Fabrizio Montesi George Angelos Papadopoulos Wolf Zimmermann (Eds.)

Service-Oriented and Cloud Computing

9th IFIP WG 6.12 European Conference, ESOCC 2022 Wittenberg, Germany, March 22–24, 2022 Proceedings





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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, a quite 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 9th edition of ESOCC, ESOCC 2022, was supposed to be held at Lutherstadt Wittenberg, Germany, from March 22 until March 24, 2022. Due to the COVID-19 pandemic situation it was held as a virtual conference.

ESOCC 2022 was a multi-event conference aiming at covering both an academic and an industrial audience. The main event mapped to 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 to bring together academia and industry through showcasing the application of service-oriented and cloud computing research, especially in the form of case studies, in industry. Overall, 17 submissions were received out of which eight outstanding were accepted—six full papers and two short papers.

Each submission was peer-reviewed by three main reviewers, comprising either Program Committee (PC) members or their colleagues. The PC chairs would like to thank all the reviewers that participated in the reviewing process. Their comments were essential for improving the quality of the received manuscripts and especially for giving constructive comments to the authors of papers that, in their current forms, were rejected for ESOCC 2022.

The attendees of ESOCC had the opportunity to follow an outstanding keynote that was part of the conference program. The keynote was conducted by Uwe Assmann, professor and former dean of the Faculty of Computer Science at Dresden University of Technology, Germany. This keynote introduced an exciting application of fog computing: a gas sniffing sensor network for remote operation in dangerous areas.

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The additional events held at ESOCC 2022 included the PhD symposium, enabling PhD students to present their work in front of real experts, as well as a projects track, providing researchers with the opportunity to present the main research results that they have achieved in the context of currently operating EU projects and national projects. Further, ESOCC 2022 included the organization of satellite workshops. All these events will be accompanied by respective proceedings which will be published separately.

The PC chairs and the general chair would like to gratefully thank all the people involved in making ESOCC 2022 a success. This includes both the PC members and their colleagues who assisted in the reviews, as well as the organizers of the industry track, the PhD symposium, the projects track, and the workshops. A special applause should also go to Maik Boltze, Mandy Weissbach, and Ramona Vahrenhold for their administrative support and for managing the virtual conference rooms. Finally, a special thanks goes to all the authors of the manuscripts submitted to ESOCC 2022, the presenters of the accepted papers who made interesting and fascinating presentations of their work, and the active attendees of the conference who initiated interesting discussions and gave fruitful feedback to the presenters. All these people have not only enabled the successful organization and execution of ESOCC 2022 but also an active and vibrant community which continuously contributes to the research in service-oriented and cloud computing. This also encourages ESOCC to keep supporting and enlarging its community, by providing a forum in which new research outcomes can be shared and discussions on how to achieve greater impact can be held.

March 2022

Fabrizio Montesi George A. Papadopoulos Wolf Zimmermann

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ESOCC 2022 was organized by Martin Luther University Halle-Wittenberg, Germany.

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