

# **2015 12th International Symposium on Programming and Systems (ISPS 2015)**

**Algiers, Algeria  
28-30 April 2015**



**IEEE Catalog Number: CFP1553P-POD  
ISBN: 978-1-4799-7700-0**

## Table of Contents

Foreword by the General Chair . . . . .	xii
Invited Speakers . . . . .	xiv
Panel Discussion . . . . .	
N. Labraoui, <i>A Reliable Trust Management Scheme in Wireless Sensor Networks</i> . . . . .	1
K. Beghdad Bey, F. Benhammadi and R. Benaissa, <i>Balancing Heuristic for Independent Task Scheduling in Cloud Computing</i> . . . . .	7
F. Medjek, D. Tandjaoui, M. R. Abdmeziem and N. Djedjig, <i>Analytical evaluation of the impacts of Sybil attacks against RPL under mobility</i> . . . . .	13
C. Bensaid, K. M. Farouan and S. Bouki Hacene, <i>Cluster based key management in VANET Networks</i> . . . . .	22
M. Masmoudi, L. Kaddour El Boudadi, A. Loukil, A. Dahane, M. Khelf, <i>The teleoperation of a mobile robot in a network without a quality of service guaranteed</i> . . . . .	28
S. Cherbal, A. Boukerram and A. Boubetra, <i>A Survey of Locality-Awareness Solutions in Mobile DHT Systems</i> . . . . .	34
F. Khedim, N. Labraoui and M. Lehsaini, <i>Dishonest Recommendation Attacks in Wireless Sensor Networks: A Survey</i> . . . . .	41
S. Souiki, M. Hadjila and M. Feham, <i>Energy Efficient Routing for Mobile Underwater Wireless Sensor Networks</i> . . . . .	51
C. Gherbi, Z. Aliouat and M. Benmohammed, <i>Distributed Energy Efficient Adaptive Clustering Protocol with Data Gathering for Large Scale Wireless Sensor Networks</i> . . . . .	57
A. Abbassene, Z. Alimazighi and M. Aouachria, <i>Towards an Open Framework for Inter- Organizational Workflow Semantic Annotation</i> . . . . .	66
M. Hafidi and L. Mahnane, <i>A personalized adaptive e-learning system based on learners feedback and learners multiple intelligences</i> . . . . .	74
H. Hamiche, H. Drias and A. Hadjali, <i>A Strong-Dominance-Based Approach for Refining the Skyline</i> . . . . .	80
F. Zendaoui and W. K. Hidouci, <i>Performance Evaluation of Serializable Snapshot Isolation in PostgreSQL</i> . . . . .	88
N. Tamani, <i>Intuitionistic Fuzzy Bipolar Approach for Flexible Querying in E-commerce Applications</i> . . . . .	99
S. Boulkrinat, A. Hadjali and A. Mokhtari, <i>Crowd-Voting-Based Group Recommender Systems</i> . . . . .	107
A. Ouessai and Z. Elberrichi, <i>Web Site Classification based on URL and Content: Algerian Vs. non-Algerian Case</i> . . . . .	116
A. Ouadah, K. Benouaret, A. Hadjali and F. Nader, <i>Combining Skyline and Multi-Criteria Decision Methods to Enhance Web Services Selection</i> . . . . .	124
I. Guellil and K. Boukhalfa, <i>Social Big Data Mining : A Survey Focused on Opinion Mining and Sentiments Analysis</i> . . . . .	132
A. Chellal and K. Amrouche, <i>Adaptation of language model of Information Retrieval for empty answers Problem in databases</i> . . . . .	142
M. Lakehal, K. Bouibede and A. Aissani, <i>New Algorithm Of Scheduling Based On Priority Rules On Machines To Solve Bi-Criteria Blocking Job shop Scheduling Problem</i> . . . . .	149
B. Nachet and A. Abdulkader, <i>Ontology-based Facilitation Support Tool for Group Decision Making</i> . . . . .	157
A. Bouguessa, L. A. Mebarki and B. Boudaa, <i>Context-Aware Adaptation for Sustaining Disaster Management</i> . . . . .	164
I. Taleb and M. Ould Mammar, <i>Parking Access System Based On Face Recognition</i> . . . . .	176
M. Chettih, K. Chorfi and K. Mouattah, <i>Combining a Neural Network with Deterministic Chaos Theory Using Phase Space Reconstruction for Daily Rainfall-Runoff Forecasting</i> . . . . .	181
A. Beddiaf and M. C. Babahenini, <i>An improved splat-based ray tracing for point-based objects</i> . . . . .	188
Z. A. Seghir and F. Hachouf, <i>Image Quality Assessment Scheme based on Gradient Similarity and Color Distortion</i> . . . . .	193
O. Zedadra, H. Seridi, N. Jouandeau and G. Fortino, <i>A Distributed Foraging Algorithm Based on Artificial Potential Field</i> . . . . .	201
Y. A. Gherbi, H. Bouzeboudja and F. Lakdja, <i>Hybrid metaheuristic for the combined economic-emission dispatch problem</i> . . . . .	207
I. Bouchrika, <i>Parametric Elliptic Fourier Descriptors for Automated Extraction of Gait Features for People Identification</i> . . . . .	214
K. Bessine, A. Nehar, H. Cherroun and A. Moussaoui, <i>XCLSC: Structure and Content-based Clustering of XML Documents</i> . . . . .	221
A. Hebboul, F. Hachouf and A. Boulemnadjel, <i>Using a Growing Probabilistic Neural Network to reinforce a Semi Supervised Support Vector Machine</i> . . . . .	228
L. Ghoualmi, A. Draa and S. Chikhi, <i>An Efficient Feature Selection Scheme based on Genetic Algorithm for ear biometrics authentication</i> . . . . .	234
K. Guesmia and N. Boustia, <i>A Contextual Attribute Based Access Control Model based on T – JClassic<math>\delta\epsilon</math></i> . . . . .	239
N. Zemmal, N. Azizi and M. Sellami, <i>CAD System for Classification of Mammographic Abnormalities using Transductive Semi Supervised Learning Algorithm and Heterogeneous Features</i> . . . . .	245
O. Bettaz, N. Boustia and A. Mokhtari, <i>Dynamic Delegation based on Temporal and Nonmonotonic Description Logic</i> . . . . .	254

A. Khoudi, A. Berrichi and F. Yalaoui, <i>Heuristics to maximize system availability on parallel machine scheduling Problem</i> . . . . .	264
K. Derdour and H. Mouss, <i>Digit recognition using multiple classifiers</i> . . . . .	270
A. Benmansour, A. Bouchachia and M. Feham, <i>Human Activity Recognition in Pervasive Single Resident Smart Homes: State of Art</i> . . . . .	276
A. Boutorh and A. Guessoum, <i>Classification of SNPs for Breast Cancer Diagnosis using Neural-Network-based Association Rules</i> . . . . .	285
A. Bouaziz, A. Draa and S. Chikhi, <i>Bat Algorithm for Fingerprint Image Enhancement</i> . . . . .	294
A. Baouya, D. Bennouar, O. Ait Mohamed and S. Ouchani, <i>A Probabilistic and Timed Verification Approach of SysML State Machine Diagram</i> . . . . .	304
H. Bouaziz, S. Chouali, A. Hammad and H. Mountassir, <i>Compatibility Verification of SysML Blocks Using Hierarchical Interface Automata</i> . . . . .	313
A. Abdulhameed, A. Hammad, H. Mountassir and B. Tatibouet, <i>An Approach to Verify SysML Functional Requirements Using Promela/Spin</i> . . . . .	323
M. Rashid, M. W Anwar and A. M. Khan, <i>Identification of Trends for Model Based Development of Embedded Systems</i> . . . . .	332
A. Seghier, I. Chegrane and C. Ighilaza, <i>DNA Multiple Alignment problem with the new DIAWAY algorithm</i> . .	340
M. Sliem, N. Salmi and M. Ioualalen, <i>Using Performance Modelling and Analysis for Self-adaptive Resources Allocation Systems: A case study</i> . . . . .	347
M. Smara, M. Aliouat and Z. Aliouat, <i>Fault Detection in Component-based Models Using BIP Models</i> . . . . .	357