Controlled Quiz for People with Hearing Impairment*
- *A Situation Aware Information Infrastructure (SAI2) Framework*

13:00– 14:00

LUNCH

14:00– 15:00

KEYNOTE SPEAKER

"Teaching Videogames: The Light and Dark Sides"
by Dario Maggiorini and Laura Anna Ripamonti - University of Milan, Italy

15:00– 16:00 SESSION WiP 2

- *Early training in programming: from high school to college*
- *Cultural Heritage and Disability: Can ICT Be the 'Missing Piece' to Face Cultural Heritage Accessibility Problems?*
- *Physical and Cognitive Training of Children with Down Syndrome Using Video Games*

16:00– 16:30 COFFEE BREAK

16:30– 18:15 SESSION 6

- *Performance Comparison of H.265/HEVC, H.264/AVC and VP9 Encoders in Video Dissemination over VANETs*
- *Connected Vehicles for Safety Enhancement: Reliability of Beaconing in Urban Areas*
- *Radio Link Planning made easy with a Telegram Bot*
- *DrivingStyles: Assessing the Correlation of Driving Behavior with Heart Rate Changes*
- *A Heuristic path planning approach for UAVs integrating tracking support through wireless networks*

18:15– 18:30 CLOSING and the BEST PAPER AWARD

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LENKA LAUKOVA, EAI - European Alliance for Innovation

SPECIAL SESSIONS

Special Session on Persuasive Systems Design for Promoting Health and Wellbeing

Co-Chairs: Silvia Gabrielli (CREATE-NET, Italy), Ahmed Salih Fadhil (FBK, Italy), Dario Betti (CR-GPI, Italy)

Special Session on Open Challenges in Online Social Networks

Co-Chairs: Laura Ricci (University of Pisa, Italy), Barbara Guidi (CNR, Italy)

Special Session on ICT4D: Information and Communication Technologies for Persons with Disabilities

Co-Chairs: Fulvio Babich (University of Trieste, Italy), Eric Medvet (University of Trieste, Italy),
Gianni Ramponi (University of Trieste, Italy)

Special Session on Smart Things for Active and Assisted Living (ST4AAL)

Co-Chairs: Susanna Spinsante (Università Politecnica delle Marche, Italy), Lorena Rossi (INRCA, Italy),
Chris Nugent (University of Ulster, UK)

Special Session on Interdisciplinary Topics

Chair: Pamela Kato (Coventry University, UK)

Special Session on Networking in Challenging Scenarios

Co-Chairs: Aloizio P. Silva (Federal University of Minas Gerais, Brazil),
Vinicius F. S. Mota (Federal University of Minas Gerais, Brazil)

Special Session on Serious Games

Chair: Elif Sürer (Middle East Technical University, Turkey)

**Special Session on Smart, internet-connected objects and applications
in dynamically evolving cities and communities**

Co-Chairs: Vivian Kioussi (INTRASOFT International S.A., Greece),
George Dimitrakopoulos (Harokopio University of Athens, Greece)

Special Session on Semantic Technology

Chair: Valentina Presutti (CNR, Italy)

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CONFERENCE VENUE

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Directions



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CONFERENCE
ONLINE

<http://goodtechs.eu/2016>



GOODTECHS

Smart Objects and Technologies
for Social Good



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EAI *Blog*

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Once a year, European Alliance for Innovation (EAI), brings together a comprehensive range of key researchers, important industry players and innovation stakeholders for each of its four thematic areas: Smart City, Internet of Things, Applications for Future Internet, eHealth

Meeting at the EAI 360° summits, members have a chance to transfer their year-round collaboration activities into on-site opportunities for presentations, meetings, cooperation, recognition, strategy and hands-on experience of the best innovations of the year.

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- Publish in the **I am Innovator** magazine
- Participate in the **innovation processes**
- Have enhanced market **presence and visibility**

For more information, please contact:

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CONFERENCE NOTES





RESEARCH MEETS INNOVATION

EAI was created by leaders from industry, research, and policy making organisations to engage the global community with the shared goal of securing Europe's future competitiveness through innovation.

By harnessing the potential of the ICT revolution, EAI engages the global community in all sectors of society to explore ways in which innovation in technology and business can benefit society at large.

Through its institutional members, EAI endorses hundreds of events around the world as one of the largest scientific meeting supporters. EAI is involved in the technical program development of events including scientific meetings, trade events, training workshops, seminars, fairs, and other programs worldwide.

FOR MORE INFORMATION ABOUT EAI CONFERENCES AND HOW TO BECOME A MEMBER

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**Thank you for participating at EAI conference!
We hope to see you again!**