

Table of Contents

Índice

Page/Pág.

Algorithm Theory

Counting Edge Covers Sets for Estimating the Relevance of Communication Lines	3
<i>Guillermo De Ita, Meliza Contreras and Pedro Bello</i>	

Natural Language Processing and Knowledge Representation

Controlling an SMS Transcription System using Heuristic and Empirical Criteria	17
<i>Grégory Smits and Christine Chardenon</i>	
A Concept-Suggestion Engine for Professional Multimedia Archives.....	29
<i>Marco A. Palomino, Michael P. Oakes and Tom Wuytack</i>	
Conceptual Model Based on Change Relation (CR)	41
<i>Miguel Martinez, Serguei Levachkine, Marco Moreno, Miguel Torres and Rolando Quintero</i>	
A Tool for Designing Re-usable Process in Educational Software Development in Cooperative Environments	53
<i>Garcia I. and Pacheco C.</i>	
CLASS-W, a Grammar for Security System Development based on Environment Equipment Agents with Windows-Technology NT	65
<i>Guadalupe Cota, Pedro Flores and Joel Suárez</i>	

Pattern Recognition and Data Mining

Delta Associative Memory: An Efficient-Pattern Classifier	79
<i>Mario Aldape-Pérez, Cornelio Yáñez-Márquez and Amadeo José Argüelles-Cruz</i>	
Automatic Synthesis of Associative Memories by Genetic Programming, a First Approach	91
<i>Juan Villegas-Cortez, J. Humberto Sossa A., Carlos Avilés-Cruz and Gustavo Olague Caballero</i>	
Automatic Spatio-temporal Characterization of Criminal Activity. A New Algorithm and a Public Security Decision-support System	103
<i>Víctor Manuel Martínez-Hernández, Salvador Godoy-Calderón, Francisco Hiram Calvo Castro and Marco A. Moreno-Armendáriz</i>	

An Adjusted Variable Neighborhood Search Algorithm Applied to the Geographical Clustering Problem	113
<i>Beatriz Bernábe, Maria Osorio, Javier Ramírez, José Espinosa and Ricardo Aceves</i>	

Induction of Decision Trees from Trained SVM Models using a TREPAN Based Approach	127
<i>Douglas E. Torres D.</i>	

Computer Vision

A Methodology to Determine the Resolution of the Photograph Printed in the Mexican ID-card	141
<i>Samuel Sanchez, Edgardo Riveron and Salvador Godoy-Calderón</i>	

Segmenting Blood Vessels in Retinal Images Using a Entropic Thresholding Scheme	153
<i>Fabiola M. Villalobos-Castaldi, Edgardo M. Felipe-Riverón and Cecilia Albortante-Morato</i>	

Robust Edge Detection Algorithm using Ant Colony System	167
<i>Inkyeom Kim and Minyoung Yun</i>	

A Parametric Method Applied to Phase Recovery from a Fringe Pattern based on a Particle Swarm Optimization	177
<i>J.F. Jimenez, F.J. Cuevas, J.H. Sossa, N. Cruz and L.E. Gomez</i>	

Multi-agent Systems and Simulation

Coordinated Multi-agent Exploration	189
<i>Alfredo Toriz P., Abraham Sánchez L. and Maria A. Osorio L.</i>	

A Specialist Agent in Marketing Strategies for Quotes Establishment	201
<i>Miriam Salcedo, Darnes Vilariño, Fabiola López, Josefa Somodevilla and Mireya Tovar</i>	

Some Experiments on a Geometrical Approach to Build Maps in Indoor Environment	213
<i>Luis M. Valentin-Coronado, Victor Ayala-Ramirez and Raul E. Sanchez-Yanez</i>	

GEMPA: Graphic Environment for Motion Planning Algorithms	225
<i>Antonio Benitez and Alejandro Mugarte</i>	

Virtual Human Locomotion Synthesis: A Survey	237
<i>Xochitl Hernández V., Abraham Sánchez L. and David Nuñez R.</i>	

Computer Networks

An Approach of Content Management based on Structured Peer-to-Peer Networks	251
<i>Luis Enrique Colmenares Guillén and Angel Omar Mendoza Rojas</i>	

NSIS Signaling Protocol Simulator for Heterogeneous Quality of Service Inter-domain Negotiation	263
<i>María del C. Vargas G., Ernesto E. Quiroz M. and Miguel A. Álvarez C.</i>	

Performance of a Realnetworks Video Streaming System over an Internet Infrastructure in Mexico	275
<i>Mireya S. García-Vázquez, Alejandro A. Ramírez-Acosta and Miguel Colores-Vargas</i>	

Digital Signal Processing

Two Reconstruction Algorithms of Non Gaussian Processes on the Output of a Polynomial Converter	287
<i>V. Kazakov and Y. F. Olvera</i>	

What is the Required Series Length for Correct Self-similarity Analysis?	297
<i>Julio C. Ramírez Pacheco and Deni Torres Román</i>	

Computer Architecture and Digital Systems Design

Service-Based Access Control Using Stages for Collaborative Systems	311
<i>Mario Anzures-García, Luz A. Sánchez-Gálvez, Miguel J. Hornos and Patricia Paderewski</i>	

Successful Development of a Portable Didactic Satellite for Training and Research in Satellite Technology	323
<i>Esai Vicente-Vivas, C. Álvarez-Bernal, E.A. Jiménez, Z. Carrizales, C.A. Sánchez, J.R. Córdova, R. Alva, M.A. García and G. Islas</i>	

Fuzzy Logic and Control

Classification and Assessment of the Water Quality using Fuzzy Inference in Shrimp Aquaculture Systems	337
<i>J. J. Carbajal and L. P. Sánchez</i>	

Intelligent Control at the Coagulation Process in a Drinking Water Treatment Plant.....	347
<i>Hector Hernandez, Madain Pérez, Jorge Camas, Rafael Mota, Nicolás Juárez and Marie-Véronique Le Lann</i>	

Boundary Constraints Strategies in Differential Evolution Algorithms Applied to Optimal Control Problems	359
<i>Lopez-Cruz I.L., Rojano-Aguilar A. and Salazar-Moreno R.</i>	

Combinatorial Fuzzy Logic Controller Design.....	371
<i>Arturo Tellez, Luis Villa, Heron Molina, Oscar Camacho and Romeo Urbieta</i>	

Author Index	383
Índice de autores	
Editorial Board of the Volume	385
Comité editorial del volumen	
Additional Reviewers.....	386
Árbitros adicionales	