

\*\*\*\*\*

Call for papers

WiSARN 2016

9th International Workshop on Wireless Sensor, Actuator and Robot Networks  
(in conjunction with the International Conference on Computing, Networking and  
Communications - ICNC 2016)

Kauai, Hawaii, USA, February 15-18, 2016

<https://wisarn2016.hds.utc.fr>

Extended versions of selected papers will be considered for publication in the  
IEEE Transactions on Control of Network systems  
(see <http://sites.bu.edu/tcns/> for submission instructions).

\*\*\*\*\*

**Important Dates:**

Paper submission: July 31st, 2015

Author notification: September 30th, 2015

Camera ready: October 20th, 2015

**Call for papers**

Wireless sensor and robot networks (WSRNs) are the confluence point where the traditional fields of wireless sensor networks (WSNs), robot networks and control theory meet. In WSRN, nodes collaborate to accomplish distributed sensing and actuation tasks. Leveraged by the control and mobility of actors, the networking process and applications embrace a whole new set of possibilities. Actors may deploy, repair and relocate sensors to improve coverage, build routes and fix network partition to ensure data communication, change network topology to shape routing patterns and balance energy consumption, and respond to reported events in a timely and effective manner. The benefits are limited only by imagination. As an emerging field, WSRNs are in need of new networking techniques, by which they can fully exploit their particularities and potentials. WiSARN aims to bring together state-of-the-art contributions on the design, specification and implementation of architectures, algorithms and protocols for current and future applications of WSRN.

**Topic of Interest**

Original, unpublished contributions are solicited in ALL aspects of WSRN and traditional wireless sensor networks, robotic networks, as well as robotics and automation. Possible topics include, but are not limited to:

- Autonomous sensor networks
- Emergent behavior in WSRN
- Modeling and simulation of WSRN
- WSRN architectural and operational models
- Optimal control of networked robots

- Robot advanced motion control by WSRN
- Modeling and control of flying robots
- Autonomic and self-organizing coordination and communication
- Sensor-robot and robot-robot coordination
- Energy-efficient and real-time communication protocols
- Bandwidth-efficient and delay-tolerant communication protocols
- Distributed control and management in WSRN
- Neighborhood discovery and mobility management
- Communication protocols for swarms of mobile robots
- Map exploration and pattern formation of mobile robots
- Robot task assignment
- Biologically inspired communication
- Ecological systems
- Architectures and topology control
- Localization in WSRN
- Probabilistic integration in WSRN
- Quality of service, security and robustness issues
- Applications and prototypes
- Hybrid networks and wireless Internet
- M2M and D2D communications
- Data management, gathering, aggregation and query processing

### **Author guidelines**

It is required that the manuscript follows the standard IEEE camera-ready format (double column, 10-pt font) as well as the requirement set by EDAS paper submission system. The maximum length of ICNC paper without over-length charge is FIVE (5) page. The authors are allowed to pay for up to TWO (2) additional pages at \$150 per over length page. Submitted papers may not have been previously published in or under consideration for publication in another journal of conference. The organizing committee of WiSARN reserves the right to not review papers that either exceed the length specification or have been submitted or published elsewhere. Submissions must include title, abstract, keywords, author and affiliation with email address.

During the initial paper submission process via EDAS, the authors are required to make sure the pdf file and EDAS registration page of a paper have the same list of authors and the paper title. Be certain to add all authors in EDAS during the initial paper submission process. Failure to comply with this rule may cause a paper be withdrawn from the review process. Once reviewed the listing of authors connected to the paper can NOT be changed in the final manuscript.

All accepted papers of ICNC (main program and workshops), after being presented onsite at the conference, will be included in the proceedings to be submitted for publication in IEEE Xplore and indexing by EI Compendex.

Submissions should be uploaded using this link:

<http://edas.info/N20967>. Only electronic submissions are accepted.

## **TPC Committee (under construction)**

General Chair:

Ioannis Paschalidis, Boston University, USA

Program Co-Chairs:

Enrico Natalizio, Université de Technologie de Compiègne, France

Danilo Tardioli, Centro Universitario de la Defensa (Zaragoza), Spain

Olivier Simonin, INSA de Lyon, France

Publicity Chair:

Eduardo Montijano, Centro Universitario de la Defensa (Zaragoza), Spain

Submission Chair:

Rafael Falcon, Larus Technologies, Canada

Web Chair:

TBD

Technical Program Committee:

Luis Almeida, University of Porto, Portugal

Novella Bartolini, University of Rome « La Sapienza », Italy

Xianghui Cao, Illinois Institute of Technology, USA

Gianni Di Caro, IDSIA Lugano, Switzerland

Milan Erdelj, Inria Lille – Europe, France

Isabelle Fantoni, Université de Technologie de Compiègne, France

Jianping He, Zhejiang University, China

Shibo He, Arizona State University, USA

Jonathan How, MIT, USA

Fuzhuo Huang, Google, USA

Abdelmajid Khelil, Huawei European Research Center, Germany

Egons Lavendelis, Riga Technical University, Latvia

Sabato Manfredi, University of Naples « Federico II », Italy

Tommaso Melodia, State University of New York, USA

Nathalie Mitton, Inria Lille - Nord Europe, France

Alejandro Mosteo, Centro Universitario de la Defensa (Zaragoza), Spain

Jorge Ortín, Centro Universitario de la Defensa (Zaragoza), Spain

Angela Schoellig, University of Toronto, Canada

Ahmet Sekercioglu, Monash University, Australia

Sandra Sendra, Universidad Politécnica de Valencia, Spain

Simone Silvestri, Pennsylvania State University, USA

Fabrice Theoleyre, CNRS, France

Vito Trianni, ICST-CNR, Italy

Fabrice Valois, INSA de Lyon, France

Spyros Vassilaras, Athens Information Technology, Greece

Evsen Yanmaz, Klagenfurt University, Austria

Shuhui Yang, Purdue University, USA