

Alessandro Fantechi · Patrizio Pelliccione (Eds.)

Software Engineering for Resilient Systems

7th International Workshop, SERENE 2015
Paris, France, September 7–8, 2015
Proceedings

Contents

Biological Immunity and Software Resilience: Two Faces of the Same Coin?	1
<i>Marco Autili, Amleto Di Salle, Francesco Gallo, Alexander Perucci, and Massimo Tivoli</i>	
Towards Dynamic Software Diversity for Resilient Redundant Embedded Systems	16
<i>Andrea Höller, Tobias Rauter, Johannes Iber, and Christian Kreiner</i>	
A Decomposition Method for the Verification of a Real-Time Safety-Critical Protocol	31
<i>Tamás Tóth, András Vörös, and István Majzik</i>	
Considering Execution Environment Resilience: A White-Box Approach	46
<i>Stefan Klikovits, David P.Y. Lawrence, Manuel Gonzalez-Berges, and Didier Buchs</i>	
Engineering Cross-Layer Fault Tolerance in Many-Core Systems	62
<i>Rem Gensh, Alexander Romanovsky, and Alex Yakovlev</i>	
Risk Assessment Based Cloudification.	71
<i>Szilárd Bozóki, Gábor Koronka, and András Pataricza</i>	
Stochastic Model-Based Analysis of Energy Consumption in a Rail Road Switch Heating System	82
<i>Davide Basile, Silvano Chiaradonna, Felicita Di Giandomenico, Stefania Gnesi, and Franco Mazzanti</i>	
Bidirectional Crosslinking of System and Software Modeling in the Automotive Domain.	99
<i>Harald Sporer, Georg Macher, Andrea Höller, and Christian Kreiner</i>	
Tejo: A Supervised Anomaly Detection Scheme for NewSQL Databases	114
<i>Guthemberg Silvestre, Carla Sauvanaud, Mohamed Kaâniche, and Karama Kanoun</i>	
Resiliency Variance in Workflows with Choice.	128
<i>John C. Mace, Charles Morisset, and Aad van Moorsel</i>	
Author Index	145