17th International Conference on
Intelligent Systems Design and Applications (ISDA'17)

17th International Conference on
Hybrid Intelligent Systems (HIS'17)

7th World Congress on
Information and Communication Technologies (WICT'17)

9th World Congress on
Nature and Biologically Inspired Computing (NaBIC'17)

Organized by

South Asian University, Delhi
December 14-16, 2017

Technical Programme

December 14, 2017 (Thursday)

09:00 -   : Registration

09:30 - 17:15: International Workshop on Computational Intelligence and Machine Learning (IWCIML 2017)

December 15, 2017 (Friday)

Time	Event
08:30 - 09:15	Registration
09:15 - 09:30	Inauguration
09:30 - 10:30	Plenary Talk I: *Optimization of modular granular neural networks using bio-inspired optimization algorithms with fuzzy parameter adaptation for human recognition* Patricia Melin, Tijuana Institute of Technology, Mexico
10:30 - 11:00	**Coffee break**
Parallel Technical Sessions

Room A: ISDA I
Chair: Frantisek Zboril

Time	Event
11:00 - 13:00	1: *Enhancing Job Opportunities in Rural India Through Constrained Cognitive Learning Process: Reforming Basic Education* Shivangi Nigam, Abhishek Bajpai and Bineet Gupta
	2: *UML2ADA for early verification of concurrency inside the UML2.0 atomic components* Taoufik Sakka Rouis, Mohamed Tahar Bhiri, Mourad Kmimech and Layth Sliman
	5: *A Novel Restart Strategy for Solving Complex Multi-Modal Optimization Problems using Real-Coded Genetic Algorithm* Amit Das and Dilip Pratihar
	12: *Computer Aided Recognition and Classification of Coats of Arms* Frantisek Vidensky and Frantisek Zboril
	20: *A Secure and Efficient Temporal features Based Framework for cloud using MapReduce* Srinivasa Rao P and Krishna Prasad E S N Ponnekanti
	29: *Interval Valued Feature Selection for Classification of Logo Images* D S Guru and N Vinay Kumar
	30: *An Hierarchical Framework for Classroom Events Classification* D S Guru, N Vinay Kumar, K N Mahalakshmi Gupta, S D Nandini, H N Rajini and G Namratha Urs

Room B: HIS I
Chair: Indrajit Saha
Co-Chair: Pramod Kumar Singh

	5: *Semi-Supervised Learning with the Integration of Fuzzy Clustering and Artificial Neural Network* Indrajit Saha and Nivriti Debnath
	10: *A Fast Satellite Image Super-Resolution Technique using Multicore*

11:00 - 13:00	*Processing* Helal Uddin Mullah and Bhabesh Deka
	17: *GA Optimized ANN for Context Aware Recommender System* Akshi Kumar, Nitin Sachdeva and Archit Garg
	18: *Person vs Non-Person Classification Of Twitter Handle* Himanshu Budania and Pramod Kumar Singh
	19: *Detection of Insulting Comments in Online Discussion* Anusha Gupta and Pramod Kumar Singh
	21: *A Model for Multi-processor task scheduling problem using Quantum Genetic Algorithm* Rashika Bangroo, Reya Sharma and Neetesh Kumar
	22: *Improving Modified Differential Evolution for Fuzzy Clustering* Jnanendra Prasad Sarkar, Indrajit Saha, Anasua Sarkar and Ujjwal Maulik
13:00 - 14:00	Lunch

Parallel Technical Sessions

Room A: ISDA II
Chair: Andrè G. Santos
Co-Chair: Gagandeep Kaur

14:00 - 15:30	36: *A Memetic Algorithm for the Network Construction Problem with Due Dates* Jonatas B. C. Chagas, Andrè G. Santos and Marcone J. F. Souza
	38: *Content-based Classification Approach for Video-Spam Identification* Palak Agarwal, Mahak Sharma and Gagandeep Kaur
	40: *Kinematic Analysis and Simulation of a 6 DOF Robot in a Web-based Platform Using CAD File Import* Ujjal Dey and Cheruvu Siva Kumar
	41: *Large Scale Deep Network Architecture of CNN for Unconstraint Visual Activity Analytics* Naresh Kumar
	43: *Computing Theory Prime Implicates in Modal Logic* Manoj Raut, Tushar Kokane and Rishabh Agarwal
15:30 – 15:50	**Coffee break**
15:50 – 17:20	44: *Fault Tolerance in Real-Time Systems: A Review* Egemen Ertugrul and Ozgur Koray Sahingoz
	46: *Gauss-Newton Representation Based Algorithm for Magnetic Resonance Brain Image Classification* Lingraj Dora, Sanjay Agrawal and Rutuparna Panda
	47: *Evaluating Different Similarity Measures for the Automatic Biomedical Text Summarization* Mozhgan Nasr Azadani and Nasser Ghadiri
	52: *Ensemble of feature selection methods for text classification: An analytical study* D S Guru, Mahamad Suhil, S K Pavithra and G R Priya

Room B: HIS II and WICT I
Chair: Jalal Hamad Ameen
Co-Chair: Milan Tuba

	HIS II
	11: *Use of Cellular Automata to predict deforestation in Queretaro* C. Alberto Ochoa-Zezatti and Marìa de Lourdes Yolanda Margain Fuentes
	26: *Hybridized Elephant Herding Optimization Algorithm for Constrained Problems* Ivana Strumberger, Nebojsa Bacanin and Milan Tuba
14:00 - 15:30	27: *Drone Placement for Optimal Coverage by Brain Storm Optimization Algorithm* Eva Tuba, Romana Capor-Hrosik, Adis Alihodzic and Milan Tuba
	29: *Manufacturing Services Classification in a Decentralized Supply Chain using Text Mining* Md. Akhtar, Vijay Kumar, M. L. R. Varela, G. D. Putnik, A. M. Madureira and Ajith Abraham
	36: *Perturbation Based Efficient Crow Search Optimized FLANN for System Identification: A Novel Approach* Bighnaraj Naik, Debasmita Mishra, Janmenjoy Nayak, Danilo Pelusi and Ajith Abraham
15:30 – 15:50	Coffee break
	WICT I
	11: *Design and Simulation of Multi-Band M-Shaped Vivaldi Antenna* Jalal Hamad Ameen
	15: *Evaluating the efficiency of Higher Secondary Education State Boards in India: A DEA-ANN approach* Natthan Singh and Millie Pant
15:50 – 17:20	19: *Simulation Design of Aircraft CFD Based on High Performance Parallel Computation* Yinfen Xie
	20: *Determining the optimum release policy through Differential Evolution: A case study of Mula irrigation project* Bilal, Millie Pant and Deepti Rani
	26: *Online Academic Social Networking Sites (ASNSs) Selection through AHP for Placement of Advertisement of E-learning Website* Meenu Singh, Millie Pant, Arshia Kaul and P.C. Jha

December 16, 2017 (Saturday)

Time	Event
09:30 - 10:30	Plenary Talk II: Alexander Gelbukh, Instituto Politécnico Nacional, Mexico
10:30 - 11:00	Coffee break
Parallel Technical Sessions	
Room A: ISDA III Chair: Gagandeep Kaur Co-Chair: Manoj Kumar Raut	
	53: *Correlation Scaled Principal Component Regression*

	Krishna Kumar Singh, Amit Patel and Chiranjeevi Sadu
11:00 - 13:00	57: *Predictive analysis of alertness related features for driver drowsiness detection* Sachin Kumar, Anushtha Kalia and Arjun Sharma
	60: *Optimum Feature Selection Using Firefly Algorithm for Keystroke Dynamics* Akila Muthuramalingam, Jenifa Gnanamanickam and Ramzan Muhammad
	62: *Multi-UAV Path Planning with Multi Colony Ant Optimization* Ugur Cekmez, Mustafa Ozsiginan and Ozgur Koray Sahingoz
	66: *A Deep Convolution Neural Network based Model for Enhancing Text Video Frames for Detection* Sunil C, Chethan H K, Raghunandan K S and Hemantha Kumar G
	69: *Image Sentiment Analysis using Convolutional Neural Network* Akshi Kumar and Arunima Jaiswal
	71: *Cluster based approaches for keyframe selection in natural flower videos* D S Guru, Jyothi V K and Y H Sharath Kumar

Room B: WICT II
Chair: Leisa Armstrong
Co-Chairs: Amiya Tripathy and Rajni Jain

11:00 - 13:00	13: *Monitoring chili crop and Gray mould disease analysis through wireless sensor network* Sana Shaikh, Amiya Kumar Tripathy, Gurleen Gill, Anjali Gupta and Riya Hegde
	14: *Intelligent AgriTrade to Abet Indian Farming* Kalpita Wagaskar and Amiya Kumar Tripathy
	22: *Characterising the impact of drought on jowar (Sorghum spp) crop yield using Bayesian networks* Shubhangi Wankhede and Leisa Armstrong
	23: *Linear programming based optimum crop mix for crop cultivation in Assam state of India* Rajni Jain,Kingsly Immaneulraj,Lungkudailiu Malangmei,Nivedita Deka, Raju S. S., S. K. Srivastava, J. P. Hazarika, Amrit Pal Kaur and Jaspal Singh
	30: *Indian Mobile Agricultural Services Using Big Data and Internet of Things (IoT)* Pallavie Chatuphale and Leisa Armstrong
13:00 - 14:00	Lunch

Parallel Technical Sessions

Room A: ISDA IV
Chair: Ozgur Koray Sahingoz

14:00 - 15:30	74: *Improved Symbol Segmentation for TELUGU Optical Character Recognition* Sukumar Burra, Amit Patel, Chakravarthy Bhagvati and Atul Negi
	78: *Hardware Trojan: Malware detection using Reverse-engineering and SVM*

	Girishma Jain, Sandeep Raghuwanshi and Gagan Vishwakarma
	79: *Obtaining word embedding from existing classification model* Martin Sustek and Frantisek V. Zboril
	80: *A Robust Static Sign Language Recognition System Based on Hand Key Points Estimation* Pengfei Sun, Feng Chen, Guijin Wang, Jinsheng Ren and Jianwu Dong
	82: *Modeling of a System for fECG Extraction from abdECG* Rolant Gini J, Deepan Chakravarthy P, K I Ramachandran and Pooja Anand
15:30 – 15:50	**Coffee break**
15:50 – 17:20	84: *Improving upon package and food delivery by Semi-autonomous Tag-along Vehicles* Vaclav Uhlir, Frantisek Zboril and Jaroslav Rozman
	85: *A Novel Multi-Party Key Exchange Protocol* Swapnil Paliwal and Aswani Kumar Cherukuri
	86: *NLP based Phishing Attack Detection from URLs* Ebubekir Buber, Ozgur Koray Sahingoz and Banu Diri
	92: *Detection and localization of duplicated frames in Doctored Video* Vivek Singh, Pavan Chakroborty and Ramesh Chandra Tripathi
	129: *Blind Write Protocol* Khairul Anshar, Nanna Suryana and Noraswaliza Binti Abdullah

Room B: WICT III, NaBIC I and ISDA V
Chair: Tribeni Prasad Banerjee
Co-Chair: Sangeeta Mittal

14:00 - 15:30	**WICT III**
	31: *A Study of the Privacy Attitudes of Users of Social Network(ing) Sites and their Expectations from Law in India* Sandeep Mittal and Priyanka Sharma
	12: *Performance Evaluation of Openflow SDN Controllers* Sangeeta Mittal
	29: *Fingerprint based gender identification using digital image processing and artificial neural network* Mahendra Kanojia, Niketa Gandhi, Leisa Armstrong and Chetna Suthar
	NaBIC I
	1: *Implementing a Survival Supplies Model on Oil Platform using Brain Storm Optimization Algorithm* C. Alberto Ochoa-Zezatti and Marìa De Lourdes Margain Fuentes
	7: *Genetic Algorithm to generate music compositions: A case study with tabla* Subodh Deolekar, Ninad Godambe and Siby Abraham
15:30 – 15:50	**Coffee break**
	ISDA V
	105: *An Effective Heuristic Algorithm for the Double Vehicle Routing Problem with Multiple Stack and Heterogeneous Demand* Jonatas B. C. Chagas and André G. Santos
	107: *Named Entity Recognition from Gujarati Text using Rule Based Approach* Dikshan Shah and Harshad Bhadka

15:50 – 17:20	111: *Mining Communities in Directed Networks: A Game Theoretic Approach* Annapurna Jonnalagadda and Lakshmanan Kuppusamy
	120: *A Support Vector Machine based Approach to Real Time Fault Signal Classification for High Speed BLDC Motor* Tribeni Prasad Banerjee and Ajith Abraham
	122: *Automatic identification of malaria using image processing and artificial neural network* Mahendra Kanojia, Niketa Gandhi, Leisa Armstrong and Pranali Pednekar
17:30	**Closing ceremony**

Virtual presentations

December 15-16, 2017
10:30 - 17:00

List of papers for Virtual Presentations

ISDA 2017 Virtual Presentations
4: *A new approach for the diagnosis of Parkinson's disease using a similarity feature extractor* João W. M. Souza, Jefferson S. Almeida and Pedro Pedrosa Rebouaas Filho
8: *Evaluating SPL Quality with metrics* Jihen Ma,zoun, Nadia Bouassida and Hanene Ben-Abdallah
10: *Using sentence similarity measure for plagiarism detection of Arabic documents* Wafa Wali, Bilel Gargouri and Abdelmajid Ben Hamadou
14: *Mining Gene Expression Data: Patterns Extraction for Gene Regulatory Networks* Manel Gouider, Ines Hamdi and Henda Ben Ghezala
15: *Exploring Location and Ranking for Academic Venue Recommendation* Nour Mhirsi and Imen Boukhris
17: *Designing compound MAPE patterns for self-adaptive systems* Marwa Hachicha, Riadh Ben Halima and Ahmed Hadj Kacem
18: *CRF+LG: A Hybrid Approach for the Portuguese Named Entity Recognition* Juliana Pirovani and Elias Oliveira
23: *A comparison of machine learning methods to identify broken bar failures in induction motors using statistical moments* Navar De Medeiros Mendonça Nascimento, Cláudio Marques De Sá Medeiros and Pedro Pedrosa Rebouças Filho
26: *Canonical Correlation-based Feature Fusion Approach for Scene Classification* Arunnehru J, Yashwanth A and Shammer Shaik
27: *A Mixed-Integer Linear Programming Model and a Simulated Annealing Algorithm for the Long-term Preventive Maintenance Scheduling Problem* Roberto Aquino, Jonatas Chagas and Marcone Souza
31: *Hand gesture recognition system based on Local Binary Pattern approach for mobile devices* Houssem Lahiani, Monji Kherallah and Mahmoud Neji
33: *An Efficient Real-Time Approach For Detection of Parkinson's Disease* Joyjit Chatterjee, Ayush Saxena, Garima Vyas and Anu Mehra
35: *Dual Image Encryption Technique: Using Logistic Map and Noise* Muskan Kalra, Hemant Kumar Dua and Reena Singh
37: *Incremental Real Time Support Vector Machines* Fahmi Ben Rejab and Nouira Kaouther
42: *An Automated Support Tool to Compute State Redundancy Semantic Metric* Dalila Amara, Ezzeddine Fatnassi and Latifa Ben Arfa Rabai
49: *Fingerprint Image Enhancement Using Steerable Filter in Wavelet Domain* Kathirvalavakumar Thangairulappan and Jeyalakshmi K.S
51: *Privacy Preserving Hu's Moments in Encrypted Domain* Preethi G and Aswani Kumar Cherukuri
55: *Automated detection of Diabetic Retinopathy using weighted Support Vector Machines* Soumyadeep Bhattacharjee and Avik Banerjee
58: *Association Rules Transformation for Knowledge Integration and Warehousing*

Rim Ayadi, Yasser Hachaichi and Jamel Feki
59: *Abnormal high-level event recognition in parking lot* Najla Bouarada Ghrab, Rania Rebai Boukhriss, Emna Fendri and Mohamed Hammami
63: *An efficient method for detecting fraudulent transactions using classification algorithms on an anonymized credit card data set* Sylvester Manlangit, Sami Azam, Bharanidharan Shanmugam, Krishnan Kannoorpatti, Mirjam Jonkman and Arasu Balasubramaniam
67: *A novel approach for steganography app in android OS* Kushal Gurung, Sami Azam, Bharanidharan Shanmugam, Krishnan Kannoorpatti, Mirjam Jonkman and Arasu Balasubramaniam
68: *Exploring Human Movement Behaviour based on Mobility Association Rule Mining of Trajectory Traces* Shreya Ghosh and Soumya Ghosh
73: *From Crisp to Soft Possibilistic and Rough Meta-clustering of Retail Datasets* Asma Ammar and Zied Elouedi
76: *Semantic Attribute Classification Related To Gait* Imen Chtourou, Emna Fendri and Mohamed Hammami
77: *Classification of Dengue Gene Expression Using Entropy-based Feature Selection and Pruning on Neural Network* Kathirvalavakumar Thangairulappan and Pandiselvam Pandiyarajan
81: *Multiobjective Genetic Algorithm for Minimum Weight Minimum Connected Dominating Set* Rengaswamy Dinesh, Subham Datta and Subramanian Ramalingam
83: *Supervised Learning Model for Combating Cyberbullying: Indonesian Capital City 2017 Governor Election Case* Putri Sanggabuana Setiawan, Muhammad Ikhwan Jambak and Muhammad Ihsan Jambak
87: *Hand pose estimation system based on a cascade approach for mobile devices* Houssem Lahiani, Monji Kherallah and Mahmoud Neji
88: *HMI Fuzzy Assessment of Complex Systems Usability* Ilhem Kallel, Mohamed Jouili and Houcine Ezzedine
90: *A novel hybrid GA for the assignment of jobs to machines in a complex hybrid flow shop problem* Houda Harbaoui, Soulef Khalfallah and Odile Bellenguez-Morineau
91: *Selecting Relevant Educational Attributes for Predicting Students' Academic Performance* Abir Abid, Ilhem Kallel, Ignacio J Blanco and Mounir Ben Ayed
94: *A Novel Approach for Approximate Spatio-Textual Skyline Queries* Seyyed Hamid Aboutorabi, Nasser Ghadiri and Mohammad Khodizadeh Nahari
95: *SMI-based opinion analysis of cloud services from online reviews* Emna Ben-Abdallah, Khouloud Boukadi and Mohamed Hammami
96: *Heuristics for the hybrid flow shop scheduling problem with parallel machines at the first stage and two dedicated machines at the second stage* Zouhour Nabli, Soulef Khalfallah and Ouajdi Korbaa
97: *Breast Density Classification for Cancer Detection using DCT-PCA Feature Extraction and Classifier Ensemble* Md Sarwar Morshedul Haque, Md Rafiul Hassan, G Binmakhashen, A Owaidh and Joarder Kamruzzaman
99: *Scheduling analysis and correction of periodic Real Time Systems with tasks migration* Faten Mrabet, Walid Karamti and Adel Mahfoudhi
100: *Generating semantic and logic meaning representations when analyzing the Arabic natural questions* Wided Bakari, Patrice Bellot and Mahmoud Neji
101: *An Arabic question-answering system combining a se-mantic and logical representation of texts* Mabrouka Ben-Sghaier, Wided Bakari and Mahmoud Neji
102: *Algorithms for Finding Maximal and Maximum Cliques: A Survey*

Faten Fakhfakh, Mohamed Tounsi, Mohamed Mosbah, and Ahmed Hadj Kacem
103: *K4BPMN Modeler: An extension of BPMN 2 Modeler with the Knowledge Dimension based on core ontologies*   Molka Keskes, Mariam Ben Hassen and Mohamed Turki
104: *Exploring the integration of Business Process with Nosql databases in the context of BPM*   Asma Hassani and Sonia Ayachi Ghannouchi
108: *A Meta-Modeling Approach to create a Multidimensional Business Knowledge Model based on BPMN*   Sonya Ouali, Mohamed Mhiri and Faiez Gargouri
109: *Toward a MapReduce-based K-means Method for Multi-Dimensional Time Serial Data Clustering*   Yongzheng Lin, Kun Ma, Runyuan Sun and Ajith Abraham
126: *Comparative Analysis of Adaptive Filters for Predicting Wind-Power Generation (SLMS, NLMS, SGDLMS, WLMS, RLMS)*   Ashima Arora and Rajesh Wadhvani
130: *Ontology Visualization: An Overview*   Nassira Achich, Bassem Bouaziz, Alsayed Algergawi and Faiez Gargouri
132: *A Contextual Information Retrieval System Based on Non-Negative Matrix Factorization Technique and Semantic Relationships between Terms*   Nesrine Ksentini, Mohamed Tmar and Faiez Gargouri
HIS 2017 Virtual Presentations
3: *Neural Tree for Estimating the Uniaxial Compressive Strength of Rock Materials*   Varun Kumar Ojha and Deepak Amban Mishra
4: *Fault Tolerant Multiple Synchronized Parallel Load Balancing in Cloud*   Sreelakshmi Suresh and Remesh Babu Raman
7: *GMM-KNN: A Method for Processing Continuous k-NN queries Based on The Gaussian Mixture Model*   Ziqiang Yu, Mincai Lai and Lin Wang
9: *Edge Detection for Cement Images Based on Interactive Genetic Algorithm*   Guangyue Gao, Lin Wang, Bo Yang, Liangliang Zhang, Fengyang Sun, Ajith Abraham and Shuangrong Liu
14: *A Classification algorithm for Assessing the Quality Criteria for Business Process Models*   Fouzia Kahloun and Sonia Ayachi Channouchi
15: *Multilevel Image Thresholding Established On Fuzzy Entropy Using Differential Evolution*   Abhishek Dixit, Sushil Kumar, Millie Pant and Rohit Bansal
25: *A recent brief survey for the Multi Depot Heterogenous Vehicle Routing Problem with Time Windows*   Bochra Rabbouch and Rafaa Mraihi
28: *Combining Fragmentation and Encryption to ensure Big Data at rest Security*   Houyem Heni, Faiez Gargouri and Marwa Ben Abdallah
32: *Secured Biometric Template Matching by using Linear Discriminant Analysis*   Surbhi Vijh and Deepak Gaur
37: *Neurodegenerative Diseases Detection through Voice Analysis*   Diogo Braga, Ana Madureira, Luis Coelho and Ajith Abraham
39: *Multi Document Summarization Using Neuro-Fuzzy System*   Muhammad Azhari Ahmad Kamil, Yogan Jaya Kumar, Goh Ong Sing, Ngo Hea Choon and Aditya Pradana
40: *A Comparison of Butterworth Noise Filteration Frequency for Isotonic Muscle Fatigue Analysis*   Nur Shidah Ahmad Sharawardi, Yun-Huoy Choo, Shin-Horng Chong and Nur Ikhwan Mohamad
41: *Recognizing Music Features Pattern Using Modified Negative Selection Algorithm for Songs Genre Classification*   Noor Azilah Muda, Azah Kamilah Muda and Choo Yun Huoy

42: *Preparation of ATS Drugs 3D Molecular Structure for 3D Moment Invariants-based Molecular Descriptors* Satrya Fajri Pratama, Azah Kamilah Muda, Yun-Huoy Choo and Ajith Abraham
43: *Synchronization Technique via Raspbery Pi as Middleware for Hospital Information System* Mohd Hariz Naim, Mohd Khanapi Abd Ghani, Abd Samad Hasan Basari, Burhanuddin Mohd Aboobaider, Lizawati Salahuddin, Wan Norhisyam Abd Rashid and Jun Kai Gan
44: *Validation Guideline for Small Scale Dataset Classification Result in Medical Domain* Zeratul Izzah Mohd Yusoh and Kim Hwe Ee
46: *A Grey Wolf Optimization Algorithm for Modular Granular Neural Networks Applied to Iris Recognition* Patricia Melin and Daniela Sanchez
48: *Fraudulent Website Detection Using Bag of Words and Supervised Machine Learning* Mahdi Maktabar, Anazida Zainal, Mohd Aizaini Maarof and Mod Nizam Kassim
49: *Wavelet Convolutional Neural Networks for handwritten digits recognition* Chiraz Ben Chaabane, Dorra Mellouli, Tarek M. Hamdani, Adel M. Alimi and Ajith Abraham
WICT Virtual Presentations
17: *Design of Millimeter-wave Microstrip Antenna Array for 5G Communications? A Comparative Study* Saswati Ghosh and Debarati Sen
24: *eDWaaS: A Scalable Educational Data Warehouse as a Service* Anupam Khan, Sourav Ghosh and Soumya K. Ghosh
NaBIC Virtual Presentations
2: *Encryption based on Neural Cryptography* Sayantica Pattanayak and Simone A Ludwig
8: *Navigation Control of Mobile Robot in Unknown Environments using Adaptive Cuckoo Search Algorithm* Prases Kumar Mohanty, Shubhasri Kundu and Harshal Dewang