Call for Papers

SOCA 2012

Taipei, Taiwan, December 17-19, 2012

CONFERENCE CHAIRS:
- Tei-Wei Kuo, National Taiwan University, Taiwan
- Christian Huemer, TU Vienna, Austria

PROGRAM CHAIRS:
- Chi-Sheng Shih, *National Taiwan University, Taiwan*
- Sang H. Son, University of Virginia, USA

STEERING COMMITTEE CHAIR:
- Kwei-Jay Lin, University of California, Irvine

IMPORTANT DATES:
- Paper Submission Due: August 31, 2012
- Acceptance Notification: October 10, 2012
- Camera Ready Submission: October 26, 2012

SPONSORS:
- IEEE Computer Society
- National Taiwan University
- Intel-NTU Connected Context Computing Center
- Institute of Information and Computing Machinery, Taiwan

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http://conferences.computer.org/soca

The 2012 IEEE International Conference on
Service-Oriented Computing and Applications

Service-oriented computing is considered today as 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 Machine-to-Machine (M2M) systems that are built on top of a network of services, each of which is autonomous and collaborates with each other to form coherent and context-aware service. It has been suggested that M2M will spark the next ICT revolution based on the 15-year gold rule of the ICT technology after PC's and Internet. The services in M2M have diverse characteristics and dynamic requirements. 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. Two distinct sources for the increasing complexity are intelligent services in heterogenous devices, and the constantly evolving environment. Hence, the dynamic flexibility of SOA may be used to compose and invoke services in M2M to adapt to the changing sensor resources, but also to the dynamic user needs and physical environment.

The 2012 IEEE International Conference on Service-Oriented Computing and Applications (SOCA 2012) will be held in Taipei, Taiwan, with a theme of "M2M SOA". 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 on-going work on the topics such as:

- Service-oriented architecture, engineering, and applications
- M2M service system management
- Intelligent service composition, management and maintenance
- Configurable and reconfigurable service middleware
- Large-scale real-time cyber-physical systems
- 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 M2M applications

Proposal for workshops on focused emerging topics are also solicited. The papers in the workshops will be published in the SOCA proceedings that will be included in the IEEE Digital Library.

General Information about Taipei, Taiwan:

Taipei is the political, economic, and cultural center of Taiwan. The National Palace Museum has one of the largest collections of Chinese artifacts and artworks around the world and is located in Taipei. Taipei weather in December is usually mild with temperature around 10-15 degrees celsius. There are many direct flights to Taipei from USA, Europe, Australian and Asian cities.