

2013 5th Conference on Information and Knowledge Technology

(IKT 2013)

**Shiraz, Iran
28 – 30 May 2013**



**IEEE Catalog Number: CFP13IKT-POD
ISBN: 978-1-4673-6488-1**

Table of Contents

Cloud, Grid and Custer Computing

◆ A New Version of K-random Walks Algorithm in Peer to Peer Networks Utilizing Learning Automata	1
Mahdi Ghorbani, Mohammad Reza Meybodi, Ali Mohammad Saghiri	
◆ Hybrid CDN-P2P Architecture: Replica Content Placement Algorithms	7
Fatemeh Keymasi Khalaji, Morteza Analoui	
◆ I-LEACH: An Efficient Routing Algorithm to Improve Performance and Reduce Energy Consumption in Wireless Sensor Networks	13
Zahra Beiranvand, Ahmad patooghy, Mahdi Fazeli	
◆ survey on improved autoscaling in Hadoop into cloud environments	19
Masoumeh Rezaei Jam, Leyli Mohammad Khanli, Mohammad Kazem Akbari, Elham Hormozi, Morteza Sargolzaei Javan	
◆ E-learning ecosystem based on Service-Oriented Cloud Computing Architecture	24
Vajihe Lohmosavi, Akbar Farhoodi Nejad , Elham Morad Hosseini	
◆ Implementation of a parallel method for the graph coloring problem using MPI and verification of the number of processors on it	30
Seyed Raouf Khayami, Adel Alinezhad, Hassan Jafari	
◆ Accuracy Evaluation of a Credit Card Fraud Detection System on Hadoop MapReduce	35
Elham Hormozi, Hadi Hormozi, Mohammad Kazem Akbari ,Morteza Sargolzaei Javan	
◆ Credit Cards Fraud Detection by Negative Selection Algorithm on Hadoop (To Reduce the Training Time)	40
Hadi Hormozi, Elham Hormozi, Mohammad Kazem Akbari, Morteza Sargolzaei Javan	
◆ An Energy-Efficient Approach for Virtual Machine Placement in Cloud Based Data Centers	44
Negin Kord, Hassan Haghghi	
◆ A new feature selection algorithm based on binary ant colony optimization	50
Shima Kashef, Hossein Nezamabadi-pour	
◆ Cost Effective Cloud Resource Provisioning with Imperialist Competitve Algorithm Optimization	55
Shahla Yousefyan, Amir Vahid Dastjerdi, MohamadReza Salehnamadi	

◆ Review on Parallel Evolutionary Computing and Introduce Three General Framework to Parallelize All EC Algorithms	61
Amin Majd, Shahriar Lotfi, Gol Naz Sahebi	
◆ An Efficient Approach for Data Replication in Data Grid	67
Moslem Ebtahimi, A. Horri, Gholamhossein Dastghaibfard, Pouyan Nasrollahi	
◆ Decision Support-as-a-Service: An Energy-aware Decision Support Service in Cloud Computing	71
Aboozar Rajabi, Vahid Ebrahimi Rad, Nasser Yazdani	
Cyber Security	
◆ A Game Theoretic Approach to control IDS Sensitivity	77
Niloofar Mozafari, Mohammad-Kazem Farhadi pour, Mohsen Khodayari, Ali Hamzeh	
◆ Improving HBQ Authentication and Access Control in Wireless Sensor Network	82
Babak Nouri Moghaddam, Hamid Reza Naji	
◆ Improving the Speed of the Network Intrusion Detection	88
Zahra Sadeghi, Asadollah Shah Bahrami	
◆ A Hybrid Intelligent HIDS Model using Two-Layer Genetic Algorithm and Neural Network	92
Atefeh Torkaman, Ghazaleh Javadzadeh, Marjan Bahrololum	
◆ A Novel Protocol For the Security of SMS-Based Mobile Banking	97
Meer Soheil Abolghasemi, Taha Yasin Rezapour, Reza Ebrahimi Atani	
◆ Biological Inspired Anomaly Detection Based on Danger Theory	102
Soudeh Behrouzi Nia, Reza Azmi, Mohammad Reza Keyvanpour, Boshra Pishgoo	
◆ Identifying the Critical Indicators for Phishing Detection in Iranian E-Banking System	107
GholamAli Montaze, Sara ArabYarmohammadi	
◆ A Survey on Heuristic Malware Detection Techniques	113
Zahra Bazrafshan, Hashem Hashemi, Seyed Mehdi Hazrati Fard, Ali Hamzeh	
◆ A Steganographic Method for Images with Modulus Function and Modified LSB Replacement based on PVD	121
Masume Sabokdast, Majid Mohammadi	
◆ A Novel Compressione-Based Approach for Malware Detection Using PE Header	127

Zahra Khorsand, Ali Hamzeh	◆ An Entice Resistant Automatic Phishing Detection	134
Hossain Kordestani, Mehdi Shajari	◆ A new model for secure routing and reducing energy consumption in Ad-hoc networks	140
Mohammad Javad Khazali, Ehsan Sargolzaei, Maryam Karimi		
E-Services		
Sepehr Ghassemi, Fattane Taghiyare, Fateme Orooji	◆ New Hybrid Recommendation System Based On C-Means Clustering Method	145
Mohammad Hamidi Esfahani, Farid Khoshalhan	◆ Developing A Learner-Centered Criteria to Assessing Group Activities in Blended Learning Environments	150
Mohamad Mahdi Barati Jozan, Fataneh Taghiyareh, Fatemeh Taghiyareh	◆ Improving Social Presence through Providing Contents with Personalized Flickers based on Learner's Knowledge	155
Gholam Ali Montazer , Ali Zare Zadeh	◆ Iran Customs E-Readiness Measurement Case study: Bushehr Customs	159
Karen Kear, Jon Rosewell , Keith Williams	◆ Quality assurance for excellence in e-learning: the role of social networking	163
Jihen Malek, Mona LAROUSSI	◆ A bidirectional Learning Scenario Model Transformation for Bridging IMS-LD Interoperability Standard and Pervasive Learning Environment Design	169
Intelligent systems in IT		
Mansour Sheikhan	◆ Synthesizing Suprasegmental Speech Information Using Hybrid of GA-ACO and Dynamic Neural Network	175
Mohammd Reza Yousefi Darestani, Mansour Sheikhan, Maryam Khademi	◆ Face Recognition Using Contourlet-Based Features and Hybrid PSO-Neural Model	181
Ali Khalaji, Saeed Seyedtabaii	◆ Intricacies in Digital CMOS Implementation of a Reconfigurable Fuzzy Logic Traffic Light Controller	187

◆ Hybrid of PSO and SOM Neural Network for Immittance Spectral Frequency Quantization in AMR-WB Speech Codecs	192
Mansour Sheikhan	
◆ A New Multi-Agent Algorithm for Solving Constraint Satisfaction Problems	197
Raziye Moghaddas, Eghbal Mansoory, Ali Hamzeh	
◆ Providing a customer churn prediction model Using Random Forest technique (Case Study: Solico Food Industries Group)	202
Sadaf Nabavi, Shahram Jafari	
◆ An Approach for Personalization of Banking Sercives in Multi-channel Environment Using Memory-based Collaborative Filtering	208
Himan Abdollahpouri, Alireza Abdollahpouri	
◆ An Incomplete and Asynchronous Algorithm Based on Localization for Distributed Constraint Optimization	214
Jafar Tahmoresnezhad, Mohammad Bagher Dastgheib, Fatemeh Alizadeh Zoj, Elham Pezhhan, Raziye Moghaddas, Ali Hamzeh	
◆ Non-linear Mapping to Multi-Dim. Optimal Regions with Application in Fast Data Mining	219
Elham Bavafaye Haghghi, Mohamad Rahmati, Guenther Palm	
◆ Improve Performance of Collaborative Filtering Systems Using Backward Feature Selection	225
Mohsen Ramezani, Parham Moradi, Fardin Akhlaghian Tab	
◆ A fuzzy MCDM approach based on COPRAS method to solve supplier selection problems	231
Kamran Nourianfar, Gholam Ali Montazer	
◆ Improve recommender system using trust formula and fuzzy concept network	236
Elaheh Kafshi Taghabadi, Mehrdad Jalali	
◆ The Necessity of Establishing Business Intelligence Competency Centers for Achievement of BI Projects	242
Alireza Dehghan, Alireza Mehrabi, Nahid Fotuhi Sahl abadi	
◆ Performance Evaluation of Routing Protocols for Wireless Sensor Networks in Forest Fire Detection Application	248
Manijeh Keshtgary, Negar Rikhtegar	
◆ A Collaborative Filtering Recommender System Based on User's Time Pattern Activity	252
Pooyan Adibi, Behrouz Tork Ladani	

◆ Decision Making of Humanoid Soccer Robots Using Rule Based Expert Systems	258
Pouyan Nasrollahi, Shahram Jafari, Mehdi Jamaseb, Alireza Nikooee	
◆ A Generic Model for Smart House Remote Control Systems with Software and Hardware Simulators	262
Amir Rajabzadeh, Ali Reza Manashty, Zahra Forootan Jahromi	
Information Technology and Management	
◆ Enhancement of security with the help of real time authentication and one time password in e-commerce transactions	268
Zainab Zare Hosseini, Ehsan Barkhordari	
◆ Using COBIT and ITIL frameworks to establish the alignment of business and IT organizations as one of the critical success factors in ERP implementation	274
Reza Parvizi, Fereshteh Oghbaaei, Seyyed Raouf Khayami	
◆ Recovery Scheme for Industrial Control Systems	279
Abdullah Khalili, Mahsa Keikha, Ashkan Sami, Ali Akbar Safavi	
Knowledge Engineering	
◆ Reviewing On the Formalization of the Agent-Oriented Methodologies: Tropos and Prometheus	284
Mitra Golparyan, Sara Behpour	
◆ A New Ensemble Classifier Creation Method by Creating New Training Set for Each Base Classifier	290
Jalil Ghavidel, Sasan Yazdani, Morteza Analoui	
◆ A Novel Memetic Feature Selection Algorithm	295
Mohadeseh Montazeri, Hamid Reza Naji, Mitra Montazeri, Ahmad Faraahi	
◆ Rough Set Based Feature Selection: A Review	301
Javad Rahimipour Anaraki, Mahdi Eftekhari	
◆ Extracting Farsi text from a video in the wavelet domain	307
Zeynab Ravangard, Hossein Nezamabadi-pour, Farzad Zargar, Amir Kosari Moghadam	
◆ A Framework for Manipulating Vacuumed Data in Temporal Relational Database	312
Mohammad Shabanali Fami, Elham Shabanali Fami, Mohammad Ali Montazeri, Mohammad Taghi Isaai	
◆ Discriminating Proteins Using a Novel Ensemble Algorithm	

.....	318
Elham Nikookar, Kambiz Badie, Mehdi Sadeghi, Ebrahim Naderi	
◆ Online stability and direction fall detection for robotic soccer players using feedback from server	.....
.....	323
Sadegh Jafarian, Amin Abshirini,	
◆ A Reliable Filter for Farsi Term Extraction	.....
.....	328
Hossein Behin-Faraz, Peyman Passban, Mahmoud Shokrollahi-Far	
◆ A Review of Semantic Mapping Techniques of Natural Disaster Ontologies	.....
.....	332
Mehdi Mansourizadeh, Maryam Gharooni	
◆ Predicting customers' future demand using data mining analysis: A case study of wireless communication customer	.....
.....	338
Erfaneh Gharavi, Mohammad Jafar Tarokh	
◆ Semi-supervised Outlier Detection with only Positive and Unlabeled Data based on Fuzzy Clustering	.....
.....	344
Armin Daneshpazhouh, Ashkan Sami	
◆ Simultaneous feature selection and feature weighting with K Selection for KNN Classification Using BBO Algorithm	.....
.....	349
Ahmad A. Kardan, Atena Kavian, Amir Esmaeili	
◆ A Novel Content Based Image Retrieval Approach by Fusion of Short Term Learning Methods	.....
.....	355
Bahare Bagheri, Maryam Pourmazyabadi, Hossein Nezamabadi-pour	
◆ Improving Performance of Customer Relationship Management by Knowledge Management – A Case Study	.....
.....	359
Mohammad Rezaei-Malek, Narges Rezaei-Malek, Reza Tavakkoli-Moghaddam	
◆ Reversible fragile image watermarking by fuzzy approach	.....
.....	359
Mahsa Afsharizade, Majid Mohammadi	
Mobile Devices	
◆ An Intelligent Method for Resource Management in Wireless Networks	.....
.....	371
Seyed Mostafa Hosseini, Naser Mozayani	
◆ Teaching English to Iranian foreign national police wire mobile	.....
.....	377
Saeed Khazaie, Abdolmajid Hayati	
◆ A Novel Context-Aware Server Selection Algorithm For Mobile Thin Client Computing	.....

.....	383
Hossein Abdi, Ayaz Isazadeh, Leili Mohammad Khanli	
◆ Traffic Modeling of Safety Applications in Vehicular Networks	389
.....	
Maissam Asgari, Saleh Yousefi	
◆ Hard Periodic Real-time Task Scheduling on Mobile Heterogeneous Processor	394
.....	
Aref Karimafshar, Mohammad Ali Montazeri, Mahdi Kalbasi, Ali Fanian	
◆ A Mobile Payment Scheme Using 2D-Barcode	400
.....	
Saber Dinparast, Maryam Goleh Bakhtiari, Mehdi Shajari	
Multimedia Systems	
◆ An Automatic Mitosis Detection Method for Breast Cancer Histopathology Slide Images based on Objective and Pixel-wise Textural Features Classification	406
.....	
Ashkan Tashk, Mohammad Sadegh Helfroush, Habibollah Danyali, Mojgan Akbarzadeh	
◆ Pruning Redundant Skeleton Branches of binary Object in image	411
.....	
Mohammad Khodadadi Azadboni, Alireza Behrad, Hasan Tavakoli	
◆ SFAVD: Sharif Farsi Audio Visual Database	417
.....	
Zeinab Naraghi, Mansour Jamzad	
◆ Latency Analysis of ISP-Aware P2PTV System	422
.....	
Amin Latifi, Hadi Khani, Naser Yazdani, Masoud Rahgozar	
◆ Adaptive Kernel-Based Object Tracking with Robust Appearance Model Using Particle Filter	427
.....	
M. Seyfipoor, K. Faez, M. Shirazi	
◆ Face Pose Normalization for Identity Recognition using 3D Information by means of Neural Networks	432
.....	
Najmeh Sadoughi Nourabadi, Kamran Ghasedi Dizaji, Seyyed Ali Seyyedsalehi	
◆ Factored Language Model Adaptation Using Dirichlet Class Language Model for Speech Recognition	438
.....	
Ali Hatami, Ahmad Akbari, Babak Nasersharif	
◆ A Block Matching Based Method for Moving Object Detection in Active Camera	443
.....	
Mohsen Kheirandish Fard, Mehran Yazdi, Mohammadali Masnadi-Shirazi	
◆ A Reversible Image Watermarking In Hadamard Domain	447
.....	

Zahra Pakdaman, Saeid Saryazdi, Hossein Nezamabadi-pour	◆ A Content dependent kernel for Single-Image Super-resolution	453
Saman Saryazdi, Saeid Saryazdi, Hossein Nezamabadi-pour		
Social Networks		
Mohsen Raeesi, Meysam Jalali, Mehdi Shajari	◆ Using Influential Nodes of Stock Network to Measure Tehran Stock Exchange Index	457
Sajjad Jalili, Ali Hamzeh	◆ Enhanced Overlapping Community detection in Social Networks using Wise Initialization	463
Ali Balali, Aboozar Rajabi, Sepehr Ghassemi, Masoud Asadpour and Hesham Faili	◆ Content Diffusion Prediction in Social Networks	467
Ahmad Kardan, Salar Mohtaj	◆ A Model for Expert Finding based on Social Network Structure and Underlying Information Diffusion Network	472
Ali Varamesh, Mohammad Kazem Akbari, Mehdi Fereiduni, Saeed Sharifian, Alireza Bagheri		478
Web Technologies		
Zahra Esmaeili Marandi	◆ An Improved Routing Algorithms in Wireless Sensor Networks With Reliability and Energy-Balancing Approaches	484
Hamed Kordestanchi, Hassan Naderi	◆ Performance Comparison Study of Language Identification Tools for Identification of Farsi Web Pages	489
Gholamhossein Ghasemi, Lordly G Licayan	◆ GeoIP Clustering: Solving Replica Server Placement problem in Content Delivery Networks by clustering users according to their physical locations	502
Seyed Jalal Jafari, Hamid Reza Naji	◆ Field-Slash Based Relevance Propagation For Web Information Retrieval	508
Mohammad Amin Golshani, Ali Mohammad ZareBidaki		