## Contents

### Invited Talk

Predictive Analytics: A Shortcut to Dependable Computing ............................ 3  
*Miroslaw Malek*

### Modelling and Specification

Modeling and Monitoring of Hierarchical State Machines in Scala .............. 21  
*Klaus Havelund and Rajeev Joshi*

Stochastic Activity Networks for the Verification of Knowledge Bases .......... 37  
*Luke Martin and Alexander Romanovsky*

A Generated Property Specification Language for Resilient  
Multirobot Missions ............................................................. 45  
*Swaib Dragule, Bart Meyers, and Patrizio Pelliccione*

### Safety and Security

Towards a Model-Driven Security Assurance  
of Open Source Components .................................................. 65  
*Irum Rauf and Elena Troubitsyna*

A Cyber-Physical Space Operational Approach for Crowd  
Evacuation Handling ............................................................ 81  
*Henry Muccini and Mahyar Tourchi Moghaddam*

Co-engineering Safety and Security in Industrial Control Systems:  
A Formal Outlook ............................................................... 96  
*Inna Vistbakka, Elena Troubitsyna, Tuomas Kuismin,  
and Timo Latvala*

### Software

Evaluation of Open Source Operating Systems for Safety-Critical  
Applications ................................................................. 117  
*Petter Sainio Berntsson, Lars Strandén, and Fredrik Warg*

100 Years of Software - Adapting Cyber-Physical Systems  
to the Changing World ..................................................... 133  
*Hayley Borck, Paul Kline, Hazel Shackleton, John Gohde,  
Steven Johnston, Perry Alexander, and Todd Carpenter*
### Fault Tolerance, Resilience and Robustness

Improving Robustness of AUTOSAR Software Components with Design by Contract: A Study Within Volvo AB .......................... 151  
   Yulai Zhou, Patrizio Pelliccione, Johan Haraldsson,  
   and Mafjiul Islam

Modelling for Systems with Holistic Fault Tolerance .................. 169  
   Rem Gensh, Ashur Rafiev, Fei Xia, Alexander Romanovsky,  
   and Alex Yakovlev

Holistic Processing and Exploring Event Logs ....................... 184  
   Marcin Kubacki and Janusz Sosnowski

Author Index ............................................................... 201
Software Engineering for Resilient Systems
9th International Workshop, SERENE 2017, Geneva, Switzerland, September 4-5, 2017, Proceedings
Romanovsky, A.; Troubitsyna, E.A. (Eds.)
2017, XIV, 201 p. 56 illus., Softcover
ISBN: 978-3-319-65947-3