

Message from the Conference and Program Chairs

SOCA 2015

The Eighth IEEE Conference on Service-Oriented Computing and Applications (SOCA 2015) was held in Rome, Italy. It is the first time SOCA is hosted in Europe, after previous editions held in countries on the Pacific Ocean (USA in 2007, 2011, and 2013; Taiwan in 2009 and 2012; Australia in 2010; Japan in 2014). Rome is the perfect meeting location for SOCA, which is one of the major annual events sponsored by the IEEE Computer Society Technical Committee on Business Informatics and Systems (TCBIS), to serve as an international forum for researchers to exchange and share their experiences, ideas, and latest research results on all aspects of service-oriented computing. Extensive research and development in the past few years have pushed SOC into a state-of-the-art key technology for the development of robust and high quality intelligent Internet-scale distributed and embedded applications, in emerging areas such as Internet-of-Things (IoTs), Machine-to-Machine (M2M) communication, Cyber-Physical Systems (CPSs), as well as mobile and enterprise systems. However, many of the critical components for building reliable, robust, and user-centric, cloud-based and service-oriented architecture applications are still open for research.

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 and on edge servers living at the frontier of resource-limited systems and high-end servers. These components are part of complex applications and systems that span multiple execution environments. Their capabilities are increasingly being managed and (re)configured via emerging software-defined and elasticity mechanisms. In addition, they have to interact with humans in order to solve complex problems. Thus, on the one hand, SOC may provide effective solutions for managing the ever-increasing complexity while meeting the challenging requirements of services on largely distributed, heterogeneous and dynamic resource environments. On the other hand, the exploitation of emerging trends in such environments to build SOC applications and systems for large-scale service-based systems is an open research challenge.

SOCA 2015 has received several high-quality paper submissions from 21 different countries. After a rigorous review process, the program committee accepted 16 full papers for inclusion in the conference proceedings, together with 12 short research, work-in-progress and industrial/experience papers. In addition, 3 papers were included as part of a special invited paper session.

SOCA 2015 is honored to have two distinguished keynote speakers, Schahram Dustdar from Vienna University of Technology, Austria, and Maurizio Lenzerini from Sapienza Università di Roma, Italy. SOCA 2015 includes also a PhD Doctoral Consortium and the Workshop on Knowledge and Service Technology for Life, Environment, and Sustainability (KASTLES); Yuh-Jye Lee from the National Taiwan University of Science and Technology, Taipei, Taiwan has been invited as the workshop keynote speaker. The technical program is completed by a panel jointly organized by Barbara Pernici from Politecnico di Milano, Italy, and Alexander Lazovik from University of Groningen, the Netherlands

The excellent program and activities of SOCA 2015 are the results of diligent effort from more than 70 program committee members and conference organizers. Each paper has been reviewed by at least 4 PC members. We thank all PC members for their careful reviews to make an outstanding technical program, the Workshop Co-Chairs, Chang-ai Sun from University of Science and Technology Beijing, China, Takayuki Ito from Nagoya Institute of Technology, Japan and Pierluigi Plebani from Politecnico di

Milano, Italy, for coordinating the satellite workshop, and Hong-Linh Truong from Vienna University of Technology, Austria, and Jian Yang from Macquarie University, Sydney, Australia, for organizing the PhD Doctoral Consortium.

We are very grateful to the Publication Chair, Jong-Chan Kim from Kookmin University, Korea for his great effort in editing the conference proceedings. We also express our gratitude to the Publicity and Web Co-Chairs, Francesco Leotta from Sapienza Università di Roma, Italy, Jun Shen from University of Wollongong, Australia, and Chi-Sheng Shih from National Taiwan University, Taipei, Taiwan, for making sure the conference events would be highly visible. We also thank the organizing agency Consulta Umbria, for its great effort in handling conference registration, arrangement and meeting services. Finally, we acknowledge the financial support of Sapienza Università di Roma, Italy.

We sincerely hope you enjoy SOCA and your stay in Rome, Italy!

General Co-Chairs

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