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Service-Oriented Computing

17th International Conference, ICSOC 2019
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Proceedings

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Preface

The 17th International Conference on Service-Oriented Computing (ICSOC 2019) took place in Toulouse, France, during October 28–31, 2019. It aimed at bringing together academics, industry researchers, developers, and practitioners to report and share ground-breaking work in the area of Service-Oriented Computing (SOC). The objective of ICSOC 2019 was to foster cross-community scientific 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, Internet of Thing (IoT), networking, scientific workflows, services science, data science, management science, and software engineering. This edition of ICSOC built upon a history of a successful series of previous editions in Hangzhou (Zhejiang, China), Malaga (Spain), Banff (Alberta, Canada), Goa (India), Paris (France), Berlin (Germany), Shanghai (China), Paphos (Cyprus), San Francisco (California, USA), Stockholm (Sweden), Sydney (Australia), Vienna (Austria), Chicago (USA), Amsterdam (the Netherlands), New York (USA), and Trento (Italy).

The conference attracted papers co-authored by researchers, practitioners, and academics from different countries. We received 183 research and industry paper submissions from countries across all 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 (142 PC members and 22 senior PC members) from different countries across all continents. Based on the recommendations, and the discussion, 28 papers (15%) were accepted as full papers. We also selected 10 short papers (6%) and 7 posters (4%), as well as 2 invited papers from prominent researchers.

The program we assembled is reflective of the breadth and depth of the research and applications of SOC, with contributions in the following areas:

- Service Engineering
- Run-time Service Operations and Management
- Services and Data
- Services in the Cloud
- Services for the Internet of Things
- Services in Organizations, Business, and Society
- Services at the Edge

In addition, we were honored to have three prominent players in academic and industrial research areas who gave keynote addresses at ICSOC 2019:

- “State of Permissionless and Permissioned Blockchains: Myths and Reality,” by Dr. C. Mohan, IBM Almaden Research Center in Silicon Valley, San Francisco, CA, USA

- “The infrastructure, from physical servers to containers and beyond, what is the next breakthrough?” by Dr. Pierre Rognant, Thales Alenia Space, Toulouse, France
- “Developing AI Systems New challenges for Software Engineering,” by Prof. Ivica Crnkovic, Chalmers University, Gothenburg, Sweden

In addition to the technical program consisting of the keynote talks, the main research track, the industry track, the PhD symposium, the demo session and poster sessions, the scope of ICSOC 2019 was broadened by 5 workshops:

- The 15th International Workshop on Engineering Service-Oriented Applications and Cloud Services (WESOACS 2019)
- The 4th International Workshop on Adaptive Service-oriented and Cloud Applications (ASOCA 2019)
- The 4th International IoT Systems Provisioning & Management for Context-Aware Smart Cities (ISYCC 2019)
- The first edition of Towards Blockchain-Based Collaborative Enterprise (TBCE 2019)
- The first edition of Smart daTa integRation And Processing on Service based environments (STRAPS 2019)

We are grateful to the members of the PC as well as the meta-reviewers for helping us to provide valuable and timely reviews. Their efforts enabled us to put together a high-quality technical program for ICSOC 2019. We are indebted to the local arrangements team of LAAS-CNRS for the successful organization of all conference, social, and co-located events. The ICSOC 2019 submission, review, and proceedings process was extensively supported by the ConfTool Conference Management System. We are grateful to their technical support.

We would also like to acknowledge all the members of the Organizing Committee and all who contributed to make ICSOC 2019 a successful event. We also acknowledge the prompt and professional support from Springer, who published these proceedings in printed and electronic volumes as part of the *Lecture Notes in Computer Science* series. Most importantly, we would like to thank all authors and participants of ICSOC 2019 for their insightful work and discussions!

November 2019

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Contents

Service Engineering

An Empirical Study of GraphQL Schemas	3
<i>Erik Wittern, Alan Cha, James C. Davis, Guillaume Baudart, and Louis Mandel</i>	
Automating SLA-Driven API Development with SLA4OAI	20
<i>Antonio Gamez-Diaz, Pablo Fernandez, and Antonio Ruiz-Cortes</i>	
On Observability and Monitoring of Distributed Systems – An Industry Interview Study	36
<i>Sina Niedermaier, Falko Koetter, Andreas Freymann, and Stefan Wagner</i>	
Integrating Geographical and Functional Relevance to Implicit Data for Web Service Recommendation.	53
<i>Khavée Agustus Botangen, Jian Yu, Sira Yongchareon, LiangHuai Yang, and Quan Z. Sheng</i>	
Towards Automated Microservices Extraction Using Muti-objective Evolutionary Search	58
<i>Islem Saidani, Ali Ouni, Mohamed Wiem Mkaouer, and Aymen Saied</i>	
Towards Automated Planning for Enterprise Services: Opportunities and Challenges	64
<i>Maja Vukovic, Scott Gerard, Rick Hull, Michael Katz, Laura Shwartz, Shirin Sohrabi, Christian Muise, John Rofrano, Anup Kalia, Jinho Hwang, Dang Yabin, Ma Jie, and Jiang Zhuoxuan</i>	

Run-Time Service Operations and Management

A Model for Distributed Service Level Agreement Negotiation in Internet of Things	71
<i>Fan Li, Andrei Palade, and Siobhán Clarke</i>	
Edge User Allocation with Dynamic Quality of Service	86
<i>Phu Lai, Qiang He, Guangming Cui, Xiaoyu Xia, Mohamed Abdelrazek, Feifei Chen, John Hosking, John Grundy, and Yun Yang</i>	
Automatic Business Process Model Extension to Repair Constraint Violations	102
<i>Xavier Oriol, Giuseppe De Giacomo, Montserrat Estañol, and Ernest Teniente</i>	

N2TM: A New Node to Trust Matrix Method for Spam Worker Defense in Crowdsourcing Environments	119
<i>Bin Ye, Yan Wang, Mehmet Orgun, and Quan Z. Sheng</i>	
QoS Value Prediction Using a Combination of Filtering Method and Neural Network Regression	135
<i>Soumi Chattopadhyay and Ansuman Banerjee</i>	
Harmonia: A Continuous Service Monitoring Framework Using DevOps and Service Mesh in a Complementary Manner	151
<i>Haan Johng, Anup K. Kalia, Jin Xiao, Maja Vuković, and Lawrence Chung</i>	
Services and Data	
ESDA: An Energy-Saving Data Analytics Fog Service Platform	171
<i>Tiehua Zhang, Zhishu Shen, Jiong Jin, Atsushi Tagami, Xi Zheng, and Yun Yang</i>	
Leveraging AI in Service Automation Modeling: From Classical AI Through Deep Learning to Combination Models.	186
<i>Qing Wang, Larisa Shwartz, Genady Ya. Grabarnik, Michael Nidd, and Jinho Hwang</i>	
A Wearable Machine Learning Solution for Internet Traffic Classification in Satellite Communications	202
<i>Fannia Pacheco, Ernesto Exposito, and Mathieu Gineste</i>	
FAME: An Influencer Model for Service-Oriented Environments	216
<i>Faisal Binzagr, Hamza Labbaci, and Brahim Medjahed</i>	
Latency-Aware Deployment of IoT Services in a Cloud-Edge Environment.	231
<i>Shouli Zhang, Chen Liu, Jianwu Wang, Zhongguo Yang, Yanbo Han, and Xiaohong Li</i>	
Trusted Data Integration in Service Environments: A Systematic Mapping . . .	237
<i>Senda Romdhani, Nadia Bennani, Chirine Ghedira-Guegan, and Genoveva Vargas-Solar</i>	
CSI2: Cloud Server Idleness Identification by Advanced Machine Learning in Theories and Practice	243
<i>Jun Duan, Guangcheng Li, Neeraj Asthana, Sai Zeng, Ivan Dell'Era, Aman Chanana, Chitra Agastya, William Pointer, and Rong Yan</i>	

Services in the Cloud

An Energy Efficient and Interference Aware Virtual Machine Consolidation Algorithm Using Workload Classification.	251
<i>Rachael Shaw, Enda Howley, and Enda Barrett</i>	
Thread-Level CPU and Memory Usage Control of Custom Code in Multi-tenant SaaS	267
<i>Majid Makki, Dimitri Van Landuyt, Bert Lagaisse, and Wouter Joosen</i>	
Optimized Application Deployment in the Fog	283
<i>Zoltán Ádám Mann, Andreas Metzger, Johannes Prade, and Robert Seidl</i>	
Toward Cost Efficient Cloud Bursting	299
<i>Amirmohammad Pashar, Young Choon Lee, and Khaled Almi'ani</i>	
Optimized Renewable Energy Use in Green Cloud Data Centers.	314
<i>Minxian Xu, Adel N. Toosi, Behrooz Bahrani, Reza Razzaghi, and Martin Singh</i>	
Operating Enterprise AI as a Service	331
<i>Fabio Casati, Kannan Govindarajan, Baskar Jayaraman, Aniruddha Thakur, Sriram Palapudi, Firat Karakusoglu, and Debu Chatterjee</i>	
Towards Automated Patch Management in a Hybrid Cloud	345
<i>Ubaid Ullah Hafeez, Alexei Karve, Braulio Dumba, Anshul Gandhi, and Sai Zeng</i>	

Services on the Internet of Things

QCF: QoS-Aware Communication Framework for Real-Time IoT Services.	353
<i>Omid Tavallaie, Javid Taheri, and Albert Y. Zomaya</i>	
Constraint-Aware Drone-as-a-Service Composition	369
<i>Babar Shahzaad, Athman Bouguettaya, Sajib Mistry, and Azadeh Ghari Neiat</i>	
An Adaptive Monitoring Service Exploiting Data Correlations in Fog Computing.	383
<i>Monica Vitali, Xuesong Peng, and Barbara Pernici</i>	
The Circuit Breaker Pattern Targeted to Future IoT Applications.	390
<i>Gibeon Aquino, Rafael Queiroz, Geoff Merrett, and Bashir Al-Hashimi</i>	

Services in Organizations, Business and Society

A Catalogue of Inter-parameter Dependencies in RESTful Web APIs	399
<i>Alberto Martin-Lopez, Sergio Segura, and Antonio Ruiz-Cortés</i>	
Simplification of Complex Process Models by Abstracting Infrequent Behaviour	415
<i>David Chapela-Campa, Manuel Mucientes, and Manuel Lama</i>	
Improving IT Support by Enhancing Incident Management Process with Multi-modal Analysis	431
<i>Atri Mandal, Shivali Agarwal, Nikhil Malhotra, Giriprasad Sridhara, Anupama Ray, and Daivik Swarup</i>	
A Recommendation of Crowdsourcing Workers Based on Multi-community Collaboration	447
<i>Zhifang Liao, Xin Xu, Peng Lan, Jun Long, and Yan Zhang</i>	
Analysis of Resource Allocation of BPMN Processes	452
<i>Francisco Durán, Camilo Rocha, and Gwen Salaün</i>	

Services at the Edge

Joint Operator Scaling and Placement for Distributed Stream Processing Applications in Edge Computing.	461
<i>Qinglan Peng, Yunni Xia, Yan Wang, Chunrong Wu, Xin Luo, and Jia Lee</i>	
Graph-Based Optimal Data Caching in Edge Computing	477
<i>Xiaoyu Xia, Feifei Chen, Qiang He, Guangming Cui, Phu Lai, Mohamed Abdelrazek, John Grundy, and Hai Jin</i>	
Load-Aware Edge Server Placement for Mobile Edge Computing in 5G Networks	494
<i>Xiaolong Xu, Yuan Xue, Lianyong Qi, Xuyun Zhang, Shaohua Wan, Wanchun Dou, and Victor Chang</i>	
PAPS: A Framework for Decentralized Self-management at the Edge	508
<i>Luciano Baresi, Danilo Filgueira Mendonça, and Giovanni Quattrocchi</i>	
Measuring the Fog, Gently.	523
<i>Antonio Brogi, Stefano Forti, and Marco Gaglianese</i>	
Mobile Apps with Dynamic Bindings Between the Fog and the Cloud	539
<i>Dionysis Athanasopoulos, Mitchell McEwen, and Austen Rainer</i>	

Re-deploying Microservices in Edge and Cloud Environment for the Optimization of User-Perceived Service Quality	555
<i>Xiang He, Zhiying Tu, Xiaofei Xu, and Zhongjie Wang</i>	

Short Papers

Mapping Business Rules to LTL Formulas	563
<i>Isaac Mackey and Jianwen Su</i>	
A SDN/NFV Based Network Slicing Creation System	566
<i>Meng Wang, Bo Cheng, and Junliang Chen</i>	
Neural Adaptive Caching Approach for Content Delivery Networks	569
<i>Qilin Fan, Hao Yin, Qiang He, Yuming Jiang, Sen Wang, Yongqiang Lyu, and Xu Zhang</i>	
Personal Service Ecosystem (PSE) and Its Evolution Pattern Analysis	571
<i>Haifang Wang, Yao Fu, Zhongjie Wang, Zhiying Tu, and Xiaofei Xu</i>	
Adaptive Mobile Business Process Monitoring Service with Enhanced NFV MANO	573
<i>Giovanni Meroni, Marouan Mizmizi, Pierluigi Plebani, and Luca Reggiani</i>	
SATP: Sentiment Augmented Topic Popularity Prediction on Social Media	575
<i>Weizhi Gong, Zuowu Zheng, Xiaofeng Gao, and Guihai Chen</i>	
A Hierarchical Optimizer for Recommendation System Based on Shortest Path Algorithm	578
<i>Jiacheng Dai, Zhifeng Jia, Xiaofeng Gao, and Guihai Chen</i>	
Author Index	581