

Table of Contents – Part II

Knowledge Management

Some Properties of Complex Tree Integration Criteria	1
<i>Marcin Maleszka and Ngoc Thanh Nguyen</i>	
Semantically Enhanced Collaborative Filtering Based on RSVD	10
<i>Andrzej Szwab, Michał Ciesielczyk, and Tadeusz Janasiewicz</i>	
Hybrid Recommendation Based on Low-Dimensional Augmentation of Combined Feature Profiles	20
<i>Andrzej Szwab, Tadeusz Janasiewicz, and Michał Ciesielczyk</i>	
Statement Networks Development Environment <i>REx</i>	30
<i>Wojciech Cholewa, Tomasz Rogala, Paweł Chrzanowski, and Marcin Amarowicz</i>	
Domain Based Semantic Compression for Automatic Text Comprehension Augmentation and Recommendation	40
<i>Dariusz Ceglarek, Konstanty Haniewicz, and Wojciech Rutkowski</i>	
Model of Community-Build System for Knowledge Development	50
<i>Przemysław Różewski</i>	

Agents and Multi-agent Systems, Mobile Agents and Robotics

A Multi-Agent Scheduling Approach for the Joint Scheduling of Jobs and Maintenance Operations in the Flow Shop Sequencing Problem	60
<i>Si Larabi Khelifati and Fatima Benbouzid-Sitayeb</i>	
Aligning Simple Modalities in Multi-agent System	70
<i>Wojciech Lorkiewicz, Grzegorz Popek, Radosław Katarzyniak, and Ryszard Kowalczyk</i>	
Multilateral Negotiations in Distributed, Multi-agent Environment	80
<i>Piotr Pałka</i>	
Route Guidance System Based on Self Adaptive Multiagent Algorithm	90
<i>Mortaza Zolfpour Arokhlo, Ali Selamat, Siti Zaiton Mohd Hashim, and Md Hafiz Selamat</i>	
Agent-Based System with Learning Capabilities for Transport Problems	100
<i>Bartłomiej Śnieżyński and Jarosław Koźlak</i>	

Modelling of Agents Cooperation and Negotiation	110
<i>František Čapkovič</i>	
Modelling Relationship between Antecedent and Consequent in Modal Conditional Statements	120
<i>Grzegorz Skorupa and Radosław Katarzyniak</i>	
Semantic Simulation Engine for Supervision of Mobile Robotic System	130
<i>Janusz Będkowski and Andrzej Mastowski</i>	
Cognitive Supervision and Control of Robotic Inspection-Intervention System	140
<i>Janusz Będkowski and Andrzej Mastowski</i>	
Declarative Design of Control Logic for Mindstorms NXT with XTT2 Method	150
<i>Grzegorz J. Nalepa and Błażej Biesiada</i>	
 Modeling, Simulation and Decision Making	
Planning in Collaborative Stigmergic Workspaces	160
<i>Constantin-Bala Zamfirescu and Ciprian Candea</i>	
Signature Verification Based on a Global Classifier That Uses Universal Forgery Features	170
<i>Joanna Putz-Leszczynska and Andrzej Pacut</i>	
Functional and Dependability Approach to Transport Services Using Modelling Language	180
<i>Katarzyna Michalska and Jacek Mazurkiewicz</i>	
Swarm-Based Multi-agent Simulation: A Case Study of Urban Traffic Flow in the City of Wrocław	191
<i>Dariusz Król and Maciej Mrozek</i>	
Evolving Equilibrium Policies for a Multiagent Reinforcement Learning Problem with State Attractors	201
<i>Florin Leon</i>	
Agent Based Simulation of Customers Behavior for the Purpose of Price Distribution Estimation	211
<i>Marek Zachara and Cezary Piskor-Ignatowicz</i>	

Applications of Computational Collective Intelligence in Shipping

Evolutionary Sets of Safe Ship Trajectories: Problem-Dedicated Operators	221
<i>Rafał Szlapczyński and Joanna Szlapczyńska</i>	
Evolutionary Sets of Safe Ship Trajectories: Improving the Method by Adjusting Evolutionary Techniques and Parameters	231
<i>Rafał Szlapczyński</i>	
Comparison of Selection Schemes in Evolutionary Method of Path Planning	241
<i>Piotr Kolendo, Bartosz Jaworski, and Roman Śmierzchalski</i>	
Evidence Representation and Reasoning in Selected Applications	251
<i>Włodzimierz Filipowicz</i>	
Application of Artificial Intelligence Methods for the Diagnosis of Marine Diesel Engines	261
<i>Adam Charchalis and Rafał Pawletko</i>	

Computational Collective Intelligence in Bioinformatics

Scalable System for Protein Structure Similarity Searching	271
<i>Bożena Małyśiak-Mrozek, Alina Momot, Dariusz Mrozek, Lukasz Hera, Stanisław Kozielski, and Michał Momot</i>	
Efficient Algorithm for Microarray Probes Re-annotation	281
<i>Paweł Foszner, Aleksandra Gruca, Andrzej Polański, Michał Marczyk, Roman Jaksik, and Joanna Polańska</i>	

CCI-Based Optimization Models

Learning Method for Co-operation	290
<i>Ewa Dudek-Dyduch and Edyta Kucharska</i>	
Experimental Evaluation of the Agent-Based Population Learning Algorithm for the Cluster-Based Instance Selection	301
<i>Ireneusz Czarnowski and Piotr Jędrzejowicz</i>	
Double-Action Agents Solving the MRCPSP/Max Problem	311
<i>Piotr Jędrzejowicz and Ewa Ratajczak-Ropel</i>	
Parallel Cooperating A-Teams	322
<i>Dariusz Barbucha, Ireneusz Czarnowski, Piotr Jędrzejowicz, Ewa Ratajczak-Ropel, and Izabela Wierzbowska</i>	

Solving the Capacitated Vehicle Routing Problem by a Team of Parallel Heterogeneous Cooperating Agents	332
<i>Dariusz Barbucha</i>	

Autonomous and Collective Decision-Making

Validated Decision Trees versus Collective Decisions	342
<i>Krzysztof Grąbczewski</i>	
Time and Personality Dependent Behaviors for Agent Negotiation with Incomplete Information	352
<i>Amine Chohra, Arash Bahrammirzaee, and Kurosh Madani</i>	
Dynamic Selection of Negotiation Protocol in Multi-agent Systems for Disaster Management.....	363
<i>Amelia Bădică, Costin Bădică, Sorin Ilie, Alex Muscar, and Mihnea Scafeș</i>	

Collective Intelligence in Web Systems - Web Systems Analysis

Guaranteeing Quality of Service in Globally Distributed Web System with Brokers	374
<i>Krzysztof Zatwarnicki</i>	
Customized Travel Information Recommendation Framework Using CBR and Collective Intelligence.....	385
<i>Mye Sohn, Su ho Kang, and Young Min Kwon</i>	
Integration of Collective Knowledge in Fuzzy Models Supporting Web Design Process	395
<i>Jaroslav Jankowski</i>	
WordNet Based Word Sense Disambiguation	405
<i>Andrzej Siemiński</i>	
Further Tests with Click, Block, and Heat Maps Applied to Website Evaluations	415
<i>Kazimierz Choroś</i>	
A Research Study on Business-Oriented Quality-Driven Request Service in a B2C Web Site	425
<i>Grażyna Suchacka and Leszek Borzemski</i>	

Computational Collective Intelligence in Economy

Collective Intelligence Approach to Measuring Invisible Hand of the Market	435
<i>Paweł Skrzyński, Tadeusz Szuba, and Stanisław Szydło</i>	
Collective Intelligence of Genetic Programming for Macroeconomic Forecasting	445
<i>Jerzy Duda and Stanisław Szydło</i>	

Computational Swarm Intelligence and Applications

Parallel Appearance-Adaptive Models for Real-Time Object Tracking Using Particle Swarm Optimization	455
<i>Bogusław Rymut and Bogdan Kwalek</i>	
Following the Leader – Particle Dynamics in Constricted PSO	465
<i>Jacek Kabziński</i>	

Computational Swarm Intelligence - Discovering Relationships in Data

An Adaptive Discretization in the ACDT Algorithm for Continuous Attributes	475
<i>Urszula Boryczka and Jan Kozak</i>	
Approximate Nash Equilibria in Bimatrix Games	485
<i>Urszula Boryczka and Przemysław Juszczuk</i>	
Co-operative, Parallel Simulated Annealing for the VRPTW	495
<i>Rafał Skinderowicz</i>	
The Parallel Ant Vehicle Navigation System with CUDA Technology ...	505
<i>Wojciech Bura and Mariusz Boryczka</i>	
Author Index	515