

Contents

Part I Invited Papers

A Distributed Approach to Computational Creativity	3
Amílcar Cardoso, Pedro Martins, Filipe Assunção, João Correia and Penousal Machado	
Evolutionary Algorithms: Perspectives on the Evolution of Parallel Models	13
F. Fernández de Vega	

Part II Agent-Based Systems

Agents and Ontologies for a Smart Management of Heterogeneous Data: The IndianaMas System.	25
Daniela Briola	
Scrutable Multi-agent Hazard Rescue System	37
Andrei Mocanu and Costin Bădică	
From Virtual to Real, Human Interaction as a Validation Process for IVEs	49
J.A. Rincon, Emilia Garcia, V. Julian and C. Carrascosa	
MAESTROS: Multi-Agent Simulation of Rework in Open Source Software	61
Thiago R.P.M. Rúbio, Henrique Lopes Cardoso and Eugénio da Costa Oliveira	

A CBR Approach to Allocate Computational Resources Within a Cloud Platform	75
Fernando De la Prieta, Javier Bajo and Juan M. Corchado	
A Multi-agent Strategic Planning System Based on Blackboard	85
J. Luis Dalmau-Espert, Faraón Llorens-Largo and Rafael Molina-Carmona	
Reliable Interaction in Multiagent Systems	93
Dejan Mitrović, Mirjana Ivanović, Milan Vidaković and Zoran Budimac	
Fault Tolerant Automated Task Execution in a Multi-robot System . . .	101
Stanislaw Ambroszkiewicz, Waldemar Bartyna, Kamil Skarzynski and Marcin Stepniak	
 Part III Ambient Intelligence and Social Networks	
Analysis of Mental Fatigue and Mood States in Workplaces	111
André Pimenta, Davide Carneiro, José Neves and Paulo Novais	
Agent-Based Simulation of Crowds in Indoor Scenarios	121
Rafael Pax and Juan Pavón	
Forming Homogeneous Classes for e-Learning in a Social Network Scenario	131
Antonello Comi, Lidia Fotia, Fabrizio Messina, Giuseppe Pappalardo, Domenico Rosaci and Giuseppe M.L. Sarné	
Social-Based Arcs Weight Assignment in Trust Networks	143
Marco Buzzanca, Vincenza Carchiolo, Alessandro Longheu, Michele Malgeri and Giuseppe Mangioni	
 Part IV Bio-Inspired Computing	
Reconfiguration of Access Schemes in Virtual Networks of the Internet of Things by Genetic Algorithms	155
Igor Saenko and Igor Kotenko	
GAMPP: Genetic Algorithm for UAV Mission Planning Problems . . .	167
Gema Bello-Orgaz, Cristian Ramirez-Atencia, Jaime Fradera-Gil and David Camacho	

FSP Modeling of a Generic Distributed Swarm Computing Framework	177
Amelia Bădică, Costin Bădică and Marius Brezovan	

Part V Distributed Computing

Heuristic-Based Job Flow Allocation in Distributed Computing	189
Victor Toporkov, Anna Toporkova, Alexey Tselishchev, Dmitry Yemelyanov and Petr Potekhin	

A Data Processing Framework for Distributed Embedded Systems . . .	199
Ichiro Satoh	

A Distributed Reputation-Based Framework to Support Communication Resources Sharing.	211
Antonello Comi, Lidia Fotia, Fabrizio Messina, G. Pappalardo, Domenico Rosaci and Giuseppe M.L. Sarné	

Improving the Weighted Distribution Estimation for AdaBoost Using a Novel Concurrent Approach	223
Héctor Allende-Cid, Carlos Valle, Claudio Moraga, Héctor Allende and Rodrigo Salas	

Part VI Intelligent Data Processing

Towards Semi-automated Parallelization of Data Stream Processing	235
Martin Kruliš, David Bednárek, Zbyněk Falt, Jakub Yaghob and Filip Zavoral	

Optimizing Satisfaction in a Multi-courses Allocation Problem	247
Ana-Maria Nogareda and David Camacho	

Improving the Categorization of Web Sites by Analysis of Html-Tags Statistics to Block Inappropriate Content.	257
Dmitry Novozhilov, Igor Kotenko and Andrey Chechulin	

Distributed Architecture of Data Analysis System Based on Formal Concept Analysis Approach.	265
A.A. Neznanov and A.A. Parinov	

Part VII Machine Learning

Self-Optimizing A Multi-Agent Scheduling System: A Racing Based Approach	275
Ivo Pereira and Ana Madureira	

Collaborative Filtering with Hybrid Clustering Integrated Method to Address New-Item Cold-Start Problem.	285
Ferdaous Hdioud, Bouchra Frikh, Asmaa Benghabrit and Brahim Ouhbi	

Applying Reinforcement Learning in Formation Control of Agents . . .	297
Vali Derhami and Yusef Momeni	

Context Time-Sequencing for Machine Learning and Sustainability Optimization	309
Fábio Silva and Cesar Analide	

Part VIII Special Session on Energetic Sustainable Ambient Intelligence (ESAmI 2015)

Intelligent Distributed Systems for Rural Areas	321
Luís Frazão, Silvana Meire and António Pereira	

Intelligible Data Metrics for Ambient Sensorization and Gamification.	333
Artur Quintas, Jorge Martins, Marcos Magalhães, Fábio Silva and Cesar Analide	

Hierarchical Architecture for Robust People Detection by Fusion of Infrared and Visible Video.	343
José Carlos Castillo, Juan Serrano-Cuerda, Antonio Fernández-Caballero and Arturo Martínez-Rodrigo	

Part IX Special Session on Cognitive Models and Emotions Detection for Ambient Intelligence (COMEDAI 2015)

Recommendations with Personality Traits Extracted from Text Reviews.	355
Antonella Di Rienzo and Asana Neishabouri	

A Framework for the Automation of Multimodalbrain Connectivity Analyses	365
Paulo Marques, Jose Miguel Soares, Ricardo Magalhaes, Nuno Sousa and Victor Alves	
Emotion Effects on Online Learning.	375
Ana Raquel Faria, Ana Almeida, Constantino Martins and Ramiro Gonçalves	
A Reasoning Module for Distributed Clinical Decision Support Systems	387
Tiago Oliveira, Ken Satoh, Paulo Novais, José Neves, Pedro Leão and Hiroshi Hosobe	
 Part X 2nd Workshop on Cyber Security and Resilience of Large-Scale Systems (WSRL 2015)	
2nd Workshop on Cyber Security and Resilience of Large-Scale Systems	401
Massimo Ficco and Salvatore D’Antonio	
A Semantic Driven Approach for Consistency Verification Between Requirements and FMEA.	403
Gabriella Gigante, Francesco Gargiulo, Massimo Ficco and Domenico Pascarella	
An Analytical Approach for Optimal Resilience Management in Future ATM Systems.	415
Domenico Pascarella, Francesco Gargiulo, Angela Errico and Edoardo Filippone	
Enabling Convergence of Physical and Logical Security Through Intelligent Event Correlation	427
Gianfranco Cerullo, Luigi Coppolino, Salvatore D’Antonio, Valerio Formicola, Gaetano Papale and Bruno Ragucci	
Model-Based Vulnerability Assessment of Self-Adaptive Protection Systems.	439
Ricardo J. Rodríguez and Stefano Marrone	
Forensic Data Analysis Challenges in Large Scale Systems	451
Damien Conroy	

**Part XI International Workshop on Future Internet
and Smart Networks (FI&SN’2015)**

International Workshop on Future Internet and Smart Networks 461
Alexandre Santos, Pascal Lorenz and António Costa

**People-Centric Internet of Things—Challenges, Approach,
and Enabling Technologies.** 463
Fernando Boavida, Andreas Kliem, Thomas Renner, Jukka Riekk,
Christophe Jouvray, Michal Jacovi, Stepan Ivanov, Fiorella Guadagni,
Paulo Gil and Alicia Triviño

SDN-Based Service Delivery in Smart Environments. 475
Lucas Mendes Ribeiro Arbiza, Liane Margarida Rockenbach Tarouco,
Leandro Márcio Bertholdo and Lisandro Zambenedetti Granville

**Automated Network Resilience Optimization Using
Computational Intelligence Methods.** 485
Vitor Pereira, Miguel Rocha and Pedro Sousa

**An Automated Framework for the Management of P2P Traffic
in ISP Infrastructures** 497
Pedro Sousa

**A Geographic Opportunistic Forwarding Strategy for Vehicular
Named Data Networking** 509
Xuejie Liu, M. João Nicolau, António Costa, Joaquim Macedo
and Alexandre Santos

Intelligent Distributed Computing IX
Proceedings of the 9th International Symposium on
Intelligent Distributed Computing - IDC'2015,
Guimarães, Portugal, October 2015
Novais, P.; Camacho, D.; Analide, C.; El Fallah
Seghrouchni, A.; Badica, C. (Eds.)
2016, XVIII, 521 p. 171 illus., 114 illus. in color.,
Hardcover
ISBN: 978-3-319-25015-1