

2015 SAI Intelligent Systems Conference (IntelliSys 2015)

**London, United Kingdom
10-11 November 2015**

Pages 1-584



**IEEE Catalog Number: CFP15C15-POD
ISBN: 978-1-4673-7607-5**

**Copyright © 2015 by the Institute of Electrical and Electronic Engineers, Inc
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

******This publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number: CFP15C15-POD
ISBN (Print-On-Demand): 978-1-4673-7607-5

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Contents

Section 1 : Paper Presentations

MACHINE LEARNING/ ARTIFICIAL INTELLIGENCE

A 3-Layered Self-Reconfigurable Generic Model for Self-Diagnosis of Telecommunication Networks <i>Authors: Serge Romaric Tembo, Jean-Luc Courant, Sandrine Vaton</i>	25-34
An Adaptive Neuro-Fuzzy Inference System-based Approach for Oil and Gas Pipeline Defect Depth Estimation <i>Authors: Abduljalil Mohamed, Mohamed Salah Hamdi, Sofiène Tahar</i>	35-42
The CREDO Stack: Theory to Practice in Cognitive Systems Engineering <i>Authors: John Fox</i>	43-48
Predicting FTSE 100 Close Price using Hybrid Model <i>Authors: Bashar Al-hnaity, Maysam Abbod, Maher Alar'raj</i>	49-54
Practical Machine Learning Solution for Increasing Profit in a Car Repair Service <i>Authors: Marian Cristian Mihăescu, Carmen-Patricia Sapunaru, Paul-Stefan Popescu</i>	55-60
An Optimal Formulation of Feature Weight Allocation for CBR using Machine Learning Techniques <i>Authors: Maria Tamoor, Hina Gul, Hafsa Qaiser, Amna Ali</i>	61-67
Synthesizing Broad Null in Linear Array by Amplitude-Only Control using Wind Driven Optimization Technique <i>Authors: Santosh Kumar Mahto, Arvind Choubey, Sushmita Suman, Rashmi Sinha</i>	68-71
Fine Tuning the Tree Augmented Naïve Bayes (FTAN) Learning Algorithm <i>Authors: Amel Alhussan, Khalil El Hindi</i>	72-79
A Niche Technique to Manage Innovation Projects in ITES <i>Authors: Dr. Jasti Katyayani, Dr. Veeramallu Pinaka Pani</i>	80-86
Multi-Model Approach for Electrical Load Forecasting <i>Authors: Oussama Ahmia, Nadir Farah</i>	87-92
Diagnostic System for Predicting Bladder Cancer Recurrence using Association Rules <i>Authors: Amel Borgi, Safa Ounallah, Nejla Stambouli, Sataa Selami, Amel Ben Ammar Elgaaied</i>	93-99
Intelligent Approach to Uncertain Networked Control Systems with Random Packet Losses <i>Authors: Magdi S. Mahmoud</i>	100-104
Concept of a Decision Support System for a Loan Granting based on Continuous Price Function <i>Authors: Kirill Romanyuk</i>	105-111

A Performance Comparison between Classification Techniques with CRM Application <i>Authors: Dalia Ahmed Refaat Mohamed, Dr. Mohammed Mahmoud Sakre</i>	112-119
Engine Performance Optimization using Machine Learning Techniques <i>Authors: PRANEET DUTTA, SPARSH SHARMA, PRANAV A RATHNAM</i>	120-126
A Novel Framework for Classification of Syncope Disease using K-Means Clustering Algorithm <i>Authors: Madiha Guftar, Syed Hasnain Ali, Ammar Asjad Raja, Usman Qamar</i>	127-132
Big Data: Mathematical Topology Video Data Analytics using Superimposed Learning <i>Authors: Mazhar Hameed, Hiba Khalid, Dr. Farooque Azam</i>	133-140
How to Select Web Services Intelligently on the basis of a Brain Inspired Method for Solving Fuzzy Multi-Criteria Decision Making Problems? <i>Authors: Mohamed Naili, Abdelhak Boubetra, Abdelkamel Tari</i>	141-149
Logistic Regression Model for Breast Cancer Automatic Diagnosis <i>Authors: Ahmed F. Seddik, Doaa M. Shawky</i>	150-154
Enhanced Content-based Filtering Algorithm using Artificial Bee Colony Optimisation <i>Authors: Dima S. Mahmoud, Robert I. John</i>	155-163
A Naïve Bayes Approach for EWS Detection by Text Mining of Unstructured Data: A Construction Project Case <i>Authors: Mohammed Alsubaey, Ahmad Asadi, Dr.Harris Makatsoris</i>	164-168
Evaluation and Comparison of Anomaly Detection Algorithms in Annotated Datasets from the Maritime Domain <i>Authors: Mathias Anneken, Yvonne Fischer, Jürgen Beyerer</i>	169-178
Encouraging Active Commuting through Monitoring and Analysis of Commuter Travel Method Habits <i>Authors: Salim Hasshu, Benjamin N. Passow, Francisco Chiclana, David Elizondo</i>	179-186
Investigating Stochastic Diffusion Search in Data Clustering <i>Authors: Mohammad Majid al-Rifaie, Daniel Joyce, Sukhi Shergill, Mark Bishop</i>	187-194
Bat Inspired Algorithm for Sizing Optimization of Grid-Connected Photovoltaic System <i>Authors: Zulkifli Othman, Ismail Musirin, Shahril Irwan Sulaiman, Khairudin Mohamad</i>	195-200
Applying Regression Models to calculate the Q Factor of Multiplexed Video Signal based on Optisystem <i>Authors: Ronit Rudra, Praneet Dutta, Ankan Biswas, Prof. Aarthi G</i>	201-209
A Fuzzy-Bayesian Model based on the Superposition of States Applied to the Clinical Reasoning Support <i>Authors: Juliano Tonizetti Brignoli, Silvia Modesto Nassar, Maria M. S. Pires, Denilson Sell</i>	210-219
Language and Dialect Identification: A Survey <i>Authors: A. Etman, A. A. (Louis) Beex</i>	220-231

A Hybrid Approach for Word Segmentation <i>Authors: Ammar Mohammed, Mohamed Karam, Hesham Hefny</i>	232-238
Selecting Countries for Developmental Aid Programs using Fuzzy PROMETHEE <i>Authors: Stephen Nabareseh, Eric Afful-Dadzie, Zuzana Komínková Oplatková, Peter Klimek</i>	239-244
Unsupervised Adaptation of ASR Systems: An Application of Dynamic Programming in Machine Learning <i>Authors: Akella Amarendra Babu, Akepogu Ananda Rao, Ramadevi Yellasiri</i>	245-253

ROBOTICS

Utilization of PSoC-5 for Sensor Data Acquisition in a Semi-Autonomous Robotic Platform <i>Authors: Airs Lin, Aleksander Milshcheyn, Garth Herman, Manuel Garcia, Dr. Charles Liu, Dr. Khosrow Rad, Dr. Darrel Guillaume, Dr. Helen Boussalis</i>	254-257
Self-Reconfigurable Robotics Architecture Utilising Fuzzy and Deliberative Reasoning <i>Authors: Affan Shaukat, Guy Burroughes, Yang Gao</i>	258-266
Novel Adhesion Mechanism and Design Parameters for Concrete Wall-Climbing Robot <i>Authors: MD Omar faruq Howlader, Traiq Pervez Sattar</i>	267-273
The Application of IWO in LQR Controller Design for the Robogymnast <i>Authors: Hafizul A. Ismail, Michael S. Packianather, Roger I. Grosvenor, Eldaw E. Eldhukri</i>	274-279
Autonomous Robot Retrieval System <i>Authors: Samantha J. Ahern, Jenny Carter, Paul Wilson</i>	280-282
Demonstrating Danger Theory based Threat Detection for Robotic Manufacture Protection <i>Authors: Viktoriya Degeler, Richard French, Kevin Jones</i>	283-284
Adaptive Operator Selection for Path Planning in Static Environments <i>Authors: S M Ahmadi, H Kebriaei, H Moradi</i>	285-289
Control of 3D Printed Ambidextrous Robot Hand Actuated by Pneumatic Artificial Muscles <i>Authors: Mashood Mukhtar, Emre Akyürek, Tatiana Kalganova, Nicolas Lesne</i>	290-300
Intelligent Service Robot with Voice Recognition and Telepresence Capabilities <i>Authors: Widodo Budiharto, Derwin Suhartono</i>	301-304
Robotic Bodily Aware Interaction within Human Environments <i>Authors: Bojan Jerbic, Tomislav Stipancic, Tomislav Tomasic</i>	305-314
Multiple Robots Task Allocation for Cleaning a Large Public Space <i>Authors: Seohyun Jeon, Minsu Jang, Daeha Lee, Young-Jo Cho, Jaeyeon Lee</i>	315-319
Multivariable Centralized Fractional Order PID Controller Tuned using Harmony Search Algorithm for Two Interacting Conical Tank Process <i>Authors: Sabura banu U, Lakshmanaprabu S.K.</i>	320-327

AMBIENT INTELLIGENCE

Incentives for Rescheduling Residential Electricity Consumption to Promote Renewable Energy Usage <i>Authors: Charilaos Akasiadis, Kikia Panagidi, Nikolaos Panagiotou, Paolo Sernani, April Morton, Ioannis A. Vetsikas, Lora Mavrouli, Konstantinos Goutsias</i>	328-337
Experimental Analysis of Some Radio Propagation Models for Smart Wireless Sensor Networks Applications <i>Authors: Ashish Payal, C.S. Rai, B.V.R. Reddy</i>	338-342
A Feature Reduction Framework based on Rough Set for Biomedical Data Sets <i>Authors: Syed Hasnain Ali, Madiha Guftar, Dr. Usman Qamar, Abdul Wahab Muzaffar</i>	343-349
Enabling Distributed Context Entity Discovery for an Internet-of-Things Platform <i>Authors: Hasibur Rahman, Theo Kanter, Rahim Rahmani</i>	350-354
Hash Semi Cascade Join for Joining Multi-Way Map Reduce <i>Authors: Marwa Hussien Mohamed, Mohamed Helmy Khafagy</i>	355-361
Water Conservation using Smart Multi-User Centralized Mixing Systems <i>Authors: Mohammad Faizuddin, Jihad H. AlSadah, Yahya E. Osais</i>	362-370
Discovering Hotspots: A Placement Strategy for Wi-Fi based Trajectory Monitoring within Buildings <i>Authors: Lorenz Schauer</i>	371-380
Methods of Analysis for Urban Environmental Noise <i>Authors: Luis Pastor Sánchez Fernández, Luis Alejandro Sánchez Pérez, José Juan Carbajal Hernández, Lucrecia Pérez Echazabal</i>	381-389
Camera based Pedestrian Path Prediction by Means of Polynomial Least-Squares Approximation and Multilayer Perceptron Neural Networks <i>Authors: Michael Goldhammer, Sebastian Köhler, Konrad Doll, Bernhard Sick</i>	390-399
Object Recognition in Assembly Assisted by Augmented Reality System <i>Authors: Anderson Nishihara, Jun Okamoto Jr.</i>	400-407
Development and Evaluation of a Virtual Reality-System with Integrated Tracking of Extremities under the Aspect of Acrophobia <i>Authors: Philip Schäfer, Marius Kollery, Julia Diemerz, Gerrit Meixner</i>	408-417
Traffisense: A Smart Integrated Visual Sensing System for Traffic Monitoring <i>Authors: Reda ElHakim, Moataz Abdelwahab, Abdelrahman Eldesokey, Mohamed ElHelw</i>	418-426
Co-Design of Augmented Reality Book for Collaborative Learning Experience in Primary Education <i>Authors: Haifa Alhumaidan, Kathy Pui Ying Lo, Andrew Selby</i>	427-430
Monitoring Technologies for Buildings Equipped with Ambient Assisted Living <i>Authors: Susanne Frank, Nathalie Labonnote</i>	431-438

Predicting Occupancy Trends in Barcelona's Bicycle Service Stations using Open Data <i>Authors: Gabriel Martins Dias, Boris Bellalta, Simon Oechsner</i>	439-445
Hierarchical Organization with a Cross Layers using Smart Sensors for Intelligent Cities <i>Authors: Bouabidi Imen, Pr.Abdellaoui Mahmoud</i>	446-451
CogWatch: Intelligent Agent-based System to Assist Stroke Survivors during Tea-Making <i>Authors: Emilie M.D. Jean-Baptiste, Martin Russell, Jo Howe, Pia Rotshtein</i>	452-456
Gas Identification with Spike Codes in Wireless Electronic Nose: A Potential Application for Smart Green Buildings <i>Authors: Muhammad Hassan, Amine Bermak, Amine Ait Si Ali, Abbes Amira</i>	457-462
Adaptive Room-level Localization System with Crowd-sourced WiFi Data <i>Authors: Yongduo Wang, Albert Kai-Sun Wong, Roger Shu-Kwan Cheng</i>	463-469
Energy Optimization in Wireless Sensor Networks based on Genetic Algorithms <i>Authors: Angela Rodriguez, Paolo Falcarin, Armando Ordóñez</i>	470-474
A Linear Programming-Driven MCDM Approach for Multi-Objective Economic Dispatch in Smart Grids <i>Authors: Beatrice Lazznerini, Francesco Pistolesi</i>	475-484
Accurate Localization in Dense Urban Area using Google Street View Images <i>Authors: Mahdi Salarian, Rashid Ansari, Andrea Manavella</i>	485-490
An Intelligent Sensing System for Healthcare Applications using Real-Time EMG and Gaze Fusion <i>Authors: Aisha Al-Mansoori, Alkhzami Al-Harami, Rawda AlMesallam, Uvais Qidwai, Abbes Amira</i>	491-498

ARTIFICIAL INTELLIGENCE

Aircraft Class Recognition based on Dynamic Hierarchical Weighting of Multiple Neural Networks Outputs <i>Authors: Luis Alejandro Sánchez-Pérez, Luis Pastor Sánchez-Fernández, Sergio Suárez-Guerra</i>	499-506
Control Quality Assessment of Fuzzy Logic Controller based Static VAR Compensator (SVC) <i>Authors: Ashraf Mohamed Hemeida, Salem Alkhalaf, Osama Alfarraj</i>	507-517
Non Invasive EEG Signal Processing Framework for Real Time Depression Analysis <i>Authors: Shamla Mantri, Dr. Dipti Patil, Dr. Pankaj Agrawal, Dr. Vijay Wadhai</i>	518-521
Studying the Factors Affecting the Risk of Forest Fire Occurrence and Applying Neural Networks for Prediction <i>Authors: Nizar HAMADEH, Alaa HILAL, Bassam DAYA, Pierre CHAUVET</i>	522-526
Predication of Premature Neonates Prognosis based on their Electroencephalogram using Artificial Neural Network <i>Authors: Yasser AL HAJJAR, Abd El Salam AL HAJJAR, Bassam DAYA, Pierre CHAUVET</i>	527-531
A Formal Framework for Web Service Broker to Compose Qos Measures <i>Authors: Adnan Akhunzada, Abdullah Gani, Shahid Hussain, Arif Ali Khan, Ashrafallah</i>	532-536
Towards Experiencing the Pair Programming as a Practice of the Rational Unified Process (RUP) <i>Authors: Adnan Akhunzada, Abdullah Gani, Shahid Hussain, Arif Ali Khan, Ashrafallah</i>	537-542
Speed Control of Elliptec Motor using Adaptive Neural-Fuzzy Controller with on-Line Learning Simulated under MATLAB/SIMULINK <i>Authors: Arash Dehghanian Serej, Hamed Mojallali</i>	543-553
PSO-PD Fuzzy Control of Distillation Column <i>Authors: Yousif Al-Dunainawi, Maysam F. Abbod</i>	554-558
A Rule based Expert System for Syncope Prediction <i>Authors: Madiha Guftar, Usman Qamar</i>	559-564
Real Time Astrocyte in Spiking Neural Network <i>Authors: Bassam Abdul-Rahman Abed, Amelia Ritahani Ismail, Normaziah Abdul Aziz</i>	565-570
Chameleon Eye Motion Thruster for Missile System with Genetic Ontology Controller and Uncommon Transmission Antenna <i>Authors: Prasad R, Sudar Paul s, Vinothini G, Geetha S, Lokesh Kumar G, Surya Prabha U S</i>	571-575
A Rapid Detection of Meat Spoilage using FTIR and Neuro-Fuzzy Systems <i>Authors: Abeer Alshejari, Vassilis S. Kodogiannis, Ilias Petrounias</i>	576-584
How to Diagram your Logical Argument <i>Authors: Sabah Al-Fedaghi</i>	585-590

Optimization of an Artificial Neural Network using Firefly Algorithm for Modeling AC Power from a Photovoltaic System <i>Authors: Shahril Irwan Sulaiman, Zulkifli Othman, Ismail Musirin, Nor Syakila Mohd Zainol Abidin</i>	591-594
Impact of Refactoring on Code Quality by using Graph Theory: An Empirical Evaluation <i>Authors: Anam Shahjahan, Wasi haider Butt, Aisha Zafar Ahmad</i>	595-600
Social Network Analysis in the m-Learning Service <i>Authors: Youssef Douzi, Tarik Hajji, Mohammed Benabdellah LACSA, Abdelmalek Azizi LACSA, El Miloud Jaara LARI</i>	601-608
Weighted Heuristic Ensemble of Filters <i>Authors: Ghadah Aldehim, Wenjia Wang</i>	609-615
Architecture of English to Sanskrit Machine Translation <i>Authors: Promila Bahadur, Ajai Jain, Durg Singh Chauhan</i>	616-624
Investigating Stochastic Diffusion Search in DNA Sequence Assembly Problem <i>Authors: Fatimah Majid al-Rifaie, Mohammad Majid al-Rifaie</i>	625-631
Swarm Intelligence Approach in Detecting Spatially-Independent Symmetries in Cellular Automata <i>Authors: Mohammad Ali Javaheri Javid, Mohammad Majid al-Rifaie, Robert Zimmer</i>	632-639
An Intelligent Routing Approach for Wireless Sensor Networks <i>Authors: Najla Al-Nabhan, Sami Al-Wakeel</i>	640-645
Grid Power Quality Enhancement using Fuzzy Control-based Shunt Active Filtering <i>Authors: Abdeldjabbar Mohamed Kouadria, Mouloud Denai, Tayeb Allaoui, George Pissanidis</i>	646-650
Computer Simulation of Chemotaxis in Caenorhabditis Elegans in Consideration of Whole-Body Movements <i>Authors: Zu Soh, Michiyo Suzuki, Yuichi Kurita, Toshio Tsuji</i>	651-656
Integrated CAD/CAPP/CAM and ANN in Sheet Metal Punching and Nippling Operations <i>Authors: Amal Abdelmoneam Mohamed, Azza Fathalla Barakat, Mohamed Ibrahim Etman, Hussein M.A. Hussein</i>	657-663
Bat Algorithm for Overlapping Community Detection <i>Authors: Messaoudi Imane, Kamel Nadjat</i>	664-667
A Neural Network Model of Caenorhabditis Elegans and Simulation of Chemotaxis-related Information Processing in the Neural Network <i>Authors: Kazuma Sakamoto, Zu Soh, Michiyo Suzuki, Yuichi Kurita, Toshio Tsuji</i>	668-673
Analyzing the Intelligence in User Interfaces <i>Authors: Rabail Tahir</i>	674-680
ANN-Based Prediction of Cementation Factor in Carbonate Reservoir <i>Authors: Fadhil Sarhan Kadhim, Yousif Al-Dunainawi, Ariffin Samsuri</i>	681-686

Application of Support Vector Machines and Two Dimensional Discrete Cosine Transform in Speech Automatic Recognition <i>Authors: Gracieth Cavalcanti Batista, Washington Luis Santos Silva</i>	687-691
Adaptive Fuzzy Influence Function for Cultural Algorithm <i>Authors: Vahid Seydi</i>	692-697
Initiations of Chaotic Regimes of Attitude Dynamics of Multi-Spin Spacecraft and Gyrostat-Satellites Basing on Multiscroll Strange Chaotic Attractors <i>Authors: Anton V. Doroshin</i>	698-704
Rule-based Monitoring and Error Detecting for Converged Telecommunication Processes <i>Authors: Armando Ordóñez, Luis Eraso, Paolo Falcarin</i>	705-713
Robust Visual Tracking via Binocular Multi-Task Multi-View Joint Sparse Representation <i>Authors: Ziang Ma, Zhiyu Xiang</i>	714-722
Hidden Markov Models for Churn Prediction <i>Authors: Pierangelo Rothenbuehler, Julian Runge, Florent Garcin, Boi Faltings</i>	723-730
Effect of Influential Users on Recommendation <i>Authors: Eseosa Oshodin, Francisco Chiclana</i>	731-732
Computational Modelling of Personal Pronouns for English to Yorùbá Machine Translation System <i>Authors: Eludiora Safiriyu I., Awoniyi Akindeji O., Azeez Isau O.</i>	733-741

IMAGE PROCESSING

Automatic Detection of the Pulmonary Nodules from CT Images <i>Authors: Omnia Elsayed, Khaled Mahar, Mohamed Kholief, Hatem A. Khater</i>	742-746
A Vision based System for Traffic Lights Recognition <i>Authors: Mehdi Salarian, Andrea Manavella</i>	747-753
An Improved Reduced Candidate Modes Approach for HEVC Intra Prediction <i>Authors: Kanayah Saurty, Pierre Clarel Catherine, K. M. S. Soyjaudah</i>	754-760
Research of Neighborhood Searching Fractal Image Coding Algorithm based on Ant Colony Optimization <i>Authors: Li Lou, Yong Li</i>	761-764
A Hybrid Generative/Discriminative Model based Object Tracking Primary Exploration <i>Authors: Yehong Chen, Pil Seong Park</i>	765-772
Images Segmentation based on Interval Type-2 Fuzzy C-Means <i>Authors: ASSAS Ouarda</i>	773-781
A Multi-Instance Multi-Label Scene Classification Method based on Multi-Kernel Fusion <i>Authors: CHEN Tong-tong, LIU Chan-juan, ZOU Hai-lin, ZHOU Shu-sen, LIU Ying, DING Xin-miao</i>	782-787
Face Recognition using Gabor Wavelet and Non-Negative Matrix Factorization <i>Authors: Fredy Purnomo, Derwin Suhartono, Muhsin Shodiq, Albert Susanto, Steven Raharja, Ricky Wijaya Kurniawan</i>	788-792
Regioned Downsample for ANN Image Classification <i>Authors: Keith A Greenhow, Colin G Johnson</i>	793-797
Neuromorphic Visual Information Processing for Vulnerable Road User Detection and Driver Monitoring <i>Authors: W. S. Han, I. S. Han</i>	798-803
Performance Evaluation of Different Support Vector Machine Kernels for Face Emotion Recognition <i>Authors: Ibrahim A. Adeyanju, Elijah O. Omidiora, Omobolaji F. Oyedokun</i>	804-806
Supporting Video Conference Communication Using a Vision-based Human Facial Synthesis Approach <i>Authors: Mhretab Kidane Teweke, Shahrouz Yousefi, Marcelo Milrad</i>	807-812
New Method of Tumor Extraction using a Histogram Study <i>Authors: SANDABAD Sara, BENBA Achraf, SAYD TAHRI Yassine, HAMMOUCH Ahmed</i>	813-817
Pursuit Position Gain, Fixation Duration and Saccadic Gain with Music Intervention in Eye Motion Tracking <i>Authors: Valerie Ross, Saiful Azlan Rosli, Ahmad Mursyid Ahmad Rudin, Noor Halilah Buari, Azmir Ahmad, Ai Hong Chen</i>	818-821

An Evaluation of Image Registration Methods for Chest Radiographs <i>Authors: Muharrem Engin, Hasan Oğul, Muhteşem Ağıldere, Emre Sümer</i>	822-827
User Identification using Wavelet Features of Hand Geometry Graph <i>Authors: Shanmukhappa A. Angadi, Sanjeevakumar M. Hatture</i>	828-835
Terminating CU Splitting in HEVC Intra Prediction using the Hadamard Absolute Difference (HAD) Cost <i>Authors: Kanayah Saurty, Pierre Clarel Catherine, K. M. S. Soyjaudah</i>	836-841

AGENTS AND MULTI-AGENT SYSTEMS

- Cognitive Modeling of a General-Purpose Creative System (Creagene Model) 842-846
Authors: Shahla Tabatabai, Mehrnoush Shamsfard
- Recursive Decomposition of Numeric Goals, Exemplified with Automated Construction Agents in 3D Minecraft Worlds 847-854
Authors: Shujing Ke, Ben Goertzel, Pieter Spronck, Alex van der Peet, Oliver Watkins, Gino Yu
- Agent based Modeling of Development of Russian Federation Higher Education System 855-856
Authors: Yulia A. Morozova
- Agent based Modeling of Pension System Development Processes 857-862
Authors: Natalia N. Lychkina, Yulia A. Morozova
- A Distributed Approach for Multi-Agent Plan Monitoring and Diagnosis 863-870
Authors: Belkacem Athamena, Zina Houhamdi
- WSN Intelligent Communication based on Khalimsky Theory using Multi-Agent Systems 871-876
Authors: Mahmoud Mezghani, Pr. Mahmoud Abdellaoui
- A Component-based C++ Framework for Developing BDI Agents 877-883
Authors: Jack Betts, Berndt Müller
- An Extension of the Use Case Diagram to Model Context-Aware Applications 884-888
Authors: Ahmed Al-shuhai, François Siewe

INTELLIGENT SYSTEMS

Modelling and Prediction of Stock Price Dynamics using System Identification Methodology based on a Popularly used Technique Analysis Data <i>Authors: H. Chen, P. Dyke</i>	889-893
A Novel and Efficient Hybrid Least Mean Square (HLMS) Adaptive Algorithm for System Identification <i>Authors: Rashmi Sinha, Arvind Choubey, Santosh Kumar Mahto</i>	894-897
Relation Mining using Cross Correlation of Multi Domain Social Networks <i>Authors: Fozia Noor, Prof. Dr. Asadullah Shah, Prof. Dr. Shoab Ahmad Khan</i>	898-903
Enhancing Semantic Interoperability in Digital Library by Applying Intelligent Techniques <i>Authors: Antonio Martín, Carlos León, Alejandro López</i>	904-911
WISE Technology: A Scientific Information System for Astronomy and Beyond <i>Authors: A. Belikov, D. Boxhoorn, K. Begeman, E. Valentijn, W.-J. Vriend, O.R. Williams</i>	912-920
Place Recognition using Kernel Visual Keyword Descriptors <i>Authors: Abbas M. Ali, Tarik A. Rashid</i>	921-926
Semiotic Impacts of the Supreme Court's Mayo/Biosig/Alice Decisions on Legally Analyzing Emerging Technology Claimed Inventions (ET CIs) <i>Authors: Sigrum Schindler</i>	927-936
Learning of Parameters of Intuitionistic Statement Networks <i>Authors: Tomasz Rogala</i>	937-943
Robust Algorithm of Multi-Source Data Analysis for Evaluation of Social Vulnerability in Risk Assessment Tasks <i>Authors: Yuriy V. Kostyuchenko, Dmytro Movchan, Ivan Kopachevsky, Yulia Bilous</i>	944-949
4G Wimax Network for Smart-Sidi Bouzid Area Communication <i>Authors: FATNASSI Mariem, Pr. ABDELLAOUI Mahmoud</i>	950-956
Context-Dependent Incremental Learning of Good Maximally Redundant Tests <i>Authors: Xenia Naidenova, Vladimir Parkhomenko, Konstantin Shvetsov</i>	957-962
American Dialect Identification using Phonotactic and Prosodic Features <i>Authors: A. Etman, A. A. (Louis) Beex</i>	963-970
A Markov Chain Model for Securing Link Layer in Mobile Ad Hoc Networks <i>Authors: Mnar Saeed Alnaghesh, Fayez Gebali</i>	971-975
Exploring the Design of a Social Learning Platform for Supporting Users' e-Teaching Skill Development <i>Authors: Haiming Liu, Elizabeth J Hartnett</i>	976-977

SECURITY

Self-Stabilizing Clustering Algorithm in Mobile Ad Hoc Networks <i>Authors: Mansouri Ali, Bouhlel Mohamed Salim</i>	978-983
Analysis of Brute Force Attack using TG–Dataset <i>Authors: Tanvi Gautam, Anurag Jain</i>	984-988
An Ensemble Framework of Anomaly Detection using Hybridized Feature Selection Approach (HFSA) <i>Authors: Nutan Farah Haq, Abdur Rahman Onik, Faisal Muhammad Shah</i>	989-995
Detecting Changes in Context using Time Series Analysis of Social Network <i>Authors: Kajal Nusratullah, Prof. Dr. Shoab Ahmad Khan, Prof. Dr. Asadullah Shah, Wasi Haider Butt</i>	996-1001
Taxonomy of Honeynet Solutions <i>Authors: Wenjun Fan, Zhihui Du, David Fernández</i>	1002-1009
Host Intrusion Detection using System Call Argument-based Clustering Combined with Bayesian Classification <i>Authors: Oualid Koucham, Tajjeeddine Rachidi, Nasser Assem</i>	1010-1016
AuRo-Rec: An Unsupervised and Robust Sybil Attack Defense in Online Recommender Systems <i>Authors: Giseop Noh, Hayoung Oh</i>	1017-1024
Computer Forensics–Digitized Science <i>Authors: Promila Bahadur, Divakar Yadav</i>	1025-1031
Support Vector Machines, Mel-Frequency Cepstral Coefficients and the Discrete Cosine Transform Applied on Voice based Biometric Authentication <i>Authors: Felipe Gomes Barbosa, Washington Luis Santos Silva</i>	1032-1039

Section 2: Poster Presentations

Contrast Adjustment Algorithm using Weighting Approximation for Stereo Imaging <i>Authors: Changwoo Ha, Wonjin Lee, Changryoul Choi, Kangjun Lee, Jechang Jeong</i>	1040-1044
Calculation of Velocity in Traffic Accidents: Development of Software for Forensic Physics Research <i>Authors: Waldiney Pedra Gurgel, Luiz Moreira Gomes, Fernanda Carla Lima Ferreira, Rodrigo do Monte Gester</i>	1045-1048
Transportation Noise Reduction Through Analysis and using Bone-Conduction Device <i>Authors: Hyung-Woo Park, Myung-Jin Bae</i>	1049-1050
Moving Sensors Concept for Distributed Diagnostics <i>Authors: Anton Ivaschenko, Anton Novikov, Daniil Kosov, Vitaliy Kuzmin</i>	1051-1053
A Pilot Study in Jeddah City of Nurses Perceptions of Electronic Medical Records <i>Authors: Afrah Almutairi, Professor Rachel Mc Crindle</i>	1054-1056
Anomalies in Link Mining based on Mutual Information <i>Authors: Zakea Idris Ali Il-Agure</i>	1057-1059