Preface

Welcome to the Proceedings of ICSOC 2017, the 15th International Conference on Service-Oriented Computing. ICSOC is the premier international forum for academics, industry researchers, developers, and practitioners to report and share ground-breaking work on all topics related to services and service-oriented computing. ICSOC fosters cross-community scientific innovation and excellence by gathering experts from various disciplines, such as business process management, distributed systems, computer networks, wireless and mobile computing, cloud computing, cyber-physical systems, networking, scientific workflows, services science, data science, management science, and software engineering.

ICSOC 2017, the 15th event in this series, took place in Málaga, Spain, during November 13–16, 2017. Following on the ICSOC tradition, it featured three keynote presentations, a research and industry presentations track, as well as workshops, tool demonstrations, tutorials, and a PhD track.

Since its beginnings, services have become a core principle in software development. They provide perfect mechanisms for modularization, encapsulation, and for designing, analyzing, and deploying the architecture of large software systems, at the right level of abstraction, and in terms of loosely coupled, independent, and reusable parts with well-defined interfaces. Recently, services have gained rapid popularity across most software disciplines, showing all their benefits for building complex and critical applications in domains such as cloud computing, the Internet of Things (IoT), cyber-physical systems, mobile computing, and so on. This pervasive use of services has become industrially accepted best practice in all these application areas.

The increased success of using services in software and systems engineering has also raised new challenges, requiring collaborative research across multiple disciplines, groups, companies, and centers. As with previous editions, this year’s call for papers generated substantial interest from the community. A total of 179 full research and industry submissions were received from 23 countries across six continents. Each paper submission was carefully reviewed by at least three members of the Program Committee (PC), followed by discussions moderated by a senior PC member who made a recommendation in the form of a meta-review. The PC consisted of 172 world-class experts in service-oriented computing and related areas (153 PC members and 19 senior PC members) from 28 different countries. The ICSOC 2017 program featured 33 full papers (acceptance rate of 18%) and 20 short papers. The selected papers cover a wide variety of important topics in the area of service-oriented computing, including foundational issues on service discovery and service-systems design, business process modelling and management, economics of service-systems engineering, as well as services on the cloud, social networks, IoT, and data analytics.

We would like to express our gratitude to all individuals, institutions, and sponsors that supported ICSOC 2017. This high-quality program would not have been possible without the expertise and dedication of our PC members and in particular our senior PC
members. We are also grateful for the guidance of the General Chair, Carlos Canal, the untiring efforts of external reviewers, and the complete ICSOC Steering Committee. All of them helped make ICSOC 2017 a great success. Finally, we would like to thank all the authors who submitted papers to the conference, and we congratulate those authors whose papers appear in these proceedings. These papers reflect the quality of the current state of the art in service oriented computing research and practice. We hope that you find these papers interesting and stimulating.

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