Editorial

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Biographical notes: Schahram Dustdar is Full Professor at the Distributed Systems Group, Vienna University of Technology and Honorary Professor of Information Systems at the University of Groningen, The Netherlands. His research focus is on service-oriented architectures, web services, process-oriented systems, and distributed systems and engineering. Since 1999 he works as the co-founder and chief scientist of Caramba Labs Software AG (CarambaLabs.com) in Vienna, a venture capital co-funded software company focused on software for collaborative processes in teams. More information can be found on: http://www.infosys.tuwien.ac.at/Staff/sd.

Worldwide, there is a growing recognition that internet systems enable new forms of human collaboration – for groups of private individuals, for companies, and for the public sector – and also for emerging software (web) services, which can be discovered, deployed, and enacted as workflows on the internet.

Current effort in research and industry is, therefore, aimed at transforming the World Wide Web from a network that makes information available and that facilitates transactions, towards an environment that provides software services and resources, to facilitate the emergence of dynamic virtual organisations and collaborative working environments utilising Service-oriented Information Systems on the Internet.

For this special issue, ten paper submissions from various areas of Service-oriented Computing (SOC) were received. All papers went through a rigorous international peer review, with each paper having three reviews. Four papers were selected to be published in this special issue.

The first paper by Uwe Zdun, Carsten Heinrich, and Wil van der Aalst presents and discusses a survey of formalised patterns that are relevant for Service-oriented Architectures (SOAs), and provides an architectural framework with patterns, which are relevant for building SOA solutions.

In the second paper, Nasreddine Aoumeur, José Fiadeiro, Cristóvão Oliveira analyse distribution concerns in Service-oriented Modelling, by showing how distribution logic can be defined in a set of architectural primitives. The presented model was used to build context-aware interactions.

The third paper by Tom Gross, Tareg Egla, and Nicolai Marquardt presents a service-oriented platform for developing sensor-based infrastructures. The authors claim that this facilitates the development, since developers can focus on developing their own infrastructures.

In the fourth paper Qusay Mahmoud and Wassam Zahreddine present the design and implementation of a device-independent system for adaptive composition of web services. The authors discuss how any device may dynamically discover context-based web services that will be automatically composed to satisfy a user's request.

I want to thank all authors who submitted their work to this special issue. Furthermore, I want to thank all reviewers who helped with their thorough and timely reviews to ensure the excellent quality of the accepted papers. I hope all readers enjoy the following papers as much as I did.