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# Service-Oriented and Cloud Computing

Antonio Brogi, Wolf Zimmermann, Kyriakos Kritikos

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# Service-Oriented and Cloud Computing

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*Editors*
Antonio Brogi
Università di Pisa
Pisa, Italy

Kyriakos Kritikos
University of the Aegean
Karlovasi, Greece

Wolf Zimmermann
Martin-Luther-Universität Halle-Wittenberg
Halle (Saale), Germany

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# Preface

Service-oriented and cloud computing have made a huge impact both on the software industry and on the research community. Today, service and cloud technologies are applied to build large-scale software landscapes as well as to provide single software services to end users. Services today are independently developed and deployed as well as freely composed while they can be implemented in a variety of technologies, quite an important fact from a business perspective. Similarly, cloud computing aims at enabling flexibility by offering a centralized sharing of resources. The industry's need for agile and flexible software and IT systems has made cloud computing the dominating paradigm for provisioning computational resources in a scalable, on-demand fashion. Nevertheless, service developers, providers, and integrators still need to create methods, tools, and techniques to support cost-effective and secure development as well as the use of dependable devices, platforms, services, and service-oriented applications in the cloud.

The European Conference on Service-Oriented and Cloud Computing (ESOCC) is the premier conference on advances in the state of the art and practice of service-oriented computing and cloud computing in Europe. The main objectives of this conference are to facilitate the exchange between researchers and practitioners in the areas of service-oriented computing and cloud computing, as well as to explore the new trends in those areas and foster future collaborations in Europe and beyond. The 8th edition of ESOCC, ESOCC 2020, was held in the city of Heraklion in Crete, Greece, during September 28–30, 2020, under the auspices of FORTH-ICS.

ESOCC 2020 was a multi-event conference aimed to cover both an academic and industrial audience. The main event was associated with the main research track, which focused on the presentation of cutting-edge research in both the service-oriented and cloud computing areas. In conjunction, an industrial track was also held bringing together academia and industry by showcasing the application of service-oriented and cloud computing research, especially in the form of case studies, from industry. Overall, 20 submissions were received, out of which 6 outstanding full and 8 short papers were accepted.

Each submission was peer-reviewed by three main reviewers, either directly from the PC members or their colleagues. Due to the high quality of the manuscripts received, additional discussions were conducted, both among the PC members as well as between the two PC chairs, before the final selection was performed. The PC chairs would like to thank all the reviewers that participated in the reviewing process not only for enabling to increase the quality of the received manuscripts but also for sharing particular ideas on how the respective work, even if rejected in its current form in the ESOCC conference, could be substantially improved.

The attendees of ESOCC had the opportunity to follow two outstanding keynotes that were part of the conference program. The first keynote was conducted by Massimo Villari, Professor and Rector Delegate for ICT as well as Head of the Computer Science

School in the University of Messina, Italy. This keynote concerned recent research advances and trends towards realizing the vision of Osmotic Computing. The second keynote was conducted by Joseph Spillner, Head of the Service Prototyping Lab and Associate Professor at Zurich University of Applied Sciences in Switzerland. This second keynote concerned the presentation of methods for developing production-ready, Function-as-a-Service applications concentrating on scalable event-driven data processing that are well-suited for highly dynamic environments with varying loads.

The additional events held in ESOCC 2020 included the PhD symposium, enabling PhD students to present their work in front of real experts, as well as the EU projects track, supplying researchers with the opportunity to present the main research results that they have achieved in the context of currently operating EU projects. Further, ESOCC 2020 included the organization of satellite workshops. All these events were accompanied by respective proceedings which were published separately.

Finally, this 8th edition of ESOCC included a novel track dedicated to the conduction of tutorials. This enabled the workshop participants to get acquainted with the latest results of specific European projects as well as of specific European research groups in a practical manner which included demonstrations of research prototypes.

The PC chairs and the general chair would like to gratefully thank all the persons involved in making ESOCC 2020 a success. This includes both the PC members and their colleagues that assisted in the reviews as well as the organizers of the industry track, the PhD symposium, the EU projects track, and the workshops. A special applause should also go to the members of the Local Organizing Committee for their devotion, willingness, and hospitality. Finally, a special thanks goes to all the authors of all the manuscripts submitted to ESOCC 2020, the presenters of the accepted papers who made interesting and fascinating presentations of their work, as well as the active attendees of the conference who initiated interesting discussions and gave fruitful feedback to the presenters. All these persons not only enabled a very successful organization and execution of ESOCC 2020, but also formulate an active and vibrant community which continuously contributes to the research in service-oriented and cloud computing. This also encourages ESOCC to continue contributing with new research outcomes to further facilitate and enlarge its community as well as have a greater impact and share in both the service-oriented and cloud computing research.

September 2020

Antonio Brogi
Wolf Zimmermann
Kyriakos Kritikos

# Organization

ESOCC 2020 was organized by FORTH-ICS, Greece.

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