

Contents

Resource-Aware Control and Dynamic Scheduling in CPS	1
<i>W.P.M.H. Heemels</i>	
Current Challenges in the Verification of Hybrid Systems	8
<i>Stefan Schupp, Erika Ábrahám, Xin Chen, Ibtissem Ben Makhoulf, Goran Frehse, Sriram Sankaranarayanan, and Stefan Kowalewski</i>	
Constructive Modelling of Parallelized Environmental Models for Structured Testing of Automated Driving Systems.	25
<i>Sebastian Siegl and Martin Russer</i>	
Core Research and Innovation Areas in Cyber-Physical Systems of Systems: Initial Findings of the CPSoS Project	40
<i>S. Engell, R. Paulen, M.A. Reniers, C. Sonntag, and H. Thompson</i>	
A Parametric Dataflow Model for the Speed and Distance Monitoring in Novel Train Control Systems	56
<i>Benjamin Beichler, Thorsten Schulz, Christian Haubelt, and Frank Golatowski</i>	
A Modelling Framework for Cyber-Physical System Resilience	67
<i>Manuela L. Bujorianu and Nir Piterman</i>	
Recharging Probably Keeps Batteries Alive	83
<i>Holger Hermanns, Jan Krčál, and Gilles Nies</i>	
Fault Localization of Energy Consumption Behavior Using Maximum Satisfiability	99
<i>Shin Nakajima and Si-Mohamed Lamraoui</i>	
Hybrid Secure Data Aggregation in Wireless Sensor Networks	116
<i>Keyur Parmar and Devesh C. Jinwala</i>	
Formally Analyzing Continuous Aspects of Cyber-Physical Systems Modeled by Homogeneous Linear Differential Equations	132
<i>Muhammad Usman Sanwal and Osman Hasan</i>	
Author Index	147

Cyber Physical Systems. Design, Modeling, and
Evaluation

5th International Workshop, CyPhy 2015, Amsterdam,
The Netherlands, October 8, 2015, Proceedings

Berger, C.; Mousavi, M.R. (Eds.)

2015, VII, 147 p. 43 illus. in color., Softcover

ISBN: 978-3-319-25140-0