

---

## Contents

---

### Part I Invited Papers

---

<b>The world of autonomous distributed systems</b>	
<i>Frances Brazier</i> .....	3
<b>Time and Space Coordination of Mobile Agents</b>	
<i>Gabriel Ciobanu</i> .....	9
<b>The Difficulty of Search and an Interesting Solution</b>	
<i>Peter Noerr</i> .....	25
<b>Distributed Decision Making for Robot Teams</b>	
<i>Nikos Vlassis</i> .....	35
<b>Fully Coupled and Feedforward Neural Networks with Complex-Valued Neurons</b>	
<i>Jacek M. Zurada and Igor Aizenberg</i> .....	41

---

### Part II Regular Papers

---

<b>Cluster-Based Route Discovery Protocol</b>	
<i>Doina Bein, Ajoy K. Datta, and Shashirekha Yellenki</i> .....	53
<b>Object-Oriented High Level Petri Nets as a Formal Language for Modelling and Design Multi-Agent Systems</b>	
<i>Marius Brezovan and Eugen Ganea</i> .....	63
<b>Considerations on the Design and Implementation of an Agent-Based Auction Service</b>	
<i>Adriana Dobriceanu, Laurențiu Bîscu, Costin Bădică, and Elvira Popescu</i> ....	75

<b>Automatic Streaming Processing of XSLT Transformations Based on Tree Transducers</b> <i>Jana Dvořáková</i> . . . . .	85
<b>Knowledge Processing for Web Search – An Integrated Model</b> <i>Peter Gurský, Tomáš Horváth, Jozef Jirásek, Stanislav Krajčí, Róbert Novotný, Veronika Vaneková, and Peter Vojtáš</i> . . . . .	95
<b>Applying Social Behaviours to Model Trusting</b> <i>Vincenza Carchiolo, Alessandro Longheu, Michele Malgeri, Giuseppe Mangioni, and Vincenzo Nicosia</i> . . . . .	105
<b>Using Ant’s Alarm Pheromone to Improve Software Testing Automation</b> <i>Ronaldo Menezes, Rafael Silva, Marcelo Barros, and Alexandre M. Silva</i> . . . . .	115
<b>Aspects Concerning SVM Method’s Scalability</b> <i>Daniel Morariu, Maria Vințan, and Lucian Vințan</i> . . . . .	125
<b>On Interchange between JBoss Rules and Jess</b> <i>Oana Nicolae, Adrian Giurca, and Gerd Wagner</i> . . . . .	135
<b>A Cross-Entropy Approach to Solving Dec-POMDPs</b> <i>Frans A. Oliehoek, Julian F.P. Kooij, and Nikos Vlassis</i> . . . . .	145
<b>Polyphony, a Knowledge-based Chat System Supporting Collaborative Work</b> <i>Ciprian Onofreiciuc, Alexandru Roșiu, Alexandru Gartner, and Ștefan Trăușan-Matu</i> . . . . .	155
<b>Decomposition and Processing Strategies of Global XQuery Queries over Distributed Environments</b> <i>Jong-Hyun Park and Ji-Hoon Kang</i> . . . . .	165
<b>Description and Organization of Instructional Resources in an Adaptive Educational System Focused on Learning Styles</b> <i>Elvira Popescu, Costin Badica, and Philippe Trigano</i> . . . . .	177
<b>JTangPS: Content-Based Publish/Subscribe over Structured P2P Networks</b> <i>Dongcai Shi, Jianwei Yin, Jianfeng Qian, Yiyuan Li, and Jinxiang Dong</i> . . . . .	187
<b>Using the color set back-projection algorithm in retrieval and evaluation of endoscopic images</b> <i>Liana Stanescu, Dan Burdescu, Anca Ion, and Eugen Georgescu</i> . . . . .	197

<b>Granularity of Medical Software Agents in ICU - Trade-off Performance versus Flexibility</b> <i>Kristof Steurbaut, Sofie Van Hoecke, Kirsten Colpaert, Chris Danneels, Johan Decruyenaere, and Filip De Turck</i> . . . . .	207
<b>APP: Agent Planning Package</b> <i>Saša Tošić, Miloš Radovanović, and Mirjana Ivanović</i> . . . . .	217
<b>Converting Programs into Constraint Satisfaction Problems</b> <i>Franz Wotawa and Mihai Nica</i> . . . . .	227
<hr/>	
<b>Part III Short Papers</b>	
<hr/>	
<b>Models for Temporal and Spatial Terrain Coverage</b> <i>Harry Bullen and Ronaldo Menezes</i> . . . . .	239
<b>Using Genetic Algorithms to Optimise Rough Set Partition Sizes for HIV Data Analysis</b> <i>Bodie Crossingham and Tshilidzi Marwala</i> . . . . .	245
<b>Semantic Web and Rule Reasoning inside of E-Learning Systems</b> <i>Ion-Mircea Diaconescu, Sergey Lukichev, and Adrian Giurca</i> . . . . .	251
<b>Web-based Remote Digital Signal Processing (DSP) Laboratory Using the Integrated Learning Methodology (ILM)</b> <i>Zohar Dvir</i> . . . . .	257
<b>Reasoning on Activity-centered Semantics in Request-Service Matchmaking</b> <i>Alexandra Galatescu, Taisia Greceanu, Cristian Neicu, and Doina Enache</i> . . . . .	263
<b>Marked-Controlled Rewriting EFPN for Dynamic Knowledge Inference</b> <i>Emilian Guțuleac and Mihai Mocanu</i> . . . . .	269
<b>Off-Line Signature Verification using Feature Based Image Registration</b> <i>Zsolt Kertész and Bence Kővári</i> . . . . .	277
<b>Collaboration of Intelligent, Autonomous Systems: Situation Aware Behavior Change</b> <i>Willibald Krenn and Franz Wotawa</i> . . . . .	283
<b>On the Distributed Water Pollution Control Solving with an Agent-Based Approach</b> <i>Mihaela Oprea and Constantin Nichita</i> . . . . .	289
<b>Learn Reversi using Parallel Genetic Algorithms</b> <i>Daniel Paraschiv and Laurentiu Vasiliu</i> . . . . .	295

XIV    Contents

**Graph-based semantic description and information extraction in analysis  
of 3D coronary vessels visualizations**

*Marek R. Ogiela, Ryszard Tadeusiewicz, and Mirosław Trzupek . . . . . 303*

Advances in Intelligent and Distributed Computing  
Proceedings of the 1st International Symposium on  
Intelligent and Distributed Computing IDC 2007,  
Craiova, Romania, October 2007  
Badica, C.; Paprzycki, M. (Eds.)  
2008, XIV, 310 p. 98 illus., Hardcover  
ISBN: 978-3-540-74929-5