

Call for Workshop Contributions

"COCOSS - Coordination in Complex Software Intensive Systems"

In conjunction with "The 4rd International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2010)"

<http://www.ifs.tuwien.ac.at/COCOSS-2010>

February, 15th – 18th 2010, Andrzej Frycz Modrzewski Cracow College, Krakow, Poland

Theme and Goals

Today's networks and systems are going through a rapid evolution. Different kinds of systems with different characteristics are emerging and integrating in heterogeneous networks. The focus of this development has shifted from developing algorithms to the complexity of structuring large systems, and furthermore to overcome the additional complexity in building distributed, concurrent systems. Complex systems highly depend on software that controls the behavior of individual components and the interaction between components, and on software which interacts with other software, systems, devices, sensors and with people. Extremely complex coordination requirements to keep up effectiveness, performance and quality of the complex system have to be accomplished. The production automation domain is a good example for these complexity issues. Hundreds of software agents representing the functionality of the underlying production machinery need to cooperate and coordinate themselves in order to achieve a common high-level business goal, like an efficient and effective production system. Thus it is important to provide methods for efficiently and effectively supporting the communication entities in their design, development, simulation, test, operation and runtime tasks.

Goals of the COCOSS-2010 workshop are in the scope of the CISIS conference. They focus on investigating and discussing the many approaches for collaboration and coordination of autonomous communication entities in complex software intensive systems. The workshop intends to put together researchers and practitioners of the aforementioned fields, to share and identify common problems, and to devise general solutions.

Topics of interest in the workshop include, but are not restricted to:

- a) Complex Systems
 - Use Cases with respect to applications of coordination techniques
 - Lessons Learned, challenges faced, anti-patterns
- b) Management of and Coordination in Complex Systems
 - Coordination Patterns
 - Programming abstractions and languages: techniques that support coordination, collaboration, choreography, and control of distributed and concurrent interaction
 - Collaboration and negotiation protocols
 - Distributed problem solving
 - Semantics as a means for coordination support

- c) Support of Entities in Complex Systems
 - Frameworks and Middleware architectures
 - Autonomous systems
 - Multi-agent systems and architectures
 - Self-adapting and self-healing systems

Submission Guidelines

Submit a full paper of at most 6 pages (IEEE Computer Society Proceedings Manuscripts style: two columns, single-spaced), including figures and references, using 10 fonts, and number each page. You can confirm the IEEE Computer Society Proceedings Author Guidelines at the following web page:

<http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html>

Contact author must provide the following information to the workshop chairs: paper title, authors' names, affiliations, postal address, phone, fax, and e-mail address of the author(s), about 200-250 word abstract, and about five keywords. Prepare your paper in PDF file and submit it using the CISIS conference paper management system:

<https://TBD>

Submission of a paper implies that should the paper be accepted, at least one of the authors will register and present the paper in the conference. Accepted papers will be given guidelines in preparing and submitting the final manuscript(s) together with the notification of acceptance.

Important Dates

- Submission Deadline: October, 1st 2009
- Author Notification: November, 1st 2009
- Camera-ready Version: November, 14th 2009
- Author Registration: November, 14th 2009

Papers must describe original work, and must not have been accepted or submitted for publication elsewhere. Proceedings of the CISIS 2010 workshops will be published by IEEE Computer Society Press.

Workshop Organizers and Co-Chairs

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Intended Program Committee

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