Fourth International Workshop on RESTful Design (WS-REST 2013)

Over the past few years, the discussion between the major architectural styles for designing and implementing Web services, the RPC-oriented approach, the Message-oriented approach, and the Resource-oriented approach, has been mainly held outside of traditional research communities. Mailing lists, forums and developer communities have seen long and very detailed debates around the assumptions, strengths, and weaknesses of these approaches. Representational State Transfer (REST) is an architectural style [1] and as such can be applied in different ways, extended by additional constraints, or specialized with specific interaction patterns.

With the advent of service orientation and Service Oriented Architecture (SOA) as important new paradigms for large-scale IT system design, it has become an essential and sometimes contentious issue what to define as a "service". While many definitions in the scope of SOA stay on a very abstract level, eventually services need to be mapped to concrete IT architectures [2]. In this area, there are two main design approaches. One approach has been to use a functional approach to services, and to define them in a way resembling a collection of Messages and Remote Procedure Calls; this approach has also been the underlying principles of existing middleware frameworks, such as CORBA. The other approach is to center the design on resources instead of functions; this approach has its main background in REST, the architectural style underlying the Web.

The *International Workshop on RESTful Design* is a venue that aims to involve researchers in the debate by providing a prestigious forum for discussing research activities, novel applications and results centered around the resource-oriented style of Web services. The *First International Workshop on RESTful Design (WS-REST 2010)* [3] was held at the WWW2010 conference and attracted more than 70 registrations; it was the second largest workshop and based on the papers and submissions, a follow-up book, called "*REST: From Research to Practice"* [4], was published in early 2011. The *Second International Workshop on RESTful Design (WS-REST 2011)* [5] became again the second largest workshop at WWW2011 and was followed by the *Third International Workshop on RESTful Design (WS-REST 2012)* [6] at WWW2012, which gave rise to a second book, called "*REST: Advanced Research Topics and Practical Applications*" (to be published in 2013).

This fourth edition of the workshop (WS-REST 2013), held at the WWW2013 conference, is following the tradition of WS-REST workshops at the WWW conference series. This workshop edition includes contributions from Markus Gulden and Stefan Kugele, presenting a technique for generating *simplified RESTful interfaces*; Ruben Verborgh, Michael Hausenblas, Thomas Steiner, Erik Mannens and Rik Van de Walle, reviewing *distributed affordance, as an open-world assumption for hypermedia*; Luca Panziera and Flavio De Paoli, introducing *a framework for self-descriptive RESTful services;* and Markus Lanthaler and Christian Guetl, discussing the need of *modeling REST application domains instead of JSON structures*.

We would like to extend our gratitude to the authors for their contributions, and to the members of the program committee, who thoroughly reviewed all submissions to the workshop: Jan Algermissen, Benjamin Carlyle, Stuart Charlton, Cornelia Davis, Joe Gregorio, Michael Hausenblas,

Yves Lafon, Markus Lanthaler, Mark Nottingham, Carlos Pedrinaci, Silvia Schreier, Stefan Tilkov, Ruben Verborgh, Tomas Vitvar, and Ivan Zuzak. Each submission was reviewed by various PC members, which results in a fair and balanced reviewing process and a helpful feedback for the authors.

We hope that you will find this program interesting and thought-provoking, and that the workshop will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world.

[1] R. T. Fielding. Architectural Styles and the Design of Network-based Software Architectures. PhD thesis, UCI, Irvine, 2000.

[2] T. Erl, B. Carlyle, C. Pautasso, and   R. Balasubramanian. SOA with REST - Principles, Patterns and Constraints for Building Enterprise Solutions with REST. The Prentice Hall service technology series. Pearson Education, 2013.

[3] C. Pautasso, E. Wilde, and A. Marinos, editors. First International Workshop on RESTful Design (WS-REST 2010), Raleigh, NC, USA, Apr. 2010.

[4] E. Wilde and C. Pautasso, editors. REST: From Research to Practice. Heidelberg, 2011.

[5] C. Pautasso, E. Wilde, and R. Alarcón, editors. Second International Workshop on RESTful Design (WS-REST 2011), Hyderabad, India, Mar. 2011.

[6] R. Alarcón, C. Pautasso, and E. Wilde, editors. Third International Workshop on RESTful Design (WS-REST 2012), Lyon, France, Apr. 2012.

Rosa Alarcon
Computer Science Department
Pontificia Universidad Catolica
ralarcon@ing.puc.cl

Cesare Pautasso
Faculty of Informatics
University of Lugano
cesare.pautasso@usi.ch

Erik Wilde
Information Intelligence Group
EMC Corporation
erik.wilde@emc.com