

**Call for Papers**  
**Embedded Sensors & Applications (ESA 2013) Workshop**  
*The 9<sup>th</sup> International Wireless Communications & Mobile Computing Conference*  
*(IWCMC 2013)*

<http://iwcmc.org/2013/>

<http://edas.info/newPaper.php?c=13371>

Cagliari, Sardinia, Italy, July 1-5, 2013

**Symposium Chair:**

Abderrazak Abdaoui, Qatar University, Qatar, [abdaoui@ieee.org](mailto:abdaoui@ieee.org)

**Scope:**

The optimization of the hardware architecture of a system-on-a-chip has particularly attracted a great amount of interest, as the design of an intelligent embedded device is an essential milestone of many innovations. The main objective of this Workshop is to review the state of the art, propose novel ideas and discuss actual research results and future trends in the field of embedded technologies for intelligent systems and sensors. Contributors and participants, from both industry and academia, are highly encouraged to take active part in this Workshop.

Embedded systems achieve their performance objectives, including real-time constraints, using a combination of special-purpose hardware and software components customized to the system requirements. Both, seeking new features and reuse of existing intellectual property components are essential for keeping up with ever demanding customized requirements. In addition, design complexities are steadily growing with an important number of components cooperating between each other properly. The designers of embedded systems have to cope with multiple goals and constraints simultaneously, including timing, power, reliability, dependability, maintenance, packaging and least price.

The significance of these constraints varies with the application area a system is targeted for. Usually, embedded applications include multi-media, automotive, medical, and communication devices. Topics of interest include, but are not limited to, the following topics:

- Sensor nodes (in wireless sensor networks) and distributed implementation (TinyOS, nesC, ... etc.)
- Hardware Implementation of Wireless sensor networks
- Embedded sensor architectures: reconfigurable platforms, memory management support, communication, protocols, network-on-chip, real-time systems
- Testing techniques: all aspects of testing, including, test synthesis, embedded tests, for embedded and system-on-a-chip systems,
- Self-organization and self-configuration algorithms
- Design and deployment of embedded system platforms
- Embedded chip designs
- Hardware routing implementations
- Sensor Prototypes
- Sensor node components
- Sensor interfaces,

- Integration of sensors into engineered systems.

### **Submission Guidelines:**

Prospective authors are invited to submit original technical papers—up to 6 pages of length, using the EDAS link <https://edas.info/newPaper.php?c=14235&track=29241> for possible publication in the IWCMC 2012 Conference Proceedings, which will be included in IEEE Xplore. Selected papers will be further considered for possible publication in three special issues in the following Journals:

1. Wiley Journal of Wireless Communications and Mobile Computing (WCMC)  
<http://www3.interscience.wiley.com/journal/76507157/home>
2. The International Journal of Sensor Networks (IJSNet)  
<http://www.inderscience.com/browse/index.php?journalCODE=ijsnet>
3. The International Journal of Autonomous and Adaptive Communications Systems (IJAAACS): [www.inderscience.com/ijaacs](http://www.inderscience.com/ijaacs)
4. KSII Transactions on Internet and Information Systems: [www.itiiis.org](http://www.itiiis.org)  
Peer-to-Peer Net. & Applications, a Springer Journal  
<http://www.springer.com/engineering/signals/journal/12083>

**Note:** There will be best paper award, best Symposium award and best Workshop award.

### **Important Dates:**

Submission:	February 15, 2013
Acceptance notification:	March 5, 2013
Camera-ready paper submissions:	April 1, 2013
Registration deadline for authors:	April 1, 2013

**TPC Members:** to be added.