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Software Architecture

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Proceedings

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Preface

The European Conference on Software Architecture (ECSA) is the premier European conference that provides researchers and practitioners with a platform to present and discuss the most recent, innovative, and significant findings and experiences in the field of software architecture research and practice.

This year's technical program included a doctoral symposium track with its own keynote, a gender diversity in software architecture & software engineering track with its own keynote, and a tool demos track. ECSA 2020 also offered nine workshops on diverse topics related to the software architecture discipline. ECSA 2020 also included a research track, three keynote talks, and an industry track, included in a volume by Springer LNCS. In addition, ECSA 2020 featured a journal first track partnering with the *Journal of Software and Systems*, Elsevier, and the *IEEE Software Magazine*.

ECSA 2020 received 103 contributions to all tracks. We received 11 workshop proposals, 4 doctoral symposium submissions, 3 gender diversity papers, 7 tools demos, 1 tutorial, and 4 journal first contributions.

The workshops took place on the two days before the ECSA 2020 main conference and the program included the following nine workshops:

- Third International Workshop on Context-aware, Autonomous and Smart Architecture (CASA 2020)
- 5th Workshop on Continuous Software Engineering (CSE 2020) and 6th International Workshop on Quality-Aware DevOps (QUDOS 2020)
- Third International Workshop on moDEling, vERification and Testing of dEPendable CRiTical systems (DETECT 2020)
- 4th Workshop on Formal Approaches for Advanced Computing Systems (FAACS 2020) and First International Workshop on Model-Driven Engineering for Software Architecture (MDE4SA 2020)
- 4th International Workshop on Engineering IoT Systems: Architectures, Services, Applications, and Platforms (IoT-ASAP 2020)
- Second Workshop on Systems, Architectures, and Solutions for Industry 4.0 (SASI4 2020)
- 6th International Workshop on Automotive System/Software Architectures (WASA 2020)

All workshops together received a total of 58 papers. Each workshop had an independent Program Committee, which was in charge of selecting the papers. Out of the 58 submissions, 28 papers were selected to be presented at the workshops.

The doctoral symposium track had its own keynote provided by Radu Calinescu, from the Department of Computer Science at the University of York, UK, who talked about “Going the extra mile to publish your research in a top venue.”

The gender diversity in software architecture track had also its own keynote provided by Paola Inverardi, from the Information Engineering, Computer Science, and

Mathematics Department, University of L'Aquila, Italy. Professor Inverardi, who was rector of the University of L'Aquila from 2013 to 2019, is in a unique position to report about the state of the implementation of gender equality policies at Italian universities, a topic of great interest to ECSA's audience.

We are grateful to the members of the tracks and workshop Program Committees for helping us to seek submissions and provide valuable and timely reviews. Their efforts enabled us to put together a high-quality program for ECSA 2020. We would like to thank the members of the Organizing Committee of ECSA 2020 for playing an enormously important role in successfully organizing the event with several tracks and collocated events, as well as the workshop organizers, who made significant contributions to this year's successful event.

July 2020

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Contents

ECSA 2020 Doctoral Symposium Track

A Semiautomatic Approach to Identify Architectural Technical Debt from Heterogeneous Artifacts	5
<i>Boris Pérez</i>	
Big Data and Machine Intelligence in Software Platforms for Smart Cities . . .	17
<i>Mubashir Ali</i>	
Decentralized Self-adaptation in Large-Scaled Systems of Systems	27
<i>Daniel Matusek</i>	
Systematic Approach to Engineer Decentralized Self-adaptive Systems	38
<i>Federico Quin</i>	

ECSA 2020 Tool Demos Track

Voyager: Software Architecture Trade-off Explorer	55
<i>Jason Mashinchi and Javier Cámara</i>	
A Decision Support System for Pattern-Driven Software Architecture	68
<i>Siamak Farshidi and Slinger Jansen</i>	
Gropius — A Tool for Managing Cross-component Issues	82
<i>Sandro Speth, Uwe Breitenbücher, and Steffen Becker</i>	
SecoArc: A Framework for Architecting Healthy Software Ecosystems	95
<i>Bahar Schwichtenberg and Gregor Engels</i>	
SQuAT-Vis: Visualization and Interaction in Software Architecture Optimization.	107
<i>Sebastian Frank and André van Hoorn</i>	

ECSA 2020 Gender Diversity in Software Architecture and Software Engineering Track

Girl-Friendly Computer Science Classroom: Czechitas Experience Report . . .	125
<i>Barbora Buhnova and Lucia Happe</i>	

Mining Gender Bias: A Preliminary Study on Implicit Biases and Gender Identity in the Department of Computer Science at the Technical University of Munich	138
<i>Ana Petrovska, Patricia Goldberg, Anne Brüggemann-Klein, and Anne Nyokabi</i>	
 CASA - 3rd International Workshop on Context-aware, Autonomous and Smart Architecture	
State of the Practice Survey: Predicting the Influence of AI Adoption on System Software Architecture in Traditional Embedded Systems	155
<i>Jasmin Jahić and Robin Roitsch</i>	
Composition Algorithm Adaptation in Service Oriented Systems.	170
<i>Niranjana Deshpande and Naveen Sharma</i>	
A Statistical Approach for Context-Awareness of Mobile Applications.	180
<i>Mai Abusair, Mohammad Sharaf, Antinisca Di Marco, and Paola Inverardi</i>	
A Reference Architecture for Personalized and Self-adaptive e-Health Apps	195
<i>Eoin Martino Grua, Martina De Sanctis, and Patricia Lago</i>	
 CSE/QUDOS - Joint Workshop on Continuous Software Engineering and Quality-Aware DevOps	
Collecting Service-Based Maintainability Metrics from RESTful API Descriptions: Static Analysis and Threshold Derivation	215
<i>Justus Bogner, Stefan Wagner, and Alfred Zimmermann</i>	
Optimizing Parametric Dependencies for Incremental Performance Model Extraction	228
<i>Sonya Voneva, Manar Mazkatli, Johannes Grohmann, and Anne Koziulek</i>	
Data Pipeline Architecture for Serverless Platform.	241
<i>Chinmaya Dehury, Pelle Jakovits, Satish Narayana Srirama, Vasilis Tountopoulos, and Giorgos Giotis</i>	
Examination and Comparison of TOSCA Orchestration Tools	247
<i>Anže Luzar, Sašo Stanovnik, and Matija Cankar</i>	
Auto-scaling Using TOSCA Infrastructure as Code	260
<i>Matija Cankar, Anže Luzar, and Damian A. Tamburri</i>	

Towards Coordinated Autoscaling and Application Brownout at the Orchestrator Level	269
<i>Ivan Kotegov and Antonio Filieri</i>	

DETECT - 3rd International Workshop on Modeling, Verification and Testing of Dependable Critical Systems

Measurement-Based Timing Analysis on Heterogeneous MPSoCs: A Practical Approach.	279
<i>Roy Jamil, Emmanuel Grolleau, Bernard Dautrevaux, and Antoine Bertout</i>	

Awas: AADL Information Flow and Error Propagation Analysis Framework.	294
<i>Hariharan Thiagarajan, John Hatcliff, and Robby</i>	

Formal Verification of Run-to-Completion Style Statecharts Using Event-B	311
<i>Karla Morris, Colin Snook, Thai Son Hoang, Geoffrey Hulette, Robert Armstrong, and Michael Butler</i>	

A Simulator Coupling Architecture for the Creation of Digital Twins	326
<i>Thomas Kuhn, Pablo Oliveira Antonino, and Adam Bachorek</i>	

Integrating Runtime Verification into an Automated UAS Traffic Management System	340
<i>Matthew Cauwels, Abigail Hammer, Benjamin Hertz, Phillip H. Jones, and Kristin Y. Rozier</i>	

Dependability of Model-Driven Executable DSLs: Critical Review and Solutions	358
<i>Akram Idani</i>	

FAACS-MDE4SA - Joint Workshop on Formal Approaches for Advanced Computing Systems and Model-Driven Engineering for Software Architecture

Defining a Formal Semantic for Parallel Patterns in the Palladio Component Model Using Hierarchical Queuing Petri Nets.	381
<i>Markus Frank, Alireza Hakamian, and Stefen Becker</i>	

Model-Based Simulation at Runtime with Abstract State Machines	395
<i>Elvinia Riccobene and Patrizia Scandurra</i>	

Merging Railway Standard Notations in a Formal DSL-Based Framework . . .	411
<i>Asfand Yar, Akram Idani, and Simon Collart-Dutilleul</i>	

Continuous Formal Verification of Microservice-Based Process Flows	420
<i>Matteo Camilli</i>	
 IoT-ASAP - 4th International Workshop on Engineering IoT Systems: Architectures, Services, Applications, and Platforms	
Defining Design Patterns for IoT APIs.	443
<i>Rasmus Svensson, Adell Tatrous, and Francis Palma</i>	
 SASI4 - 2nd Workshop on Systems, Architectures, and Solutions for Industry 4.0	
Access Control for Smart Manufacturing Systems	463
<i>Björn Leander, Aida Čaušević, Hans Hansson, and Tomas Lindström</i>	
Industrie 4.0 Virtual Automation Bus Architecture	477
<i>Thomas Kuhn, Pablo Oliveira Antonino, and Frank Schnicke</i>	
Enabling Industry 4.0 Service-Oriented Architecture Through Digital Twins	490
<i>Frank Schnicke, Thomas Kuhn, and Pablo Oliveira Antonino</i>	
 WASA - 6th International Workshop on Automotive System/Software Architecture	
System Health Indicators in Mixed Criticality E/E Systems in Automated Driving Context	509
<i>Friederike Dollinger, Rinat Asmus, and Marc Dreiser</i>	
How to Conduct Experiments with a Real Car? Experiences and Practical Guidelines	518
<i>Thomas Hutzelmann, Dominik Mauksch, and Alexander Pretschner</i>	
Towards a Systems Engineering Based Automotive Product Engineering Process	527
<i>Hassan Hage, Vahid Hashemi, and Frank Mantwill</i>	
Development of a Virtual Simulation Environment and a Digital Twin of an Autonomous Driving Truck for a Distribution Center	542
<i>Ion Barosan, Arash Arjmandi Basmenj, Sudhanshu G. R. Chouhan, and David Manrique</i>	
Author Index	559