

## **Name of the Workshop:**

10th IWSSA (10th International Workshop on System/Software Architectures)

## **Workshop description/CfP**

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Far from being residual in its importance, Systems and Software Architectures prevail as a touchstone for many System and Software Engineering (SSE) projects in achieving a certain level of quality. The successive emergence of new development approaches and the advent of new technologies and computation paradigms, such as Cloud Computing, Model and Ontology driven Engineering, Lean Software Development, Agile, etc., lend new opportunities for academicians, practitioners and even politicians to steadily strive to come up with new system designs or even revisit old ones.

In recent years, service oriented and/or service-driven architectures are gaining momentum within the SSE community and even changing the way in which system operation is conceived. Indeed, thinking of services almost means not developing any more, but orchestrating and choreographing functionalities developed in the past through well-defined interfaces. Interoperability, heterogeneity, etc. are commonplaces in this context.

IWSSA workshop specially focuses on the enactment/connection of the different kinds of system and software requirements into/to concrete design issues (decisions, guidelines, paradigms, etc.) for system/software architectures. In particular, the workshop stresses the importance of non-functional requirements analysis for successful architectural designs. Techniques, methodologies and processes to address this issue will be presented and discussed at the workshop.

The topics, with special emphasis on architectures satisfying requirements in service oriented and service driven environments, include but are not limited to:

- architecting critical systems for diversity and collaborative operability
- roles of enterprise/system architectures in system/software lifecycle
- requirements and software architectures for specific application domains and product lines
- case studies especially for complex systems in organizational and social settings
- architectural models in model-driven approaches
- traceability and dependency among requirements, system architectures and software architectures
- engineering quality in architectures to address non-functional requirements such as security, interoperability, adaptability, responsiveness, ubiquity, reliability, dependability, self-healing ability, performance, usability, safety, functionality, etc.
- methodologies and techniques applied to the construction of high-quality system/software architectures
- models and design theories – both evolutionary and revolutionary - for system architectures and software architectures
- software architecture maintenance, evolution and management
- validation of requirements and verification techniques for architectural design
- metrics for architectures
- service-oriented / object-oriented / aspect-oriented / goal-oriented / agent-oriented / scenario-based approaches to enterprise/software architecture development
- COTS / GOTS / Component / Middleware-Based development for architectures
- Ontology-driven architectures

## Program Committee Members

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- Wil van der Aalst, Eindhoven University of Technology, The Netherlands
- Philippe Aniorde, LIUPPA IUT de Bayonne, France
- Hernán Astudillo, Universidad Técnica Federico Santa María, Chile
- Doo-Hwan Bae, KAIST, Korea
- Joseph Barjis, Delft University of Technology, The Netherlands
- Jaelson Castro, Federal University of Pernambuco, Brasil
- Roger Champagne, Ecole de Technologie Supérieure, Canada
- Francois Coallier, Ecole de Technologie Supérieure, Canada
- Kendra Cooper, The University of Texas at Dallas, USA
- Rafael Corchuelo, University of Sevilla, Spain
- Lirong Dai, Seattle University, USA
- Sergiu Dascalu, University of Nevada, Reno, USA
- Yannis A. Dimitriadis, University of Valladolid, Spain
- Jing Dong, Hewlett Packard, USA
- Jesús Favela, CICESE, Mexico
- Juan Fernández-Ramil, The Open University, UK
- Rubén Fuentes, Complutense University of Madrid, Spain
- Lars Grunske, Swinburne University, Melbourne, Australia
- Fred Harris, University of Nevada, Reno, USA
- Michael Hinchey, Lero—the Irish Software Engineering Research Center, University of Limerick, Ireland
- María V. Hurtado, University of Granada, Spain
- Stan Jarzabek, National University of Singapore, Singapore
- Li Jiang, The University of Adelaide, Australia
- Carlos Juiz, University of the Balearic Islands, Spain
- Pericles Loucopoulos, Loughborough University, UK
- María D. Lozano, University of Castilla-La Mancha, Spain
- Chung-Horng Lung, Carleton University, Canada
- Stephen J. Mellor, Embedded Systems Division of Mentor Graphics, USA
- Tommi Mikkonen, Tampere University of Technology, Finland
- Ivan Mistrik, Independent consultant, Germany
- Masaki Murakami, Okayama University, Japan
- Selmin Nurcan, University of Paris 1 Panthéon-Sorbonne, France
- Sergio F. Ochoa, University of Chile, Chile
- Patricia Paderewski, University of Granada, Spain
- Sooyong Park, Sogang University, Korea
- Óscar Pastor, Polytechnic University of Valencia, Spain
- Fabio Paternò, ISTI-CNR, Pisa, Italy
- Claudia Raibulet, Università degli Studi di Milano-Bicocca, Italy
- María Luisa Rodríguez, University of Granada, Spain
- Gustavo Rossi, University of La Plata, Argentina
- Vespe Savikko, Elektrobit, China
- Michael Shin, Texas Technical University, USA
- Sam Supakkul, University of Texas at Dallas, USA

- Yeong Tae Song, Towson University, USA
- Dalila Tamzalit, University of Nantes, France
- Sebastian Uchitel, Imperial College London, UK
- Andrea Zisman, City University London, UK

## **Publication**

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Accepted papers will be published in a LNBIP Proceedings Volume by Springer Verlag.

After each workshop edition, IWSSA chairs have edited a special issue in a Software Engineering journal with significantly improved and extended versions of papers accepted. Previous special issues related to IWSSA have been published in the Journal of Science of Computer Programming (four special issues), the Journal of Systems Architecture, Computer Standards & Interfaces and the Journal of Systems and Software.

This time again, authors of selected quality papers, from those presented at IWSSA'12, will be invited to submit significantly extended versions to the review process for a special issue of an International Journal (pending agreement).

## **Organizers' names**

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Lawrence Chung, University of Texas at Dallas (USA)  
Manuel Noguera, University of Granada (Spain)  
Nary Subramanian, University of Texas at Tyler (USA)  
José Luis Garrido, University of Granada (Spain)

## **Submission and paper acceptance deadlines**

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Abstract Submission Deadline:	February 2 <sup>nd</sup> , 2012
Paper Submission Deadline:	February 9 <sup>th</sup> , 2012
Acceptance Notification:	March 9 <sup>th</sup> , 2012
Camera Ready Due:	March 23 <sup>rd</sup> , 2012

## **Workshop site:**

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<http://www.ugr.es/~iwssa>