

Contents

An Ontology-Based Autonomic System for Ambient Intelligence Scenarios	1
Alessandra De Paola	
Detection of User Activities in Intelligent Environments	19
Agnese Augello and Salvatore Gaglio	
An AMI System for User Daily Routine Recognition and Prediction.	33
Salvatore Gaglio and Gloria Martorella	
A Fuzzy Adaptive Controller for an Ambient Intelligence Scenario. . .	47
Alessandra De Paola, Giuseppe Lo Re and Antonio Pellegrino	
Design of an Adaptive Bayesian System for Sensor Data Fusion	61
Alessandra De Paola and Luca Gagliano	
A Heterogeneous Sensor and Actuator Network Architecture for Ambient Intelligence	77
Enrico Daidone, Orazio Farruggia and Marco Morana	
Short-Term Sensory Data Prediction in Ambient Intelligence Scenarios	89
Enrico Daidone and Fabrizio Milazzo	
A Structural Approach to Infer Recurrent Relations in Data	105
Pietro Cottone, Salvatore Gaglio and Marco Ortolani	
Hardware and Software Platforms for Distributed Computing on Resource Constrained Devices.	121
Gloria Martorella, Daniele Peri and Elena Toscano	

From IEEE 802.15.4 to IEEE 802.15.4e: A Step Towards the Internet of Things	135
Domenico De Guglielmo, Giuseppe Anastasi and Alessio Seghetti	
Extracting Structured Knowledge From Sensor Data for Hybrid Simulation	153
Marco Ortolani	
Gait Analysis Using Multiple Kinect Sensors	167
Gabriele Maida and Marco Morana	
3D Scene Reconstruction Using Kinect	179
Marco Morana	
Sensor Node Plug-in System: A Service-Oriented Middleware for Wireless Sensor Networks	191
Giuseppe Di Modica, Francesco Pantano and Orazio Tomarchio	
Toward the Next Generation of Sensors as a Service	209
Dario Lombardo, Vito Morreale and Giuseppe Li Calsi	
Advances in Internet of Things as Related to the e-government Domain for Citizens and Enterprises	217
Francesco Beltrame and Virginia Dagostino	
Low-Effort Support to Efficient Urban Parking in a Smart City Perspective	233
Alessio Bechini, Francesco Marcelloni and Armando Segatori	
An Integrated System for Advanced Multi-risk Management Based on Cloud for IoT	253
Maria Fazio, Antonio Celesti, Antonio Puliafito and Massimo Villari	
Towards Internet Intelligent Services Based on Cloud Computing and Multi-Agents	271
Domenico Talia	
Chatbots as Interface to Ontologies	285
Agnese Augello, Giovanni Pilato, Giorgio Vassallo and Salvatore Gaglio	
Body Area Networks and Healthcare	301
Daniele Peri	

Urban Air Quality Monitoring Using Vehicular Sensor Networks 311
Giuseppe Lo Re, Daniele Peri and Salvatore Davide Vassallo

**Concentrated Solar Power: Ontologies for Solar Radiation
Modeling and Forecasting** 325
Antonino Piazza and Giuseppe Faso

Designing Ontology-Driven Recommender Systems for Tourism 339
Pierluca Ferraro and Giuseppe Lo Re

Advances onto the Internet of Things

How Ontologies Make the Internet of Things Meaningful

Gaglio, S.; Lo Re, G. (Eds.)

2014, IX, 352 p. 125 illus., Softcover

ISBN: 978-3-319-03991-6