



PUEBLA, MÉXICO. FEBRUARY 26 – 28, 2007

XVII INTERNATIONAL CONFERENCE ON ELECTRONICS, COMMUNICATIONS, AND COMPUTERS

CONIELECOMP 2007



PROCEEDINGS

Sponsored by



TABLE OF CONTENTS

Membrane Systems for Robot Control Architectures	1
<i>Rodrigo Montúfar-Chaveznavia</i>	
Construction and Motion for a Virtual Humanoid	6
<i>Antonio Benitez, Wilson Sánchez, Daniel Vallejo</i>	
RB-T2 Path Planning Robot	12
<i>Oscar J. Flores-Villa, Gabriela Guerra-Galán, Kathya J. Alvarado Montejo, Joaquín Loaiza Martínez, Raúl I. Fernández Mulia</i>	
Simulation of an Adaptive System Based in the 802.16 Standard	17
<i>D. A. Sánchez-Salas, J. L. Cuevas-Ruíz</i>	
Scope Design Implemented in a PCI Card	21
<i>L. Mantilla, M. A. Vargas, S. Vergara</i>	
Network Ad hoc Routing Algorithm: An Application with Bluetooth	25
<i>Oscar Guerra, Moisés Sánchez-Adame</i>	
Measurement-Based-in-Building Cellular Coverage Analysis for GSM1900	29
<i>Alejandro Aragón-Zavala, Claudia Arredondo-Luna, Karla Monares-Sánchez, Jose Luis Cuevas-Ruiz</i>	
Symbolic MAPLE-Based Design of Allpole Filtres	34
<i>Alfonso Fernandez-Vazquez, Gordana Jovanovic-Dolecek, Roberto Rosas-Romero</i>	
Markovian Random Fields and Comparison Between Different Convex Criterion Optimization in Image Restoration	41
<i>José Ismael De La Rosa, Jesús Villa, Maria A. Araiza</i>	
A New Method for Designing Flat Shelving and Peaking Filters Based on Allpass Filters	47
<i>Alfonso Fernandez-Vazquez, Roberto Rosas-Romero, Jorge Rodriguez-Asomoza</i>	
MIDI Gestural Control of a VST Plugin Using an IR Sensor	54
<i>L. Martinez, F. Guerrero</i>	
FLF4DoS. Dynamic DDoS Mitigation Based on TTL Field Using Fuzzy Logic	58
<i>J. César Covarrubias-Rodríguez, Alejandro Parra-Briones, Juan Arturo-Nolazco</i>	
System of Data Acquisition Applied to a Level Control Using Fuzzy Logic	63
<i>Alvaro Correa, Elvira Rivera, Mario Chauca</i>	
Fuzzy System for DOA Estimation in Mobile Communications Using a FPGA	68
<i>Alberto Rochin-García, Alejandro Díaz-Méndez, Jose Luis Vázquez-González</i>	
Control Algorithm of a Multilevel Converter Based on a Fuzzy Inference System Using MATLAB	74
<i>Salvador Revelo-Andrade, Mariano Fernández-Nava, Pedro Bañuelos-Sánchez, Félix E. Guerrero-Castro</i>	
4G Self-Configurable System Based on Neural Networks	80
<i>M.C. Juan Antonio Arízaga Silva</i>	
Wavelet-Networks for Predicting Ozone Levels in Puebla City Mexico	86
<i>E. S. García-Treviño, V. Alarcon-Aquino, M. A. Herrera-García</i>	
An Extrinsic Calibration Method for 3D Range Surface Sensors: An Application in Radiotherapy Patient Positioning	92
<i>R. Posada-Gomez, G. Alor-Hernandez, M. A. García-Martínez, J. A. Quintana-Silva</i>	

Vital Signs Monitoring through Internet	96
<i>T. Rivera-Toral, R. Alejos-Palomares, Y- Takahashi-Iturriaga</i>	
Reductions Between the Subgraph Isomorphism Problem and Hamiltonian and SAT Problems	102
<i>I. Olmos, M. Osorio, J. A. Gonzalez</i>	
A Semantics for Updates consisting of a Sequence of Programs.....	108
<i>M. Osorio, C. Zepeda</i>	
RDF-based Model for Encoding Document Hierarchies	114
<i>M. A. Medina, J. A. Sanchez, R. O. Chavez</i>	
On the Accurate Calculation of Miller Effect.....	120
<i>E. Gutierrez-Cortés, D. Báez-López</i>	
CAD Modeling of a Microwave Rectangular Coaxial Filtering Device.....	126
<i>A. Jaimes-Vera, I. Llamas-Garro, A. Corona-Chávez, I. Zaldivar-Huerta</i>	
High-Precision Current-Based CMOS WTA/LTA Filters	132
<i>L. A. Sánchez-Gaspariano, A. Díaz-Sánchez, G. Saldaña-González</i>	
Review on Microwave and Millimeter Filters using MEMS Technology.....	138
<i>A. Jaimes-Vera, I. Llamas-Garro, A. Corona-Chávez, I. Zaldivar-Huerta</i>	
Discover Behavior of Turkishs People in Orkut.....	144
<i>A. Ochoa-Zezzatti, J. Martínez, A. Hernández, J. Muñoz</i>	
Scenary Reconstruction with Monocular Vision and Genetic Algorithms.....	149
<i>M. Pérez-Meza, R. Montufar-Chaveznavia, I. H. Pineda-Torres</i>	
SITIO: A Social Semantic Recommendation Platform.....	155
<i>J. M. Gómez, G. Alor-Hernandez, R. Posada-Gómez, M. A. Abud-Figueroa, A. García-Crespo</i>	
A Novel Shape Indexing Method for Automatic Classification of Lepidoptera	161
<i>O. Starostenko, C. K. Cruz, A. Chávez-Aragon, R. Contreras</i>	
EchoTech: A Water Management System	167
<i>J. R. Del Rey, G. Franco, R. Berelleza, J. Gutiérrez, J. González, L. González</i>	
Data Hiding Scheme for Medical Images.....	173
<i>R. Rodríguez-Colín, C. Feregrino-Urbe, G. De J. Trinidad-Blas</i>	
Digital Watermarking Based on Image Centroid Resistant to Rotation and Scaling	179
<i>J. A. Méndez-Polanco, A. C. Palacios-García, R. Rodríguez-Colín, C. Feregrino-Urbe</i>	
Adaptive Steganography Based on Textures	186
<i>D. R. Herrera-Moro, R. Rodríguez-Colín, C. Feregrino-Urbe</i>	
Face Recognition Algorithm using the Discrete Gabor Transform	192
<i>G. Aguilar-Torres, G. Sánchez-Pérez, M. Nakano-Miyatake, H. Pérez-Meana</i>	
Author Index	