

# **SOCA 2013**



KAUAI, HAWAII, DEC 16-18, 2013

# **General Chair:**

Kwei-Jay Lin, University of California, Irvine, USA

## **Program Chair/Co-Chairs:**

- Chang-Gun Lee, Seoul National University, Korea
- Albert Cheng, University of Houston, USA
- Massimo Mecella, Sapienza University of Rome, Italy

# **Important Dates:**

- Abstract Submission Due: July 16, 2013
- Paper Submission Due: July, 31, 2013
- Acceptance Notification: October 5, 2013
- Camera Ready Submission: October 15, 2013
- Conference and Workshop Program: December 16-18, 2013

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### **Conference Web:**

http://conferences.computer.org/soca

Service-oriented computing is considered today a key technology for the development of robust and high quality intelligent distributed and embedded applications. Extensive research and development in the past few years has pushed SOA technology into state-of-the-art application areas such as context-aware, cloud-connected, mobile enterprise systems. However, many of the critical components on building reliable, robust, and user-centric sensor-based SOA systems are still open for research. Hence, it is timely to reexamine SOA research opportunities and identify new research challenges for next generation SOA.

One of the future SOA applications is large-scale cyber-physical systems (CPSs) that include deep interactions between cyber-sides and physical-sides through massive sensors, actuators, mobile devices, and computing servers connected by heterogeneous networks. The services of large-scale CPSs have challenging requirements such as accurate timeliness, high reliability, and dynamic adaptability. Many of the service components are deployed on resource limited embedded systems and are performance sensitive; others are deployed on cloud servers providing highly parallel services. Thus, SOA may provide effective solutions for managing the ever-increasing complexity while meeting the challenging requirements of CPS services on largely distributed, heterogeneous and dynamic resource environments.

The 2013 IEEE International Conference on Service-Oriented Computing and Applications (SOCA 2013) will be held in Kauai, Hawaii, with topics of general service oriented computing and also the focused area of SOA for large-scale CPSs. The conference includes three days of parallel tracks program, special-topic workshops/ tutorials, and panel discussion. We invite submissions of high quality papers describing fully developed results or ongoing work on the topics such as:

- Service-oriented architecture, engineering, and applications
- Large-scale cyber-physical systems
- Intelligent service composition, management and maintenance
- Configurable and reconfigurable service middleware
- Dependable and trustworthy services
- Streaming and real-time data analytics
- · Mobile service engineering and applications
- Security and privacy for intelligent service applications
- Context-aware connected embedded computing
- Service composition with multi-dimensional QoS
- Service networks for smart home, smart transportation, and smart infrastructure
- Sustainability issues on large-scale CPS applications

Authors are invited to submit original, unpublished research papers that are not being considered in another forum. Manuscripts will be limited to 8 (IEEE style) pages. Please follow the IEEE Computer Society Press Proceedings Author Guidelines to prepare your papers with 8.5" x 11". two-column paper formatting instructions http://www.computer.org/portal/web/cscps/formatting. Electronic submission of manuscripts (in PDF) is required through the paper submission system in the SOCA 2013 homepage http://conferences.computer.org/soca. All papers submitted to SOCA 2013 will be peer-reviewed by at least 3 reviewers. Papers that are selected for presentation at SOCA 2013 will appear in the Proceedings of SOCA 2013 and be included in IEEE Xplore and indexed by EI. Each paper accepted for SOCA 2013 requires at least one author to register at the full rate (IEEE member or non-IEEE member). At least one author is required to attend the conference and present the paper. The best papers from the proceedings will be selected for publication in the Springer Journal on Service-Oriented Computing and Applications (SOCA) as well as special issues in international journals to be announced. Furthermore, a Best Paper Award will be presented to the best paper selected from the accepted full papers.