

Joint Post-proceedings of the Third and Fourth International Conference on Microservices

Microservices 2020, September 2020, Virtual Meeting
Microservices 2022, May 2022, Paris, France

Edited by

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■ Contents

Preface	
<i>Gokila Dorai, Maurizio Gabbrielli, Giulio Manzonetto, Aomar Osmani, Marco Prandini, Gianluigi Zavattaro, and Olaf Zimmerman</i>	0:vii–0:viii
Microservices 2020	
.....	0:ix
Microservices 2022	
.....	0:xi
Scientific Committee of the post-proceedings	
.....	0:xiii
Invited Paper	
Microservices Beyond COVID-19	
<i>Antonio Brogi</i>	1:1–1:3
Regular Papers	
Microservice-Aware Static Analysis: Opportunities, Gaps, and Advancements	
<i>Tomas Cerny and Davide Taibi</i>	2:1–2:14
Modular Choreographies: Bridging Alice and Bob Notation to Java	
<i>Luís Cruz-Filipe, Anne Madsen, Fabrizio Montesi, and Marco Peressotti</i>	3:1–3:18
ZVAX – A Microservice Reference Architecture for Nation-Scale Pandemic Management	
<i>Oliver Cvetkovski, Carlo Field, Davide Trinchi, Christof Marti, and Josef Spillner</i>	4:1–4:16
Custom Serverless Function Scheduling Policies: An APP Tutorial	
<i>Giuseppe De Palma, Saverio Giallorenzo, Jacopo Mauro, Matteo Trentin, and Gianluigi Zavattaro</i>	5:1–5:16
Model-Driven Code Generation for Microservices: Service Models	
<i>Saverio Giallorenzo, Fabrizio Montesi, Marco Peressotti, and Florian Rademacher</i>	6:1–6:17
Towards Self-Architecting Autonomic Microservices	
<i>Claudio Guidi</i>	7:1–7:14
Correct-By-Construction Microservices with Model-Driven Engineering: The Case for Architectural Pattern Conformance Checking and Pattern-Conform Code Generation	
<i>Florian Rademacher</i>	8:1–8:25
Applying QoS in FaaS Applications: A Software Product Line Approach	
<i>Pablo Serrano-Gutierrez, Inmaculada Ayala, and Lidia Fuentes</i>	9:1–9:15

■ Preface

About the Microservices Community and the Microservices Conference Series

The Microservices Community¹ is a European-based non-profit organisation purposed at sharing the knowledge and fostering collaborations on microservices. The organisation counts a broad composition of members from research institutions, private companies, universities, and public organisations. The International Conference on Microservices (shortened, Microservices) is a conference series whose aim is to bring together industry and academia, to foster discussion on the practice and research of all aspects of microservices: their design, programming, and operations. Microservices is the flagship conference among the many dissemination events supported by the Microservices Community.

Microservices 2020, September 2020, Virtual Meeting.

The general theme of Microservices 2020 was the interplay between microservices and cyber security.² Wide representation was left open to both scientific papers and application reports regarding different themes. The criteria for acceptance were adjusted towards selecting presentations that could raise interest and spark discussion, rather than seeking complete maturity from a scientific or industrial standpoint.

The program committee consisted of 32 members and the conference received 23 submissions in the form of 2-page abstracts, among which 20 were accepted for presentation. The conference was held online due to Covid-19 restrictions, spanning three days. In addition to the 20 presentations, three keynote speeches were given (by Vaughn Vernon, Sanjiva Weerawarana, and Antonio Brogi), the Microservices Community was introduced, and two plenary sessions were offered merging the audiences of the Bologna Federated Conference on Programming Languages, including the 28th International Workshop on Functional and Logic Programming, the 30th International Symposium on Logic-Based Program Synthesis and Transformation, and the 22nd International Symposium on Principles and Practice of Declarative Programming.

Microservices 2022, May 2022, Paris, France.

The general themes of Microservices 2022 were the aspects of microservices in the age of digital transformation.³ The program committee consisted of 17 members and the conference received the submission of 20 extended abstracts, among which 16 were accepted for presentation. The contributions covered a broad spectrum of topics related to the following three themes: 1) autonomic microservices and software engineering approaches; 2) architectures and tools; 3) migration to microservices. Each day of the conference was dedicated to one of these themes. The program featured Valentina Lenarduzzi, Fabio Casati and Cesare Pautasso as keynote speakers. On the last day of the conference Christian Walther Bruun held a funding and consortium building workshop, giving insights into the opportunities for obtaining EU funding via the European framework programme Horizon Europe and Eurostars.

¹ <https://www.microservices.community>

² <https://www.conf-micro.services/2020>

³ <https://www.conf-micro.services/2022>



Post-proceedings of Microservices 2020/2022

The present volume compiles contributions from attendees of Microservices 2020 and 2022. The volume received ten submissions of which eight were accepted for publications after two rounds of peer reviewing. In addition to the contributed papers, this volume includes an invited paper selected by the Program Committee members among the keynote speakers of these two editions of Microservices.

We thank the authors of all submitted proposals for their work in preparing and presenting their contributions. We hope that they benefited from the feedback received during the reviewing process. We also thank the members of the program committees of Microservices edition 2020 and 2022, for their excellent work and enthusiasm. Finally, we want to thank all the donors that provided financial support to the conference and these proceedings: Université Sorbonne Paris Nord, Laboratoire d'Informatique de Paris Nord (LIPN), IUT de Villetaneuse, Philip Morris International, Injenia Srl, Huawei-Edinburgh Joint Lab, and last, but not least, the Microservices community.

Let Industry and Academia meet.

Gokila Dorai
Maurizio Gabbrielli
Giulio Manzonetto
Aomar Osmani
Marco Prandini
Gianluigi Zavattaro
Olaf Zimmermann

■ Microservices 2020

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