

18th International Conference
Intelligent Systems Design and Applications
(ISDA 2018)

&

10th World Congress
Nature and Biologically Inspired Computing
(NaBIC 2018)

December 06-08, 2018
VIT University, Vellore, India

Final Technical Program

Organized by



ISDA - NaBIC 2018 - Welcome message

Welcome to the 18th International Conference on Intelligent Systems Design and Applications (ISDA) and 10th World Congress on Nature and Biologically Inspired Computing (NaBIC), which is held in VIT University, India, during December 06-08, 2018. ISDA - NaBIC 2018 is jointly organized by the VIT University, India and Machine Intelligence Research Labs (MIR Labs), USA. ISDA - NaBIC 2018 brings together researchers, engineers, developers, and practitioners from academia and industry working in all interdisciplinary areas of intelligent systems, nature inspired computing, big data analytics, real world applications and to exchange and cross-fertilize their ideas. The themes of the contributions and scientific sessions range from theories to applications, reflecting a wide spectrum of the coverage of intelligent systems and computational intelligence areas. ISDA 2018 received submissions from 30 countries and each paper was reviewed by at least 5 reviewers in a standard peer-review process. Based on the recommendation by 5 independent referees, finally about 120 papers will be presented during the conference (acceptance rate of 48 % including virtual presentations). NaBIC 2018 received submissions from 11 countries and each paper was reviewed by at least 5 reviewers in a standard peer-review process. Based on the recommendation by 5 independent referees, finally about 15 papers will be presented during the conference (acceptance rate of 53 % including virtual presentations). Conference proceedings will be published by Springer Verlag, Advances in Intelligent Systems and Computing Series, which is now indexed by ISI Proceedings, DBLP, Ulrich's, EI-Compendex, SCOPUS, Zentralblatt Math, MetaPress, Springerlink etc.

Many people have collaborated and worked hard to produce the successful ISDA - NaBIC 2018 conference. First, we would like to thank all the authors for submitting their papers to the conference, for their presentations and discussions during the conference. Our thanks go to Program Committee members and reviewers, who carried out the most difficult work by carefully evaluating the submitted papers. Our special thanks to Raija Halonen, University of Oulu, Finland; Junzo Watada, Universiti Teknologi Petronas, Malaysia and Nelishia Pillay, University of Pretoria, South Africa for the exciting plenary talks.

We express our sincere thanks to the session chairs and organizing committee chairs for helping us to formulate a rich technical program.

General Chairs

Ajith Abraham, Machine Intelligence Research Labs (MIR Labs), USA

Aswani Kumar Cherukuri, Vellore Institute of Technology, India

Program Chairs

Patricia Melin, Tijuana Institute of Technology, Mexico

Emilio Corchado, University of Salamanca, Spain

Florin Popentiu Vladicescu, University "Politehnica" in Bucharest, Romania

Ana Maria Madureira, Instituto Superior de Engenharia do Porto, Portugal

Plenary Speakers of ISDA – NaBIC 2018

Title: Empowering with ICT



Raija Halonen, University of Oulu, Finland

Abstract: Nowadays, inadequate management of amenable and preventable chronic illnesses for the ageing working population causes immense loss of productive life years for the industry (3.4 million productive life years in Europe), significant economic burden on the state budgets globally and poor health life of the patients. Moreover, the European level economic impact of mental problem is calculated as 470 billion euros annually and as 1700 billion euros globally. Only minority of people suffering from mental issues seek professional help for themselves even if they would benefit from such help – for example in Finland, only 34 % of people with major depression look for professional treatment, and similar results in other European countries and the US disclose that the problem is global. With the aging population, the number of individuals living with disabilities is increasing.

On the other hand, state-of-the-art ICT including sensor-based wearables has shown benefits in monitoring health, and the use of technological development in the form of miniature biosensing devices, smart textiles, microelectronics, and wireless communication has brought new possibilities to reduce healthcare cost. Recent studies also show that people are motivated to use wearable sensors to make their lives easier and to support them in managing their diseases. In the current talk the focus is on the possibilities to empower individuals who benefit from the ICT-based supportive actions.

Biography: Raija Halonen acts as an Adjunct Professor in the Faculty of Information Technology and Electrical Engineering at the University of Oulu, Finland. She is a member of the Research Unit of Empirical Software Engineering in Software, Systems and Services (M3S). Before joining the academic world Dr. Raija Halonen has worked on information systems both in the public sector and in private IT enterprises. After receiving her PhD she acted as a Postdoctoral Fellow in the Centre of Innovation & Structural Change, National University of Ireland Galway where she continues as a Research Associate while working in Finland. Lately her main research interests have been in ICT and social inclusion and ICT-enabled process improvement.

Title: Biologically Inspired Computation to Solve NP-hard Problems



Junzo Watada, Universiti Teknologi Petronas, Malaysia

Abstract: Since DNA-based molecular computation was pioneered, it has provided significant ideas and concepts that enable us to express new types of molecular computational algorithms, methods, and computing paradigms. In this talk, we show how to implement new types of molecular engineering experimental methods. While implementing these experimental methods, we propose several integrations of DNA-based algorithms (each of which includes its own molecular engineering experimentation for each purpose), advanced mathematical information engineering, and totally different field methodologies, meaning that algorithms have been integrated with other field methods and techniques for the first time. These multiplied integrated algorithms are associated with various forms in different engineering and science fields.

In this talk, the computational model that makes use of DNA molecular structures and characteristics at the nanometric level is referred to as nanobiocomputation, reflecting our focus on the nanometric and molecular engineering mechanisms associated with various areas of science and engineering. Four different interdisciplinary DNA-based algorithms are designed to develop nanobiocomputation and discussed in this dissertation; each design was based on theoretical concepts of nanometric molecules and molecular experimental data.

Biography: **Junzo Watada** received his B.Sc. and M.Sc. degrees in electrical engineering from Osaka City University, Japan, and his Ph.D degree from Osaka Prefecture University, Japan. Currently, he is a professor, the Department of Computer and Information Sciences, Universiti Teknologi PETRONAS, and a Professor Emeritus at Waseda University. He received the Henri Coanda Medal Award from Inventico in Romania in 2002. He is a Life Fellow of the Japan Society for Fuzzy Theory and intelligent informatics (SOFT). Prof Watada is an IEEE senior member, Executive Chair of ISME, WCICME, a vice-president and life member, Forum of Interdisciplinary Mathematics. He commits himself in editing various international journals as a principal editor of several journals and an editorial board member of more than 30 journals. His professional interests include artificial neural network, human centric data mining, soft computing, tracking systems, knowledge engineering, financial engineering and management engineering.

Title: Automated Design of Intelligent Systems Using Hyper-Heuristics



Nelishia Pillay, University of Pretoria, South Africa

Abstract: The field of hyper-heuristics is growing rapidly since its inception. Hyper-heuristics work in the heuristic space rather than the solution space which is typical of optimization techniques and have proven to be effective at solving discrete combinatorial optimization problems. More recently the potential of using hyper-heuristics for the automated design of machine learning and search techniques has been established. As we move into the fourth industrial revolution the aim is to provide off-the-shelf machine learning tools that the non-expert can apply to a particular application area to solve the problem at hand. Furthermore, the design of intelligent systems is a very time consuming process, requiring many man hours. Hence, there has been a drive towards the automated design of intelligent systems employing machine learning and search techniques, leading to the emergence of fields such as autoML.

This talk will firstly provide an overview of hyper-heuristics. It will then examine the automated design of intelligent systems examining various design decisions ranging from parameter tuning to the induction of operators and the hybridization of intelligent techniques. The talk will highlight how the four types of hyper-heuristics, namely, selection constructive, selection perturbative, generation constructive and generation perturbative, can be used in the automated design of intelligent systems. The talk will conclude by looking at future research directions of hyper-heuristics for automated intelligent system design.

Biography: Nelishia Pillay is a Professor and Head of Department of Computer Science at the University of Pretoria. She is chair of the IEEE Task Force on Hyper-Heuristics with the Technical Committee of Intelligent Systems and Applications at IEEE Computational Intelligence Society and holds the Multichoice Joint-Chair in Machine Learning. Her research areas include hyper-heuristics, combinatorial optimization, genetic programming, genetic algorithms and other biologically-inspired methods. She is an active researcher in field of evolutionary algorithm hyper-heuristics and the application thereof to optimization problems and automated design. This is one of the focus areas of the NICOG (Nature-Inspired Computing Optimization) research group which she has established.

Technical Program Schedule

December 06, 2018

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09:30 - 10:00: Inauguration

10:00 - 10:45: Plenary 1 (Raija Halonen, University of Oulu, Finland)

10:45 - 11:05 Coffee break

11:05 - 01:00: Parallel Session: ISDA - 01

- 9 A Novel Design and Implementation of 8-bit and 16-bit Hybrid ALU
Suhas Shirol, Ramakrishna S and Rajashekar Shettar
- 11 A Thermal Imaging Based Classification of Affective States using Multiclass SVM
C M Naveen Kumar and Shivakumar G
- 13 AKCSS: An Asymmetric Key Cryptography Based on Secret Sharing in Mobile Ad Hoc Network
Preethi R
- 29 Simulation of Friction Stir Welding of Aluminium Alloy AA5052 ? Tailor Welded Blanks
M Arun Siddharth, Padmanaban Ramasamy and R. Vaira Vignesh
- 30 Information Systems Success: Extending the Theoretical Model from IT Business Value Perspective
Thanh D. Nguyen
- 345 A Novel Air Gesture Based Wheelchair Control and Home Automation System
Sudhir Rao Rupanagudi, Varsha G Bhat, Rupanagudi Nehitha, Jeevitha G. C., K Kaushik, K H Pravallika Reddy, Priya M C, Raagashree N G, Harshitha M, Soumya S Sheelavant, Sourabha S Darshan, Vinutha G and Megha V

11:05 - 01:00: Parallel Session: ISDA - 02

- 33 Business Growth Using Open Source e-Commerce and ERP in Small Business
Valtteri Kujala and Raija Halonen
- 35 Directional Multiscale Feature Extraction For Biomedical Image Indexing And Retrieval Using Contourlet Transform
Amita Shinde, Amol Rahulkar and Chetankumar Patil
- 41 Modeling Hybrid Indicators for Stock Index Prediction
Arjun R and Suprabha K R
- 51 Intention to Use M?Banking: The Role of E?WOM
Thanh D. Nguyen, Thy Q. L. Nguyen, Thi V. Nguyen and Tung D. Tran

64 Design of Time-Frequency Localized Filter Bank Using Modified Particle Swarm Optimization

Swati Madhe, Amol Rahulkar and Raghunath Holambe

65 Development of Low-Cost Real-Time Driver Drowsiness Detection System using Eye Centre Tracking and Dynamic Thresholding

Fuzail Khan and Sandeep Sharma

71 A Hybrid Entropy Based Method Using Gaussian Kernel for Retinal Blood Vessel Segmentation

Adhish N.K., R. Rajesh and Thasleema T.M.

11:05 - 01:00: Parallel Session: ISDA - 03

25 API Call Based Malware Detection Approach Using Recurrent Neural Network - LSTM
Mathew J and Ajay Kumara M. A.

72 Precision Crop Protection using Wireless Sensor Network
Radha R, Amit Kumar Tyagi, Staflin Betzy G and Kathiravan K

86 Background modeling using Deep-Variational Autoencoder
Midhula Vijayan and Mohan R

87 Sewage Sludge Removal Method through Arm-Axis by Machine Robot
Gobinath M and Malathi S

91 A Visual Spelling System using SSVEP Based Hybrid Brain Computer Interface with Video-Oculography

Saravanakumar D and Ramasubba Reddy M

92 QBEECH: Multi-hop clustering of cognitive based sensor nodes in the administration of queen nodes

Souvik Kundu, Srividya Karthikeyan and Karthikeyan A.

138 Turbo Coded STBC MIMO OFDM With DWT Based I/Q Balancing System
Sundar Srinivas Kuchibotla, Naga Lakshmi Kalyani Movva, Mounika N and Aruna Kumari Ch

11:05 - 01:00: Parallel Session: ISDA – 04 and NaBIC – 01

ISDA

331 Sentiment Analysis for Scraping of Product Reviews from Multiple Web Pages Using Machine Learning Algorithms

Suganya E

334 Association Rule Hiding Using Firefly Optimization Algorithm

Sharmila S

NaBIC

- 3 Automatic Determination Number of Cluster for Multi Kernel NMKFCM Algorithm on Image Segmentation
Pradip Paithane and Dr. S.N. Kakarwal
- 11 Characteristics of Alpha/Numeric Shape Microstrip Patch Antenna for Multiband Applications
Thandaiah Prabu, Thulasi Bai and Benisha xavier
- 20 Hybrid Segmentation of Malaria-Infected Cells in Thin Blood Slide Images
Sayantan Bhattacharya, Anupama Bhan and Ayush Goyal
- 28 Soft-Margin SVM incorporating Feature Selection using Improved Elitist GA for Arrhythmia Classification
Vinod Kadam, Samir Yadav and Shivajirao Jadhav
- 34 Continuous Cartesian Genetic Programming with Particle Swarm Optimization
Jaroslav Loeb1 and Viera Rozinajova

01:00 - 02:00: Lunch

02:00 - 04:00: Parallel Session: ISDA - 05

- 96 Asymmetric Key Cryptosystem And Digital Signature Algorithm Built On Discrete Logarithm Problem (Dlp)
Ashish Kumar, Jagadeesh Kakarla and Muzzammil Hussain
- 97 A Study on Big Cancer Computing
Sabuzima Nayak and Ripon Patgiri
- 110 M2U2: Multifactor Mobile based Unique User Authentication Mechanism
Rachit Bhalla and Jeyanthi N
- 115 Generation of Image Caption using CNN-LSTM based approach
AravindKumar S, Varalakshmi P and Hemalatha M
- 120 A Novel Approach to Solve Class Imbalance Problem Using Noise Filter Method
G Rekha, V Krishna Reddy and Amit Kumar Tyagi
- 137 An improved classifier based on entropy and deep learning for bug priority prediction
V B Singh, Madhu Kumari and Meera Sharma
- 142 ECC based Encryption Algorithm for Lightweight Cryptography
Soumi Banerjee and Anita Patil
- 153 A Single Program Multiple Data Algorithm for Feature Selection
Bhabesh Chanduka, Tushaar Gangavarapu and Jaidhar C. D.

02:00 - 04:00: Parallel Session: ISDA - 06

- 161 Clustering time-series data generated by smart devices for human activity recognition
Jothi Ramasamy

- 163 A Priority-Based Ranking Approach for Maximizing the Earned Benefit in an Incentivized Social Network
Suman Banerjee, Mamata Jenamani, Dilip Pratihar and Abhinav Sirohi
- 164 Analysis of Basic-SegNet Architecture with variations in training options
Ganesh Padalkar and Madhuri Khambete
- 165 CRIST900: A Fully-Labeled Natural Image Dataset For Multi-Operator Content Aware Image Retargeting
Abhayadev Malayil and Santha T
- 175 Analysis of Overhead View Images at Intersection Using Machine Learning
Taisuke Hori, Mitsuhiro Namekawa and Syuya Kanagawa
- 179 A New Design Prospective for User Specific Intelligent Control of Devices in a Smart Environment
Vaskar Deka and Shikhar Kumar Sarma
- 187 Trust Based RPL Protocol for Internet of Things
Bhalaji Natarajan and Jayaram Hariharakrishnan
- 275 Characterization of edible oils using NIR spectroscopy and chemometric Methods
Rishi Ranjan, Navjot Kumar, A Hepsiba Kiranmayee and P C Panchariya

02:00 - 04:00: Parallel Session: ISDA - 07

- 168 Evaluation of advanced analysis method for human relationship using fuzzy theory
Toshihiro Yoshizumi, Tomoo Sumida, Yasunori Shiono, Mitsuhiro Namekawa and Kensei Tsuchida
- 188 Fractional Order Extended Kalman Filter For attitude Estimation
Nimmi Sharma and Dr Shashi Poddar
- 189 Implementation of Robust Solid State Drive controller using LZ77 compression and SHA-1 encryption technique
Amanda Kelly D'Costa, Raksha K P and Vasanthi D R
- 193 Design of low power SAR ADC with two different DAC structure and two different SAR logic designs and their comparisons
Chirapangi Aruna Kumari, G.M.G. Madhuri, Burri Praveen Kitty and Movva Naga Lakshmi Kalyani
- 198 Efficient Decision Support System on Agrometeorological Data
Abhishek Teli, Bhanu Kaushik K, Amith A, Gopala Krishna Vasanth K, Sowmya B J and Seema S
- 200 Distributed Mining of Significant Frequent Colossal Closed Itemsets from Long Biological Dataset
Manjunath K Vanahalli and Nagamma Patil

- 205 OP3DBFT: A Power and Performance Optimal 3D BFT NoC Architecture
Bheemappa Halavar and Basavaraj Talawar
- 207 An FPGA based Hardware Accelerator for Classification of Handwritten Digits
Gautham Sundar Ram Ramesh, Nitin Chaturvedi, Sumeet Saurav and Sanjay Singh

04:00 - 04:20 Coffee break

04:20 - 05:20: Parallel Session: ISDA - 08

- 192 An Efficient Outlier Detection Mechanism for RFID-Sensor Integrated MANET
Adarsh Kumar and Alok Aggarwal
- 206 Comparative Analysis of Elliptic Curve Cryptography based Lightweight Authentication Protocols for RFID-Sensor Integrated MANETs
Adarsh Kumar and Alok Aggarwal
- 213 Feature Selection using Fast Ensemble Learning for Network Intrusion Detection
Ujjwal Pasupulety, Adwaith Cd, Suraj Hegde and Nagamma Patil
- 214 An Embedded System for Watershed Based Hard Exudate Extraction
Vasanthi Satyananda, Narayanaswamy K V and Karibasappa K

04:20 - 05:05: Parallel Session: ISDA - 09

- 215 Detection of Exudates from Fundus Images
Vasanthi Satyananda, Narayanaswamy K V and Karibasappa K
- 216 Intuitionistic Fuzzy Soft Aggregation Operator Based on Einstein Norms And its Applications in Decision-making
Rishu Arora
- 217 Parametric Similarity Measures on Linguistic Single-Valued Neutrosophic Sets with Application to Decision-making Problems
Nancy

04:20 - 05:05: Parallel Session: ISDA - 10

- 222 A State-of-Art review on Automatic Video Annotation Techniques
Krunal Randive and Mohan R
- 223 A Robust Speech Encryption system based on DNA Addition and Chaotic Maps
Nagakrishnan R and Revathi A
- 347 A Single Ended Fuzzy Based Directional Relaying Scheme For Transmission Line Compensated by Fixed Series Capacitor
Praveen Kumar Mishra and Anamika Yadav

06:00 Cultural Programme followed by Conference Banquet

December 07, 2018

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09:00 - 10:00: Plenary 2 (Junzo Watada, Universiti Teknologi PETRONAS, Seri Iskandar, Perak Malaysia)

10:00 - 10:20: Coffee break

10:20 - 11:20: Plenary 3 (Nelishia Pillay, University of Pretoria, South Africa)

11:20 - 01:00: Parallel Session: ISDA - 11

40 Performance comparison of PID and ANFIS controller for stabilization of x and x-y Inverted pendulums

Vikram Chopra, Ishan Chawla and Ashish Singla

151 Authorship Identification with Multi Sequence Word Selection Method
Mubin Tamboli and Rajesh Prasad

231 A Novel Approach for Operational Performance Mail Processing Facility Layout selection using Grey Relational Analysis: A Case on India Speed Post Service Industry
Vadivel S M and A H Sequeira

239 Differential Evolution trained Fuzzy Cognitive Map: An Application to modeling efficiency in Banking

Gutha Jaya Krishna, Meesala Smruthi, Vadlamani Ravi and Bhamidipati

Shandilya

250 Analysis on Improving the Performance of Machine Learning Models using Feature Selection Technique

Maajid Khan, Nalina Madhav, Anjali Negi and Sumaiya Thaseen

255 Hybrid Evolutionary Algorithm for Optimizing Reliability of Complex Systems
Gutha Jaya Krishna and Vadlamani Ravi

11:20 - 01:00: Parallel Session: ISDA - 12

252 A Normalized Rank Based A* Algorithm For Region Based Path Planning On An Image
Sangeetha Viswanathan, Sivagami Ramadass and Ravichandran K S

253 Quantum inspired high dimensional conceptual space as KID model for elderly assistance

Ishwarya Srinivasan and Cherukuri Cherukuri

256 Identification of Phishing Attack in Websites using Random Forest-SVM hybrid model
Amritanshu Pandey, Noor Gill, Kashyap Sai Prasad Nadendla and Sumaiya

Thaseen

257 Conflict Detection and Resolution with Local Search Algorithms for 4D-Navigation in ATM

Vitor Filincowsky Ribeiro, Henrique Torres de Almeida Rodrigues, Vitor Bona de Faria, Li Weigang and Reinaldo Crispiniano Garcia

260 A semi-local method for image retrieval
Hanen Karamti

11:20 - 01:00: Parallel Session: ISDA - 13

263 Physical Modeling Of The Tread Robot And Simulated On Even And Uneven Surface
Rashmi Arora and Rajmeet Singh

264 ipBF: A Fast and Accurate IP Address Lookup using 3D Bloom Filter
Ripon Patgiri, Samir Kumar Borgohain and Sabuzima Nayak

267 Comparison of a Backstepping and a Fuzzy Controller for Tracking a Trajectory with a Mobile robot
Rodrigo Silva, Daniel Gamarra and Marco Antonio Cuadros

332 Interval Chi-Square Score (ICSS): Feature Selection of Interval Valued Data
D S Guru and N Vinay Kumar

348 Hybrid of Intelligent Minority Oversampling and PSO-based Intelligent Majority Undersampling for Learning from Imbalanced Datasets
Seba Susan and Amitesh Kumar

270 Construction and Merging of ACM and ScienceDirect Ontologies
M. Priya and Aswani Kumar Cherukuri

11:20 - 01:00: Parallel Session: NaBIC - 02

31 Distributed Scheduling with Effective Holdoff Algorithm in Wireless Mesh Networks
K.S. Mathad and S.R. Mangalwede

36 List-Based Task Scheduling Algorithm For Distributed Computing System Using Artificial Intelligence
Akanksha Akanksha

55 Metaheuristic for Optimize the India Speed Post Facility Layout Design and Operational Performance Based Sorting Layout Selection using DEA Method
Vadivel S M, Sequeira A H and Sunil Kumar Jauhar

56 A Hybrid Evolutionary Algorithm for Evolving A Conscious Machine
Vijay Kanade

65 Mixed Reality in Action - Exploring Applications for Professional Practice
Adam Nowak, Mikołaj Woźniak, Michał Pieprzowski and Andrzej Romanowski

01:00 - 02:00: Lunch

02:00 - 04:00: Parallel Session: ISDA - 14

- 145 A Prototype Model Of Hand Assisstive System Useful For Hearing Impaired
Divya Udayan J, Anupama Ingale and Hemalata R
- 268 Modelling complex transport network with Dynamic Routing: a Queueing Networks
approach
Elmira Yu Kalimulina
- 269 Math modeling of the reliability control and monitoring system of complex network
platforms
Elmira Yu Kalimulina
- 273 Towards an Upper Ontology and Hybrid Ontology Matching for Pervasive Environments
Karthik N and Ananthanarayana V S
- 278 Design and Application of Controller based on Sine-Cosine Algorithm for Load
Frequency Control of Power System
Saswati Mishra, Shubhrata Gupta and Anamika Yadav
- 279 A Perusal Analysis on Hybrid Spectrum Handoff schemes in Cognitive Radio Networks
Josephine Dhivya
- 282 On Human Identification using Running Patterns: a Straightforward Approach
Anusha R and Jaidhar C D
- 283 Analysis of Encoder-Decoder based deep learning architectures for semantic
segmentation in remote sensing images
Sivagami R, Srihari J and Ravichandran K S

02:00 - 04:00: Parallel Session: ISDA - 15

- 285 Le vision
Neela Maadhuree and Ruben Mathews
- 286 Permission-based Android Malware Application Detection using Multi-Layer Perceptron
Jannath Nisha O S and Mary Saira Bhanu S
- 287 Accelerating Image Encryption with AES using GPU: A Quantitative Analysis
Aryan Saxena, Vatsal Agrawal, Rajdeepa Chakrabarty, Shubhjeet Singh and J.
Saira Banu
- 296 Image Encryption Using New Chaotic Map Algorithm
Subashanthini Selvaraj, Aswani Kumar Cherukuri and Pounambal M
- 297 Fast Implementation of Tunable ARN nodes
Shilpa Mayannavar and Uday Wali
- 305 Facial Keypoint Detection Using Deep Learning And Computer Vision
Middi Venkata Sai Rishita, Kevin Job Thomas and Tanvir Ahmed Harris

321 A group recommender system for academic venue personalization
Abir Zawali and Imen Boukhris

323 An Augmented Algorithm for Energy Efficient Clustering
Ushus Zachariah and Lakshmanan Kuppusamy

02:00 - 04:00: Parallel Session: ISDA - 16

318 Family Coat of Arms and Armorial Achievement Classification
Martin Sustek, Frantisek Vidensky, Frantisek Zboril and Frantisek Zboril

320 FAST Community Detection for Proteins Graph-based Functional Classification
Ben Rejab Arbi and Imen Boukhris

325 A Crisp-Based Approach for Representing and Reasoning on Imprecise Time Intervals
in OWL 2
Fatma Ghorbel, Elisabeth Métais and Faycal Hamdi

326 Algorithmic creation of genealogical models
Frantisek Zboril, Jaroslav Rozman and Radek Koci

329 Performance Evaluation of Data stream mining Algorithm with shared density graph for
micro and macro clustering
Gopinathan S and Ramesh L

349 Data Mining with Association Rules for Scheduling Open Elective Courses using
Optimization Algorithms
Seba Susan and Aparna Bhutani

350 Compressed Sensing in Imaging and Reconstruction - An Insight Review
Sreekala K and Dr. Krishna Kumar E

355 A Novel Decision Tree Algorithm for Fault Location Assessment in Dual-Circuit
Transmission Line based on DCT-BDT Approach
Ashok V and Anamika Yadav

04:00 - 04:20: Coffee break

04:20 - 05:05: Parallel Session: ISDA - 17

357 Opposition Based Salp Swarm Algorithm for Numerical Optimization
Divya Bairathi and Dinesh Gopalani

358 A Novel Swarm intelligence Based Optimization Method: Harris? Hawk Optimization
Divya Bairathi and Dinesh Gopalani

359 An Improved Opposition Based Grasshopper Optimisation Algorithm for Numerical
Optimization
Divya Bairathi and Dinesh Gopalani

05:15 - 06:00: Closing ceremony

ISDA 2018 Virtual Presentations

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- 2 Clinical Decision Support System for Neuro -Degenerative Disorders: An Optimal Feature Selective Classifier and Identification of Predictor Markers
Lokeswari Venkataramana, Shomona Gracia Jacob, Saraswathi S and Athilakshmi R
- 5 Favoring the K-Means Algorithm with Initialization Methods
Anderson Oliveira and Maria Do Carmo Nicoletti
- 10 Authentication Scheme Using Sparse Matrix In Cloud Computing
Sunita Meena, Subhrat Sethi, Vipin Chandar Dhobal, Shivani Kapur and Neeraj MANGA
- 12 Multidimensional Crime Dataset Analysis
Prerna Kapoor and Prem Singh
- 28 Review & Analysis of Few-shots Learning Approaches
Suvarna Kadam and Vinay Vaidya
- 31 Towards an Automatic Detection of Sensitive Information in Mongo Database
Heni Houyem and Gargouri Faiez
- 37 Link Quality and QoE aware Predictive Vertical Handoff mechanism for video streaming in urban VANET
Emna Bouzid Smida, Sonia Gaied Fantar and Habib Youssef
- 48 XOR Encryption Techniques For Video Steganography: A Comparative Analysis
Namrata Singh
- 52 Activity gesture recognition on Kinect sensor using Convolutional Neural Networks and FastDTW for the MSRC-12 dataset
Miguel Pfitscher, Daniel Welfer, Marco Antonio de Souza Leite Cuadros and Daniel Fernando Tello Gamarra
- 63 Plug in Electric Vehicle-Wind integrated multi-area Automatic Generation Control tuned by Intelligent Water Drops algorithm
Subhranshu Sekhar Pati, Aurobindo Behera and Tapas Kumar Panigrahi
- 76 Deep learning based approach for classification and Detection of papaya leaf diseases
Rathan Kumar Veeraballi
- 81 Three-materials image recover from value range projection data
Chuanlin Liu, Amit Yadav and Asif Khan
- 82 Multiple criteria fake reviews detection using belief function theory
Malika Ben Khalifa, Zied Elouedi and Eric Lefevre
- 83 Improved Logistic Regression Approach in feature selection for EHR

Shreyal Gajare and Shilpa Sonawani

- 90 K-nearest neighbors under possibility framework with optimizing parameters
Sarra Saied and Zied Elouedi
- 94 Perceive Core Logical Blocks of a C Program Automatically for Source Code Transformations
Pallavi Ahire and Jibi Abraham
- 98 Food Monitoring Using Adaptive Naïve Bayes Prediction in IoT
Pramod Ganjewar, Barani S., Sanjeev Wagh and Santosh Sonavane
- 104 Mixed Credit Scoring Model of Logistic Regression and Evidence Weight in the Background of Big Data
Keqin Chen, Amit Yadav and Asif Khan
- 108 A model for identifying Historical landmarks of Bangladesh from image content using a Depth-wise Convolutional Neural Network
Afsana Ahsan Jeny, Masum Shah Junayed, Syeda Tanjila Atik and Sazzad Mahamd
- 117 ADABA: an Algorithm to Improve the Parallel Search in Competitive Agents
Lidia Tomaz and Rita Julia
- 122 Mobility Aware Routing Protocol based on DIO message for Low power and Lossy Networks
Shridhar Sanshi and Jaidhar Cd
- 123 Boosting Convolutional Neural Networks Performance based on FPGA Accelerator
Omran Al-Shamma, Mohammed Fadhel and Laith Alzubaidi
- 124 Real-time PCG Diagnosis using FPGA
Mohammed Fadhel, Omran Al-Shamma and Laith Alzubaidi
- 125 Cluster Center Initialization and Outlier Detection Based on Distance and Density for the K-means Algorithm
Qi He, Zhenxiang Chen, Ke Ji, Lin Wang, Kun Ma, Chuan Zhao and Yuliang Shi
- 127 A Novel method for Retrieval of Remote Sensing Image using Wavelet Transform and HOG
Minakshi Vharkate and Dr. Vijaya Musande
- 129 Classification of Red Blood Cells in Sickle Cell Anemia Using Deep Convolutional Neural Network
Laith Alzubaidi, Omran Al-Shamma and Mohammed Fadhel
- 130 Robust and Efficient Approach to Diagnose Sickle Cell Anemia in Blood
Laith Alzubaidi, Mohammed Fadhel and Omran Al-Shamma
- 141 A UML/MARTE based design pattern for a wireless sensor node
Raoudha Saida, Yessine Hadj Kacem, M.S Bensaleh and Mohamed Abid

- 144 Reduced complexity affine projection algorithm based on variable projection order and multiple sub filter approach
Radhika S and Chandrasekar A
- 149 Towards micro-expression recognition through Pyramid of uniform Temporal Local Binary Pattern features
Taoufik Ben Abdallah, Radhouane Guerhazi and Mohamed Hammami
- 150 Misbehavior Detection in C-ITS Using Deep Learning Approach
Pranav Kumar Singh, Manish Kumar Dash, Paritosh Mittal, Sunit Kumar Nandi and Sukumar Nandi
- 154 Prosodic feature selection of personality traits for job interview performance
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