

19-21 June 2014, Pisa, Italy

General Co-Chairs

Marco Di Natale
Scuola Superiore S. Anna, Pisa
R. Passerone, Univ. of Trento,
Italy

Program Committee Co-Chairs

Giorgio Buttazzo
Scuola Superiore S. Anna, Pisa
Enrico Macii, Politecnico di Torino

Finance Chairs

Giancarlo Prati
Scuola Superiore S. Anna
Richard Zurawski
ISA Group., USA

Publications Chair

Mauro Marinoni
Scuola Superiore S. Anna

SIES Series Steering Committee

R. Ernst, TUB, Germany
G. De Micheli, EPFL, Switzerland
R. Gupta, UC San Diego, USA
A. S.-Vincentelli, UC Berkeley,
USA
R. Zurawski, ISA Group, USA

International Advisory Committee

E. Dekneuveel, UNSA, France
L. Gomes, Uninova, Portugal
T. Nolte, Mälardalen Univ.,
Sweden
R. Passerone, Univ. of Trento,
Italy
G. Sassatelli, LIRM, France
A. Vachoux, EPFL, Switzerland
J. J. Chen, KIT, Germany

Sponsored by:

Scuola Superiore S. Anna and IEEE Industrial Electronics Society

Background: Application domains have had a considerable impact on the evolution of embedded systems, in terms of required methodologies and supporting tools and resulting technologies. SoCs are slowly making inroads in to the area of industrial automation to implement complex field-area intelligent devices which integrate the intelligent sensor/actuator functionality by providing on-chip signal conversion, data processing, and communication functions. There is a growing tendency to network field-area intelligent devices around industrial type of communication networks. Similar trends appear in the automotive electronic systems where the Electronic Control Units (ECUs), typically implemented as heterogeneous system-on-chip, are networked by means of one of safety-critical communication protocols such as FlexRay, for instance, for the purpose of controlling one of vehicle functions; electronic engine control, ABS, active suspension, etc. The design of this kind of networked embedded systems (this includes also hard real-time industrial control systems) is a challenge in itself due to the distributed nature of processing elements, sharing common communication medium, and safety-critical requirements, to mention some.

Aim: The aim of the symposium is to bring together researchers and practitioners from industry and academia and provide them with a platform to report on recent developments, deployments, technology trends and research results, as well as initiatives related to embedded systems and their applications in a variety of industrial environments.

Topics include, but are not limited to:

Embedded Systems: Design and Validation of Embedded Systems; Real-Time Issues; Models of Embedded Computation; Design and Verification Languages; Operating Systems and Quasi-Static Scheduling; Timing and Performance Analysis; Power Aware Embedded Computing; Adaptive Embedded Systems; Security in Embedded Systems.

System-on-Chip and Network-on-Chip Design & Testing: Design of Application-Specific Instruction-Set Processors; Design and Programming of Embedded Multiprocessors; SoC Communication and Architectures; NoC Communication and Architectures; Design of SoC/NoC; Platform-Based Design for Embedded Systems; Reconfigurable Platforms; Multiprocessor SoC Platforms and Tools; Testing of Embedded Core-based Integrated Circuits.

Networked Embedded Systems: Design Issues for Networked Embedded; Middleware Design and Implementation for Networked Embedded Systems; Self Adaptive Networked Entity Sensor Networks: Architectures, Energy-Efficient Medium Access Control, Time Synchronization Issues, Distributed Localization Algorithms, Routing, Distributed Signal Processing, Security..

Embedded Applications: Industrial Automation and Controls; Automotive Applications; Industrial Building Automation and Control; Power (sub-) Station Automation and Control; Intelligent Sensors, etc. - design, maintenance, fault tolerance & dependability, networks, infrastructure, safety and security.

Submission of Papers: Manuscripts must be submitted electronically in PDF format, according to the instructions contained in the Conference web site. Contributions must contain original unpublished work. Papers that have been concurrently submitted to other conferences or journals (double submissions) will be automatically rejected. Papers are to be submitted electronically in PDF format. Two types of submissions are solicited: Long Papers - from 6 to 10 double-column pages (typically 8 pages). Work-in-Progress Papers - limited to 4 double-column pages. For further details, please consult the conference web pages.

Paper Acceptance: Each accepted paper must be presented at the conference by one of the authors. The final manuscript must be accompanied by a registration form and a registration fee payment proof. All conference attendees, including authors and session chairpersons, must pay the conference registration fee, and their travel expenses.

Author's Schedule

Regular Papers:

Submission deadline: March 3, 2014
Notification for acceptance: April 14, 2014
Deadline for final manuscript: May 19, 2014

WiP papers:

Submission deadline: April 21, 2014
Notification for acceptance: May 5, 2014
Deadline for final manuscript: May 19, 2014

FURTHER INFORMATION: <http://retis.sssup.it/sies2014>



About Pisa: a city in Tuscany, Central Italy, on the right bank of the mouth of the River Arno on the Tyrrhenian Sea. It is the capital city of the Province of Pisa. Known worldwide for its leaning tower (the bell tower of the city's cathedral), the city contains more than 20 other historic churches, several palaces and various bridges across the River Arno. The city is also home of the University of Pisa, which has a history going back to the 12th century and the Napoleonic Scuola Normale Superiore..