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(HIS 2010)

**Atlanta, Georgia, USA
23 – 25 August 2010**



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Time	TBD	333	433
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Monday, August 23

08:45-09:30			P1: <i>Plenary 1</i>
09:40-10:25			P2: <i>Plenary 2</i>
10:25-10:45	C1: <i>Coffee break</i>		
14:00-15:30		S2: <i>Hybrid Fuzzy Systems</i>	
15:45-17:00		S4: <i>Hybrid Systems in Applications</i>	

Tuesday, August 24

09:00-13:00		S3: <i>Hybrid Metaheuristics</i>	
14:00-17:00		S1: <i>Hybrid neural networks</i>	

Monday, August 23

08:45 - 09:30

P1: Plenary 1

Yager

09:40 - 10:25

P2: Plenary 2

Tadahiko Murata

10:25 - 10:45

C1: Coffee break

14:00 - 15:30

S2: Hybrid Fuzzy Systems

FCCTF: Fairness Congestion Control for a disTrustful Wireless Sensor Network Using Fuzzy Logic

Mani Zarei (Dept.of Com. Eng., Science and Research Branch, IAU, Tehran, Iran, Iran); Amir Masoud Rahmani (Science and Research Branch, Islamic Azad University Tehran, Iran, Iran); Razieh Farazkish (Science and Research Branch, Islamic Azad University Tehran, Iran, Iran); Sara Zahimia (Islamic Azad University, Hamadan, Iran, Iran)

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A Comparison of Positive, Boundary, and Possible Rules Using the MLEM2 Rule Induction Algorithm

Jerzy Grzymala-Busse (University of Kansas, USA); Shantanu Marepally (University of Kansas, USA); Yiyu Yao (University of Regina, Canada)

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A Fuzzy Based Hybrid Multispectral Image Fusion Method Using DWT

Tanish Zaveri (Nirma University, India)

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On The Use of Fuzzy Rules to Text Document Classification

Tatiane Nogueira (Universidade de São Paulo, Brazil); Heloisa Camargo (Universidade Federal de São Carlos, Brazil); Solange Rezende (Universidade de São Paulo, Brazil)

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Improving Black Box Testing By Using Neuro-Fuzzy Classifiers and Multi-Agent Systems

Marcos Álvares (University of Pernambuco, Brazil); Julio Fort (Federal University of Pernambuco,

Brazil); Fernando Lima Neto (University of Pernambuco, Brazil)
pp. 25-30

A New Hybrid Nature-Inspired Metaheuristic for Problem Solving Based on the Social Interaction Genetic Algorithm Employing Fuzzy Systems

Otavio Noura Teixeira (Centro Universitário do Estado do Pará (CESUPA), Brazil); Walter Lobato (Centro Universitário do Estado do Pará (CESUPA), Brazil); Carlos Yasojima (Centro Universitário do Estado do Pará (CESUPA), Brazil); Felipe Brito (Universidade Federal do Pará, Brazil); Artur Teixeira (Universidade Federal do Pará, Brazil); Roberto Oliveira (Universidade Federal do Pará, Brazil)
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15:45 - 17:00

S4: Hybrid Systems in Applications

Internet Traffic Classification Using a Hidden Markov Model

Jose Everardo Bessa Maia (State University of Ceara, Brazil); Raimir Holanda (University of Fortaleza, Brazil)
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Feature Selection Algorithm for Classification of Multispectral MR Images Using Constrained Energy Minimization

Geng-Cheng Lin (National Central University, Taiwan); Wen-June Wang (National Central University, TAIWAN, Taiwan); Wang Chuin-Mu (National Chinyi University of Technology, Taiwan)
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Necessity-Matching Approach for Translated, Rotated and Scale Characters Recognition From Map

Guang Xiao Tian (University of Electronic Science and Technology of China, P.R. China); Yong Da Zhu (University of Electronic Science and Technology of China, P.R. China)
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An Intelligent Web Interface to Generate and Update Adaptive Virtual Environments

Marcus Aquino (Federal University of Campina Grande, Brazil); Fernando Souza (Federal University of Pernambuco, Brazil)
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A Short-Term Bus Load Forecasting System

Ricardo Salgado (University of Alfenas, Brazil); Takaaki Ohishi (University of Campinas, Brazil); Rosangela Ballini (University of Campinas, Brazil)
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Evaluating Classification Methods Applied to Multi-Label Tasks in Different Domains

Araken Santos (Federal University of RN, Brazil); Anne Canuto (Federal University of RN, Brazil); Antonino Feitosa Neto (Federal University of RN, Brazil)
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On The Improvement Of Knowledge Management Status Through Case-Based Reasoning In A Hybrid Approach

Emilio Corchado (University of Burgos, Spain); Aitor Mata (University of Salamanca, Spain); Alvaro Herrero (University of Burgos, Spain); Lourdes Sáiz (University of Burgos, Spain)
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Aiida-Sql: an Adaptive Intelligent Intrusion Detector Agent For Detecting Sql Injection Attacks

Cristian Pinzón (University of Salamanca, Spain); Juan De Paz (University of Salamanca, Spain); Javier Bajo (University of Salamanca, Spain); Alvaro Herrero (University of Burgos, Spain); Emilio Corchado (University of Burgos, Spain)
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Tuesday, August 24

09:00 - 13:00

S3: Hybrid Metaheuristics

An Improved Identification Technique of Gene Regulatory Network From Gene Expression Time Series Data Using Multi-Objective Differential Evolution

Debasish Datta (Research Scholar, Jadavpur University, India); Konar Amit (Professor, India); Atulya K Nagar (Liverpool Hope University, United Kingdom); Archana Bisoyi (Institute of Advanced Computer And Research, India)

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Impact of the Random Number Generator Quality on Particle Swarm Optimization Algorithm Running on Graphic Processor Units

Carmelo J A Bastos-Filho (University of Pernambuco, Brazil); Marcos Oliveira Junior (University of Pernambuco, Brazil); Debora Nascimento (University of Pernambuco, Brazil); Alex Ramos (Federal Univeristy of Pernambuco, Brazil)

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A Particle Swarm Optimization Based Approach for the Maximum Coverage Problem in Cellular Base Stations Positioning

Antonio I. S. Nascimento (University of Pernambuco, Brazil); Carmelo J A Bastos-Filho (University of Pernambuco, Brazil)

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A GRASP Heuristic with Path-Relinking for a Bi-Objective P-Median Problem

Jose Elias Claudio Arroyo (Universidade Federal de Vicosa, Brazil); Michele Soares (Universidade Federal de Viçosa, Brazil); Paula Santos (Universidade Federal de Viçosa, Brazil)

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Analyzing the Control of Dominance Area of Solutions in Particle Swarm Optimization for Many-Objective

Andre Britto de Carvalho (Federal University of Parana, Brazil); Aurora Pozo (Federal University of Parana, Brazil)

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Intelligent Bio-Inspired System for Manufacturing Scheduling Under Uncertainties

Ana Maria Pereira (Institute of Engineering-Polytechnic Institute of Porto, European Union); Ivo Pereira (Institute of Engineering – Polytechnic of Porto, Portugal)

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Efficient Protein-Ligand Docking Using Sustainable Evolutionary Algorithms

Emrah Atilgan (University of South Carolina, USA); Jianjun Hu (University of South Carolina, USA)

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The Swarm Computer, an Analog Cellular-Swarm Hybrid Architecture

Ryanne Dolan (University of Missouri, USA); Guilherme DeSouza (University of Missouri-Columbia, USA); Dan Caputo (University of Missouri, USA)

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A Hybrid Evolutionary Direct Search Technique for Solving Optimal Control Problems

Arnob Ghosh (Jadavpur University, India); Aritra Chowdhury (Jadavpur University, India); Swagatham Das (Jadavpur University, India); Ajith Abraham (Machine Intelligence Research Labs (MIR Labs), USA)

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Fractal Image Compression Based on Spatial Correlation And Chaotic Particle Swarm Optimization

Gohar Vahdati (Islamic Azad University Mashhad Branch, Iran); Mahdi Yaghoobi (Islamic Azad University Mashhad Branch, Iran); Mohammad Reza Akbarzadeh- Totonchi (Ferdowsi University of Mahhad, Iran)

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An Optimization Heuristic for Siting Observers in Huge Terrains Stored in External Memory

Salles Magalhaes (Universidade Federal de Viçosa, Brazil); Marcus Andrade (Universidade Federal de Viçosa, Brazil); W. Randolph Franklin (Rensselaer Polytechnic Institute, USA)

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Search Personalization in Hyperlinked Environments by Relevance Propagation and Ant Colony Optimization

Pavel Kromer (VSB-Technical University of Ostrava, FEECS, Czech Republic); Vaclav Snasel (VSB-Technical University of Ostrava, FEECS, Czech Republic); Jan Platos (VSB-Technical University of Ostrava, FEECS, Czech Republic); Suhail Owais (Applied Science University Amman, Jordan)

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Evolutionary Improvement of Search Queries and Its Parameters

Pavel Kromer (VSB-Technical University of Ostrava, FEECS, Czech Republic); Vaclav Snasel (VSB-Technical University of Ostrava, FEECS, Czech Republic); Jan Platos (VSB-Technical University of Ostrava, FEECS, Czech Republic); Ajith Abraham (Machine Intelligence Research Labs (MIR Labs), USA)

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Circular Antenna Array Synthesis with a Differential Invasive Weed Optimization Algorithm

Anirudha Basak (Jadavpur University, India); Siddharth Pal (Jadavpur University, India); Swagatham Das (Jadavpur University, India); Ajith Abraham (Machine Intelligence Research Labs (MIR Labs), USA)

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A Gaussian Artificial Immune System for Multi-Objective Optimization in Continuous Domains

Pablo Castro (Unicamp, Brazil); Fernando J Von Zuben (State University of Campinas, Brazil)

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An Integral Approach for Geno-Simulated Annealing

Mostafa Hassan (University of Waterloo, Canada); Fakhri Karray (University of Waterloo, Canada); Mohamed Kamel (University of Waterloo, Canada); Abbas Ahmadi (University of Waterloo, Canada)

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A New Third Order Particle Swarm Optimization and Applications to Test Various Functions

Hwan Kang (Myongji University, Korea); Min woo Kwon (Myongji University, Korea); Hwan gil Bae (Myongji University, Korea)

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Examination of the Performance of Objective Reduction Using Correlation-Based Weighted-Sum for Many Objective Knapsack Problems

Akinori Taki (Kansai University, Japan); Tadahiko Murata (Kansai University, Japan)

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Mixing Theory of Retroviruses and Genetic Algorithm to Build a New Nature-Inspired Meta-Heuristic for Real-Parameter Function Optimization Problems

Renato Moreira (Universidade Federal do Pará, Brazil); Otavio Noura Teixeira (Centro Universitário do Estado do Pará (CESUPA), Brazil); Roberto Oliveira (Universidade Federal do Pará, Brazil)

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14:00 - 17:00

SI: Hybrid neural networks

Hybrid System for a Never-Ending Unsupervised Learning

Aldo F. Dragoni (Università Politecnica delle Marche, Italy); Germano Vallesi (Università Politecnica delle Marche, Italy); Paola Baldassarri (Università Politecnica delle Marche, Italy)

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Modular Robot with Adaptive Connection Topology

Pitoyo Hartono (Future University Hakodate, Japan)

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Metaheuristic Techniques for Support Vector Machine Model Selection

James Blondin (Armstrong Atlantic State University, USA); Ashraf Saad (AAU, USA)

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A Hybrid Approach for IEEE 802.11 Intrusion Detection Based on AIS, MAS and Naïve Bayes

Moisés Danziger (School of Electrical and Computer Engineering - UNICAMP, Brazil); Fernando Lima Neto (University of Pernambuco, Brazil)

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The Application of a CICA Neural Network on Farsi License Plates Recognition

Mojdeh Akhtari (Qazvin Islamic Azad University, Iran); Karim Faez (Amirkabir University of Technology, Iran)

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DPF-Based Japanese Phoneme Recognition Using Tandem MLNs

Mohammed Rokibul Alam Kotwal (United International University, Bangladesh); Manoj Banik (Ahsanullah University of Science and Technology, Bangladesh); Gazi Md. Moshfiqul Islam (United International University, Bangladesh); Shahadat Hossain (United International University, Bangladesh); Foyzul Hassan (Enosis Solutions, Bangladesh); Mohammad Hasan (Blueliner

Bangladesh, Bangladesh); Ghulam Muhammad (King Saud University, Saudi Arabia); Mohammad Huda (United International University, Bangladesh)
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Using a Reinforcement-based Feature Selection Method in Classifier Ensemble

Anne Canuto (Federal University of RN, Brazil); Karliane Vale (Federal University of RN, Brazil);
Antonino Feitosa Neto (Federal University of RN, Brazil)
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Embedding a Neural Network Into WSN Furniture

Symone Soares (University of Coimbra, Portugal); Rui Araújo (University of Coimbra, Portugal);
Adson da Rocha (University of Brasilia, Brazil); Talles Marcelo Barbosa (Pontifical Catholic
University of Goiás, Brazil)
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Local and Global Gaussian Mixture Models for Hematoxylin and Eosin Stained Histology Image Segmentation

Lei He (National Institutes of Health, USA); Rodney Long (NIH, USA); Sameer Antani (NIH, USA);
George Thoma (NIH, USA)
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GPUMLib: a New Library to Combine Machine Learning Algorithms with Graphics Processing Units

Noel Lopes (Polytechnic Institute of Guarda, Portugal); Bernardete Ribeiro (University of Coimbra,
Portugal)
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