W4S4FI Workshop Papers
Preface of WAS4FI 2015

The Future Internet has emerged as a new initiative to pave a novel infrastructure linked to objects (things) of the real world so as to meet the changing global needs of business and society. It offers Internet users a standardized, secure, efficient, and trustable environment, which allows open and distributed access to global networks, services, and information. There is a need for both researchers and practitioners to develop platforms made up of adaptive Future Internet applications. In this sense, the emergence and consolidation of service-oriented architectures (SOA), cloud computing wireless sensor networks (WSN), and the new paradigm fog computing, give benefits, such as flexibility, scalability, security, interoperability, and adaptability for building these applications.

WAS4FI encourages a multidisciplinary perspective and welcomes papers that address challenges of Future Internet applications. The participation of researchers and practitioners from academia and industry is encouraged in order to promote cross-community interactions thereby avoiding disconnection between these groups. As the proud Organizing Committee and chairs of the 5th International Workshop on Adaptive Services for the Future Internet, we would like to take this opportunity to welcome you to the proceedings of WAS4FI 2015.

In this fifth edition, WAS4FI again aimed to bring together the community at ESOCC and addresses different aspects of adaptive Future Internet applications, emphasizing the importance of governing the convergence of contents, services, things, and networks in order to achieve the building of platforms for efficiency, scalability, security, and flexible adaptation. In this workshop, we cover the foundations of the aforementioned technologies as well as new emerging proposals for their potential in Future Internet services. To promote collaboration, WAS4FI has a highly interactive format with short technical sessions complemented by discussions on adaptive services in the Future Internet applications.

The broad scope of WAS4FI is reflected in the wide range of topics covered by the workshop, and the 21 members of the WAS4FI Program Committee from both academic and industrial research labs. During the workshop, four papers (three long and one short) were presented:

- “A Lightweight Method for Analyzing Performance Dependencies Between Services,” by Arjan Lamers and Marko Van Eekelen (long paper). In this paper, the authors propose a methodology to describe and analyze performance dependencies between services.
- “Adaptive Architectural Model for Future Internet Applications,” by Luigi Alfredo Grieco, Marina Mongiello, Massimo Sciancalepore, and Elvis Vogli (short paper). This paper proposes a model for runtime composition of software applications in sensors networks based on data, processes, and technology to design on the fly and architectures of a software system.
• “Automated Prediction of the QoS of Service Orchestrations: PASO at Work,” by Leonardo Bartoloni, Antonio Brogi and Ahmad Ibrahim (long paper). In this paper, the authors illustrate the practical usefulness of a probabilistic analyzer of service orchestrations (PASO) by showing how it can be exploited to predict the QoS of service orchestrations.

• “A Workflow Service Mediator for Automated Information Processing and Scheduling Delivery to an Archive,” by Salvatore D’Antonio, Giuliano Gugliara, Carlo Francesco Romano, and Luigi Romano (long paper). This paper describes a service mediator that addresses real-life digital preservation problems and an overview of the project’s progress to date.

We believe this workshop was an enjoyable and productive opportunity for attendees to meet and discuss various adaptive services and Future Internet issues with their counterparts from other countries and other industrial segments.

We would like to thank all the people who contributed to make this workshop a reality, including the WAS4FI Program Committee, the ESOCC 2015 Workshop Organizers, Philipp Leitner and Antonio Celesti, and all the presenters, authors, and participants.

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