

Contents

Cloud Computing and Internet of Things

| | |
|---|----|
| Cloud Shield: Effective Solution for DDoS in Cloud | 3 |
| <i>Rajat Saxena and Somnath Dey</i> | |
| Towards Modelling-Based Self-adaptive Resource Allocation in Multi-tiers Cloud Systems | 11 |
| <i>Mehdi Sliem, Nabila Salmi, and Malika Ioualalen</i> | |
| Web2Compile-CoT: A Web IDE for the Cloud of Things | 19 |
| <i>Claudio M. de Farias, Paulo G.S.M. Júnior, Marina V. Pereira, Italo C. Brito, Igor L. dos Santos, Luci Pirmez, Flávia C. Delicato, and Luiz F.R.C. Carmo</i> | |
| Fuzzy Logic Based Energy Aware VM Consolidation | 31 |
| <i>Mohammad Alaul Haque Monil and Rashedur M. Rahman</i> | |
| Autonomic and Cognitive Architectures for the Internet of Things. | 39 |
| <i>Claudio Savaglio and Giancarlo Fortino</i> | |

Sensor Networks

| | |
|---|----|
| Sensor Web Enablement Applied to an Earthquake Early Warning System. . . | 51 |
| <i>Ana María Zambrano, Israel Pérez, Carlos E. Palau, and Manuel Esteve</i> | |
| Towards Motion Characterization and Assessment Within a Wireless Body Area Network. | 63 |
| <i>Martin Seiffert, Norman Dziengel, Marco Ziegert, Robert Kerz, and Jochen Schiller</i> | |
| Data Driven Transmission Power Control for Wireless Sensor Networks | 75 |
| <i>Roshan Kotian, Georgios Exarchakos, and Antonio Liotta</i> | |
| Mining Regularities in Body Sensor Network Data | 88 |
| <i>Syed Khairuzzaman Tanbeer, Mohammad Mehedi Hassan, Majed Alrubaian, and Byeong-Soo Jeong</i> | |

Smart Cities and Smart Buildings

| | |
|--|-----|
| Task Execution in Distributed Smart Systems | 103 |
| <i>Uwe Jänen, Carsten Grenz, Sarah Edenhofer, Anthony Stein, Jürgen Brehm, and Jörg Hähner</i> | |

Inferring Appliance Load Profiles from Measurements 118
Geir Horn, Salvatore Venticinque, and Alba Amato

Intra Smart Grid Management Frameworks for Control and Energy Saving
in Buildings 131
*Antonio Guerrieri, Jordi Serra, David Pubill, Christos Verikoukis,
and Giancarlo Fortino*

Urban Crowd Steering: An Overview 143
*Claudio Borean, Roberta Giannantonio, Marco Mamei, Dario Mana,
Andrea Sassi, and Franco Zambonelli*

Distributed Computing

Towards a Self-Adaptive Middleware for Building Reliable
Publish/Subscribe Systems 157
Sisi Duan, Jingtao Sun, and Sean Peisert

Review of Replication Techniques for Distributed Systems. 169
*Ahmad Shukri Mohd Noor, Nur Farhah Mat Zian,
Mustafa Mat Deris, and Tutut Herawan*

Connectivity Recovery in Epidemic Membership Protocols 177
Pasu Poonpakdee and Giuseppe Di Fatta

Parallel Computing

Optimisation Techniques for Parallel K-Means on MapReduce 193
Sami Al Ghamdi, Giuseppe Di Fatta, and Frederic Stahl

Epidemic Fault Tolerance for Extreme-Scale Parallel Computing. 201
Amogh Katti and Giuseppe Di Fatta

A GPU-Based Statistical Framework for Moving Object Segmentation:
Implementation, Analysis and Applications. 209
*Alfredo Cuzzocrea, Enzo Mumolo, Alessandro Moro,
and Kazunori Umeda*

Advanced Networking

Hardware-Assisted IEEE 802.15.4 Transmissions
and Why to Avoid Them 223
Andreas Weigel and Volker Turau

Containment of Fast Scanning Computer Network Worms 235
Muhammad Aminu Ahmad and Steve Woodhead

Fragmented-Iterated Bloom Filters for Routing in Distributed Event-Based
 Sensor Networks 248
Cristina Muñoz and Pierre Leone

Big Data and Social Networks

Fast Adaptive Real-Time Classification for Data Streams with Concept
 Drift 265
Mark Tennant, Frederic Stahl, and João Bártoło Gomes

Omentum – A Peer-to-Peer Approach for Internet-Scale
 Virtual Microscopy 273
*Andreas Barbian, Dennis Malenica, Timm J. Filler,
 and Michael Schoettner*

Using Social Networks Data for Behavior and Sentiment Analysis 285
Barbara Calabrese, Mario Cannataro, and Nicola Ielpo

Sentimental Preference Extraction from Online Reviews
 for Recommendation 294
Nieqing Cao, Jingjing Cao, Panpan Liu, and Wenfeng Li

Author Index 305



<http://www.springer.com/978-3-319-23236-2>

Internet and Distributed Computing Systems
8th International Conference, IDCS 2015, Windsor, UK,
September 2-4, 2015. Proceedings
Di Fatta, G.; Fortino, G.; Li, W.; Pathan, M.; Stahl, F.;
Guerrieri, A. (Eds.)
2015, XIII, 306 p. 113 illus., Softcover
ISBN: 978-3-319-23236-2