

WISES 2015

12° Workshop on Intelligent Solutions in Embedded Systems

Università Politecnica delle Marche, Ancona, Italy, October 29-30, 2015

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Call for papers

Embedded systems have an increasing importance in our everyday lives. The growing complexity of embedded systems and the emerging trend to interconnections between them lead to new challenges. Intelligent solutions are necessary to overcome these challenges and to provide reliable and secure systems to the customer under a strict time and financial budget.

WISES 2015 is a platform for presentation of innovative approaches that provide intelligent solutions in embedded systems. The objective of this workshop is to present mature approaches and to provide a forum for the exchange and discussion of ideas, and thus, the sharing of experiences among researchers, practitioners, and application developers both from industry and academia. Original papers addressing both theoretical and practical aspects of embedded systems are solicited. Papers describing prototype implementations and deployments of embedded systems are particularly welcome. In order to provide young researchers a forum to exchange their ideas WISES 2015 will include a special session for PhD-Students.

Topics of interest include, but are not limited to:

Design and Prototyping

Embedded Systems Architecture: Multicore SoC (e.g. homogeneous, heterogeneous MPSoC) - Memory systems and optimization in embedded systems - On-chip buses and point-to-point networks - Application-specific (e.g. ASIPs, hardware accelerators) - Architectures and tools for reconfigurable computing

Software for single or multi-core embedded systems: Applications and systems software (e.g. drivers, communication libraries) - Real-time operating systems and middleware in embedded systems

Tools and methodologies for analysis, exploration and validation: Cost-efficient and power-aware embedded system design - Fault tolerance, reliability and security in embedded systems - Real-time embedded systems - Debugging and profiling techniques and tools

Prototype platforms, applications and case studies: Next generation networking and mobile/wireless technology - Sensor networks and related hardware/software platforms - Embedded systems with ambient intelligence and pervasiveness - Reconfigurable computing - Evolvable hardware - self-organizing embedded systems - Energy harvesting and storage

Applications

ICT for Automotive: System-level design of HW/SW in-vehicle architectures - Tools to address the requirements for automotive electronic design - integration of different communication buses (like CAN, MOST, FlexRay and Ethernet) - Security - Safety critical, driver assistance and comfort related applications - Electromobility - Battery management systems - Integration of Electric Vehicle in smart grids.

ICT for Healthcare: ICT for health and ageing well, inclusion and governance - bio vital raw data capturing, body area networks, ECG and EEG signal processing, bio vital data filtering and pattern recognition, real time data analysis.

ICT for Agriculture: Embedded systems and technologies for feeding the planet (EXPO2015)



Submission instructions

The working language of the conference is English. Prospective authors are invited to submit new original research papers of 4-6 pages (2 columns IEEE format). Submissions will only be accepted electronically via WISES homepage in PDF format. All submitted papers will be peer-reviewed. Accepted papers will be published in printed proceedings with ISBN. The papers will be made accessible via IEEEExplore (pending approval).

The authors will be invited to submit an extended work to the EURASIP Journal on Embedded Systems: Special Issue on "Intelligent Solution in Embedded Systems".

Submission web site: <https://easychair.org/conferences/?conf=wise2015>

Important deadlines and dates

Manuscript Submission Final Deadline: October 4, 2015

Notification of Acceptance: October 12, 2015

Camera-Ready Paper Submission: October 18, 2015

Workshop: October 29-30, 2015

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<http://www.dii.univpm.it/wise2015>

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