

Call for Papers

The 14th IEEE International Symposium on Object/component/service-oriented Real-time distributed computing

March 28-31, 2011
Newport Beach, California

Important Dates

Paper Submissions:	Nov 8, 2010
Acceptance Notification:	Dec 20, 2010
Camera-Ready Papers:	Jan 17, 2011
Symposium Dates	March 28-31, 2011

Scope

This is the 14th IEEE Computer Society symposium dealing with the rapidly expanding field of object/component/service-oriented real-time distributed computing (ORC) technology. The principal theme of ISORC is the use of the object-oriented computing paradigm - which has prevailed in many non real-time applications in the past decades - in a wide variety of real-time applications. In the ISORC series, this paradigm emphasizes its spirit of openness where diverse views and new approaches to challenging issues can be freely discussed.

TOPICS OF INTEREST

Papers pertaining to all aspects of ORC are sought, including but not limited to the following:

- Programming and system engineering: ORC paradigms, object/component models, languages, RT CORBA, Embedded .NET, RT RMI, RT Java, UML, model-driven development of high integrity applications, specification, design, verification, validation, testing, maintenance, system of systems, etc.
- Distributed computing and communication infrastructures: Internet QoS (quality of service), real-time communication, networked computing platforms, protocols, peer-to-peer computing, sensor networks, interoperability, security, trusted and dependable systems, fault tolerance, virtual subnets for ORC.
- System software: real-time kernels and operating systems, middleware support for ORC, QoS management, extensibility, synchronization, resource allocation, scheduling, fault tolerance, security.

- Applications: embedded systems (automotive, avionics, consumer electronics, building systems, sensors, etc), multimedia processing, RT Web-based applications and use of XML, real-time object-oriented simulations.
- System evaluation: output accuracy, timeliness, worst-case execution time, dependability, end-to-end QoS, overhead, fault detection and recovery time.

Papers dealing with other issues that are related to the specification, design, implementation, and evaluation of ORC systems are also welcome. To promote dialogues between researchers and users of ORC, contributions from industry are particularly welcome.

SYMPOSIUM SESSION FORMATS

Following the tradition of ISORC, the symposium program will consist of sessions of different formats:

- presentations of regular and short papers,
- panel discussions, and
- special sessions devoted to reporting industrial advances

GUIDELINES FOR MANUSCRIPTS

- Research Papers. Papers should describe original work and be 8 pages or less in length using the IEEE paper format. A maximum of two extra pages may be purchased.
- Papers presenting Industrial Advances. Industrial papers and practitioner reports, describing experiences of using ORC technology in application or tool development projects, are an integral part of the technical program of ISORC. A majority of these papers are expected to be shorter and less formal than research papers. They should clearly identify, and discuss in detail, the issues that represent notable industrial advances. Reports with project metrics supporting their claims are particularly sought, as well as those that show both benefits and drawbacks of the approaches used in the given project.
- Short Synopses. Short papers (5 pages or less using the IEEE format) on substantial real-time applications are also invited, and should contain enough information for the program committee to understand the scope of the project and evaluate the novelty of the problem or approach.

According to program committee guidelines, papers presenting practical techniques, ideas, or evaluations will be favored. Papers reporting experimentation results and industrial experiences are particularly welcome. Originality will not be interpreted too narrowly.

Papers that are based on severely unrealistic assumptions will not be accepted however mathematically or logically sophisticated the discussion may be.

All accepted submissions will appear in the proceedings published by IEEE.
A person will not be allowed to present more than 2 papers at the symposium.

Organizers

Symposium Co-Chairs

Eltefaat Shokri, The Aerospace Corporation, USA
Uwe Brinkschulte, University of Frankfurt am Main, Germany
Makoto Takizawa, Seikei University, Japan

Program Co-Chairs

Gabor Karsai, Vanderbilt University, USA
Andreas Polze, HPI, University Potsdam, Germany
Doo-Hyun Kim, Konkuk University, Korea
Wilfried Steiner, (Industry Subcommittee Co-Chair), TTTech, Austria

Program Committee Members (accepted, as of 8-22-10):

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- Andy Wellings, University of York, United Kingdom
- M. Teresa Higuera Toledano, UCM, Spain
- Fabrice Kordon, Univ. P. & M. Curie, France
- Stefano Russo, Università di Napoli Federico, Italy
- Peter Puschner, Technische Universität Wien, Austria
- Neeraj Suri, Technical University Darmstadt, Germany
- Uwe Brinkschulte, Goethe University Frankfurt, Germany
- Jie Xu, University of Leeds, United Kingdom
- Stefan Kowalewski, RWTH Aachen, Germany
- Wolfgang-Schröder Preikschat, FAU Nürnberg-Erlangen, Germany
- Jörg Kaiser, Uni Magdeburg, Germany
- Theo Ungerer, Uni Augsburg, Germany
- Mathias Pacher, Uni Frankfurt, Germany
- Paul Ezhilchelvan, Newcastle School of Computing Science, UK
- Jan Gustafsson, Mälardalen University, Sweden

Asia/Pacific

- Sungdeok Cha, Korea U., Korea
- Seong Je Cho, Dankook U., Korea
- Tomoya Enokido, Risho U., Japan
- Zonghua Gu, Zhejiang University, China
- Sunyoung Han, Konkuk U., Korea
- Jung Guk Kim, Hankook University of Foreign Studies, Korea
- Pi-Cheng Hsiu, Academia Sinica, Taiwan, Republic of China

- Sunggu Lee, POSTECH, Korea
- Sang Lyul Min, Seoul National University, Korea
- Tatsuo Nakajima, Waseda U., Japan
- Yukikazu Nakamoto, University of Hyogo/Nagoya University, Japan
- Tao Pin, Tsinghua University, China

Americas

- Farokh Bastani, U Texas, USA
- Shu-Ching Chen, Florida International U., USA
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