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Xiao Liu · Michael Mrissa · Liang Zhang · Djamal Benslimane · Aditya Ghose · Zhongjie Wang · Antonio Bucchiarone · Wei Zhang · Ying Zou · Qi Yu (Eds.)

# Service-Oriented Computing – ICSOC 2018 Workshops

ADMS, ASOCA, ISYyCC, CloTS, DDBS, and NLS4IoT Hangzhou, China, November 12–15, 2018 Revised Selected Papers



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#### **Preface**

This volume presents the proceedings of the scientific satellite events that were held in conjunction with the 2018 International Conference on Service-Oriented Computing, which took place in Hangzhou, China, November 12–15, 2018. Since the first edition in Trento in 2003, ICSOC has become one of leading conferences in the rapidly evolving areas of service research.

The satellite events provide venues for specialist groups to meet, to generate focused discussions on specific sub-areas within service-oriented computing, and to engage in community-building activities. These events helped significantly enrich the main conference by both expanding the scope of research topics and attracting participants from a wider community. The selected scientific satellite events were organized around three main tracks, i.e., a workshop track, a PhD symposium track, and a demonstration track.

We received a good number of proposals for the ICSOC 2018 workshop track and six of them were finally selected. The workshop track included a wide range of topics that fall into the general area of service computing. A special focus this year was on the Internet of Things, data analytics, and smart services. These technology trends in combination with novel application domains led to inspiring research results.

- The First International Workshop on Data-Driven Business Services (DDBS)
- The First International Workshop on Networked Learning Systems for Secured IoT Services and Its Applications (NLS4IoT)
- The 8th International Workshop on Context-Aware and IoT Services (CIoTS)
- The Third International Workshop on Adaptive Service-Oriented and Cloud Applications (ASOCA2018)
- The Third International Workshop on IoT Systems for Context-Aware Computing (ISvCC)
- The First International Workshop on AI and Data Mining for Services (ADMS)

The workshops were held on November 12, 2018. Each workshop had its own chairs and Program Committee, who were responsible for the selection of papers. The overall organization for the workshop program, including the selection of the workshop proposals, was carried out by Xiao Liu, Michael Mrissa, and Liang Zhang. The ICSOC PhD Symposium is an international forum for PhD students to present, share, and discuss their research in a constructive and critical atmosphere. It also provides students with fruitful feedback and advice on their research approach and thesis. The PhD Symposium Track was chaired by Djamal Benslimane, Aditya Ghose, and Zhongjie Wang.

The ICSOC Demonstration Track offers an exciting and highly interactive way to show research prototypes/work in service-oriented computing (SOC) and related areas. The Demonstration Track was chaired by Antonio Bucchiarone, Wei Zhang, and Ying Zou.

#### Preface

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We would like to thank the workshop, PhD symposium, and demonstration authors, as well as keynote speakers and workshop Organizing Committees, who together contributed to this important aspect of the conference.

We hope that these proceedings will serve as a valuable reference for researchers and practitioners working in the SOC domain and its emerging applications.

January 2019

Xiao Liu Michael Mrissa Liang Zhang Djamal Benslimane Aditya Ghose Zhongjie Wang Antonio Bucchiarone Wei Zhang Ying Zou Qi Yu

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#### Workshop on Adaptive Service-Oriented and Cloud Applications

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# Workshop on IoT Systems for Context-Aware Computing

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Zhangbing Zhou China University of Geosciences, Beijing, China

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