## Contents

### Regular Papers

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>An Agent-Based Application for Automatic Classification of Food Allergies and Intolerances in Recipes.</td>
<td>3</td>
</tr>
<tr>
<td><em>José Alemany, Stella Heras, Javier Palanca, and Vicente Julián</em></td>
<td></td>
</tr>
<tr>
<td>Multi-agent Retail Energy Markets: Contract Negotiation, Customer Coalitions and a Real-World Case Study</td>
<td>13</td>
</tr>
<tr>
<td><em>Hugo Algarvio, Fernando Lopes, and João Santana</em></td>
<td></td>
</tr>
<tr>
<td>Fair Multi-agent Task Allocation for Large Data Sets Analysis</td>
<td>24</td>
</tr>
<tr>
<td><em>Quentin Baert, Anne Cécile Caron, Maxime Morge, and Jean-Christophe Routier</em></td>
<td></td>
</tr>
<tr>
<td>Location-Aware Social Gaming with AMUSE</td>
<td>36</td>
</tr>
<tr>
<td><em>Federico Bergenti and Stefania Monica</em></td>
<td></td>
</tr>
<tr>
<td>Dealing with Large MDPs, Case Study of Waterway Networks Supervision</td>
<td>48</td>
</tr>
<tr>
<td><em>Guillaume Desquesnes, Guillaume Lozenguez, Arnaud Doniec, and Eric Duviella</em></td>
<td></td>
</tr>
<tr>
<td>An Agent-Based DSS Supporting the Logistics of Cruise Passengers</td>
<td>60</td>
</tr>
<tr>
<td><em>Claudia Di Napoli, Pol Mateu Santamaria, and Silvia Rossi</em></td>
<td></td>
</tr>
<tr>
<td>An Open Platform for Customized Corpus Browsing Using Agents and Artifacts Approach</td>
<td>72</td>
</tr>
<tr>
<td><em>Zina EL Guedria and Laurent Vercouter</em></td>
<td></td>
</tr>
<tr>
<td>Which Information Sources are More Trustworthy in a Scenario of Hydrogeological Risks: A Computational Platform</td>
<td>84</td>
</tr>
<tr>
<td><em>Rino Falcone, Alessandro Sapienza, and Cristiano Castelfranchi</em></td>
<td></td>
</tr>
<tr>
<td>Protecting the NECTAR of the Ganga River Through Game-Theoretic Factory Inspections</td>
<td>97</td>
</tr>
<tr>
<td><em>Benjamin Ford, Matthew Brown, Amulya Yadav, Amandeep Singh, Arunesh Sinha, Biplav Srivastava, Christopher Kiekintveld, and Milind Tambe</em></td>
<td></td>
</tr>
<tr>
<td>Combining Agent-Based and Social Network Analysis Approaches to Recognition of Role Influence in Social Media</td>
<td>109</td>
</tr>
<tr>
<td><em>Bogdan Gliwa, Jarosław Koźlak, Anna Zygmunt, and Yves Demazeau</em></td>
<td></td>
</tr>
</tbody>
</table>
A Multiagent-Based Technique for Dialog Management in Conversational Interfaces ........................................... 121
  David Griol and José Manuel Molina

Activity Qualifiers in an Argumentation Framework as Instruments for Agents When Evaluating Human Activity .................. 133
  Esteban Guerrero, Juan Carlos Nieves, Marlene Sandlund, and Helena Lindgren

Agent-Based Semantic Business Process Management Methodology ........... 145
  Hüseyin Kir and Nadia Erdoğan

An Agent-Based Model of Labor Market Participation with Health Shocks ... 157
  Alessandro Moro and Paolo Pellizzari

A Dynamic Emotional Model for Agent Societies ............................... 169
  J.A. Rincon, A. Costa, P. Novais, V. Julian, and C. Carrascosa

Decentralized Group Analytical Hierarchical Process on Multilayer Networks by Consensus ........................................ 183
  Miguel Rebollo, Alberto Palomares, and Carlos Carrascosa

Simulating Reputation with Regulatory Policies: The Case of San Jerónimo Vegetable Garden, Seville, Spain ......................................................... 195
  Henrique Donâncio N. Rodrigues, Diana F. Adamatti, Graçaliz P. Dimuro, Glenda Dimuro, and Esteban de Manuel Jerez

CloudAnchor: Agent-Based Brokerage of Federated Cloud Resources ........ 207
  Bruno Veloso, Benedita Malheiro, and Juan Carlos Burguillo

A MAS Approach for Group Recommendation Based on Negotiation Techniques ................................................................. 219
  Christian Villavicencio, Silvia Schiaffino, J. Andres Diaz-Pace, Ariel Monteserin, Yves Demazeau, and Carole Adam

Demo Papers

Automatic Detection System for Food Allergies and Intolerances in Recipes ... 235
  José Alemany, Stella Heras, Javier Palanca, and Vicente Julián

An ABM Java Applet to Explore the Free Market Equality/Efficiency Tradeoff .......................................................... 239
  Hugues Bersini

U-Tool: A Urban-Toolkit for Enhancing City Maps Through Citizens’ Activity ................................................................. 243
  Elena del Val, Javier Palanca, and Miguel Rebollo
PriceCast Fuel: Agent Based Fuel Pricing ........................................ 247
   Alireza Derakhshan, Frodi Hammer, and Yves Demazeau

An Evolutionary Platform for Social Simulation in Case of Critical
Hydrogeological Phenomena: The Authority’s Role ................... 251
   Rino Falcone and Alessandro Sapienza

Demo Paper: AGADE: Scalability of Ontology Based Agent Simulations ... 256
   Thomas Farrenkopf, Michael Guckert, Neil Urquhart, and Simon Wells

A Framework to Evaluate Autonomic Behaviours for Intelligent Truck
Parking .................................................................................. 260
   José F. García, Vicente R. Tomás, Luis A. García, and Juan J. Martínez

Modeling Agents Working on ETL Processes .............................. 265
   Nuno Gomes, Bruno Oliveira, and Orlando Belo

Providing Entertainment Services by Means of a User-Adapted
Multimodal App .................................................................. 269
   David Griol and José Manuel Molina

DRNS: Dynamical Relay Node Placement Solution ....................... 273
   Roberto Magán-Carrión, José Camacho, Pedro García-Teodoro,
   Eduardo Feo Flushing, and Gianni A. Di Caro

Smart Grid Demonstration Platform for Renewable Energy Exchange ...... 277
   Mihail Mihaylov, Iván Razo-Zapata, Roxana Rădulescu, Sergio Jurado,
   Narcis Avellana, and Ann Nowé

Demonstration of ALBidS: Adaptive Learning Strategic Bidding System ... 281
   Tiago Pinto, Zita Vale, Isabel Praça, and Gabriel Santos

Detecting Social Emotions with a NAO Robot ................................ 286
   J.A. Rincon, A. Costa, P. Novais, V. Julian, and C. Carrascosa

Multi-agent Supply Scheduling System Prototype for Energy Production
and Distribution .................................................................. 290
   Alexander Tsarev and Petr Skobelev

PUMAS-GR: A Negotiation-Based Group Recommendation System
for Movies ........................................................................... 294
   Christian Villavicencio, Silvia Schiaffino, Jorge Andres Díaz-Pace,
   and Ariel Monteserin

Building Prototypes Through 3D Simulations ............................... 299
   Jorge J. Gómez-Sanz, Marlon Cardenas, Rafael Pax,
   and Pablo Campillo

Author Index ........................................................................... 303