

EURASIP Journal on Embedded Systems

Special Issue on Intelligent Solutions in Embedded Systems

Embedded systems have an increasing importance in our everyday lives. The growing complexity of embedded systems and the emerging to consider alternatives to bus-based interconnections has led 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.

This special issue aims at presenting innovative approaches that provide intelligent solutions concerning the design of modern embedded systems. Original papers addressing both theoretical and practical aspects of embedded systems design are solicited.

The innovative aspects can be on the design and prototyping aspects as well as on the application of the embedded systems with particular attention on Automotive, Healthcare and Agriculture.

The proposed special issue focus on innovative solution on embedded system, from tools and design methodologies, new architectures, emerging applications, with particular attention to automotive, health care and ICT for agriculture (theme from EXPO2015).

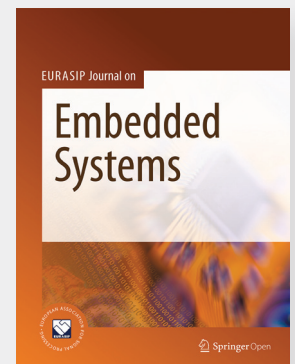
The special issue will have the support of the work of the 12th Conference WISES 2015, "Workshop on intelligent solutions on Embedded Systems", that will be organized in Ancona in October 2015.

The authors of selected papers from the conference will be invited to submit a version for this special issue. The special session will be open to all other authors that intend to submit papers.

We like to favour the following fields related to embedded systems:

- **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



Call for
Papers

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; Electro-mobility; Battery management systems; Integration 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 (related to EXPO2015)

Submission Instructions:

Before submitting your manuscript, please ensure you have carefully read the Instructions for Authors for *EURASIP Journal on Embedded Systems* at jes.eurasipjournals.com/authors/instructions. The complete manuscript should be submitted through the *EURASIP Journal on Embedded Systems* submission system at editorialmanager.com/jesy. To ensure that you submit to the correct special issue please select the appropriate section in the drop-down menu upon submission. In addition, indicate within your cover letter that you wish your manuscript to be considered as part of the special issue on Intelligent Solutions in Embedded Systems. All submissions will undergo rigorous peer review and accepted articles will be published within the journal as a collection.

Lead Guest Editor:

Massimo Conti, Dipartimento di Ingegneria dell'Informazione, Università Politecnica delle Marche, Ancona, Italy | m.conti@univpm.it

Guest Editors:

Jürgen Becker, Institute for Information Processing Technologies (ITIV), Karlsruhe Institute of Technology (KIT), Germany | becker@kit.edu

George Kornaros, Dept of Informatics Engineering, Technological Educational Institute of Crete, Greece | kornaros@ie.teicrete.gr

Marcello Coppola, ST microelectronics Grenoble, France | marcello.coppola@st.com

Miltos Grammatikakis, Dept of Informatics Engineering, Technological Educational Institute of Crete, Greece | mdgramma@ie.teicrete.gr

Simone Orcioni, Dipartimento di Ingegneria dell'Informazione, Università Politecnica delle Marche, Ancona, Italy | s.orcioni@univpm.it

Submission Schedule

Deadline for submissions:
January 31, 2016