# Agenda for i4CD - 2018

**Venue: Bansuri Guru Auditorium, ITER, Siksha 'O' Anusandhan (Deemed to be University)**
**17 – 19th December 2018**

| 17 – 12 – 2018 | | | 18 – 12 – 2018 | | | 19 – 12 – 2018 | | |
|---|---|---|---|---|---|---|---|---|
| 08:30 – 09:30 | Registration | Lobby | 09:30 – 11:30 | **Invited Talk – IV** Prof. M. Mitra | E – 214 | 09:30 – 10:30 | **Invited Talk – VI** Prof. P. K. Nanda | E – 214 |
| | | | | | | | **Invited Talk – VII** Prof. G. P. S. C. Mishra | E – 314 |
| 09:45 – 10:30 | **Invited Talk – I** Prof. G. S. Chae | Conference Hall | 11:30 – 11:45 | Tea break | | 10:30 – 10:45 | Tea break | Lobby |
| 10:30 – 10:45 | Tea break | Lobby | 11:45 – 01:15 | **Invited Talk – V** Prof. D. Dutta | E – 214 | 10:45 – 12:00 | **Technical Session VII** | E – 214 |
| 10:45 – 12:00 | **Invited Talk – II** Prof. A. Routray | Conference Hall | 01:15 – 02:00 | Lunch Break | | 12:00 – 01:00 | Valedictory Session | E – 214 |
| 12:00 – 1:00 | Inauguration Session | Conference Hall | 02:00 – 04:00 | **Technical Session III** | E-214 | 01:15 – 02:00 | Lunch | |
| 1:15-2:00 | LUNCH BREAK | | | **Technical Session IV** | E – 314 | | | |
| 3:15 – 5:15 | **Technical Session I** | E – 214 | 04:00 – 06:00 | **Technical Session V** | E – 214 | | | |
| | **Technical Session II** | E – 314 | | **Technical Session VI** | E – 314 | | | |
| **Cultural Pogramme starts from 6:15 P.M** | | | | | | | | |

**Guests for i4CD 2018 inauguration**

1. Prof. P. K. Padhi, Dean, CITE, Bhubaneswar  (Guest)
2. Prof. P.K Patra, Dean, CET (Guest)
3. Prof. Amit Bannerjee, Vice Chancellor, SOA Deemed to be University
4. Prof. Manas Ranjan Mallick, Director, ITER, SOA Deemed to be University
5. Prof. P. K. Nanda, Dean R&D, SOA Deemed to be University
6. Prof. P. K. Sahoo, Dean, ITER, FET, SOA Deemed to be University
7. Prof. G. S. Chae, Baekseok University, South Korea
8. Prof. Arabinda Routray, IIT, Kharagpur
9. Prof. Bibhuprasad Mohanty, ITER, FET, SOA Deemed to be University
10. Prof. Niva Das, ITER, FET, SOA Deemed to be University

# TECHNICAL SESSION I – COMMUNICATION

**DATE**: 17-12-2018      **TIME**: 3:15 PM – 5:15 PM      **VENUE**: E - 214

**SESSION CHAIRS**: PROF. B. D. SAHU, PROF. JAYASHREE RATNAM      **SESSION MANAGER**: PROF.PRAKASH KUMAR PANDA

| Sl. | Paper ID | Authors | Title |
|---|---|---|---|
| 1. | 2E3_i4CD_CO_18 | Ribhu Abhusan Panda , Preetibardhan Dash, Krishna Mandi, Pawan Kumar Nayak, | Clubs Shaped Patch Antenna with DGS for WLAN Application |
| 2. | 3E4_i4CD_CO_19 | Nagesh N. Nazare, Premananda B.S. | Low-Power PFAL based Speculative Han-Carlson Adder for Signal Processing Applications |
| 3. | 4E5_i4CD_CO_20 | Kaibalya Kumar Sethi1,1, Ashirwad Dutta1, Gopinath Palai1, Patha Sarkar2 | HAIRPIN STRUCTURE BAND PASS FILTER FOR IoT BAND APPLICATION |
| 4. | 5E12_i4CD_CO_21 | Sanjana Sahoo, Guru Prasad Mishra, Manas Ranjan Jena, and Biswa Binayak Mangaraj | Sub-Sectional Tapered Printed-LPDA Design with WLAN, WiMAX Notch Bands for UWB Communication Systems |
| 5. | 6E17_i4CD_CO_22 | Amir Abdullah, H. Kaur, R. Biswas | Universal Layers of IoT Architecture and its Security Analysis |
| 6. | 9E25_i4CD_CO_25 | Rajender Kumar, Krishan Kumar, Amit Kant Pandit | Performance and Complexity Analysis of Motion Estimation using Multiple Constraints in Video Compression |
| 7. | 10E26_i4CD_CO_26 | Krishan Kumar, Rajender Kumar, Dr. Amit Kant Pandit | Quality of Service Based Multimedia Data Transmission in Multi-Constraint Environment |
| 8. | 12m2_i4CD_CO_14 | Seema Jangra1,2, Dr. Sobin C.C3, Dr. Amit Kant1 | Performance analysis of Vehicular Delay Tolerant Networks Using Real Contact Traces |
| 9. | 13m3_i4CD_CO_15 | K.P. Swain[1], M. Subudhi[2], S.R. Das[1], G. Palai[1] | OPTICAL LOCKING SYSTEM USING PHOTONIC CRYSTAL STRUCTURE |
| 10. | 47m1_i4CD_CO_31 | Niranjan Panda, Binod Kumar Pattanayak | ACO based Secure Routing Protocols in MANETs |
| 11. | 51E29_i4CD_CO_27 | Shaktijeet Mahapatra, Mihir Narayan Mohanty | Design of Novel Multi-band Rectangular Patch Antenna for Wireless Communications |
| 12. | 74m46_i4CD_CO_30 | Ahmad Khader Habboush[1], Binod Kumar Pattanayak | A Review on Multicast Routing Protocols in MANETs |
| 13. | 81m56_i4CD_CO_33 | 1Namrata Mishra, 2Shrabanee Swagatika ,3Debabrata Singh | An Intelligent Framework for Analyzing Terrorism Actions using Cloud |
| 14. | 1E1_i4CD_CO_17 | Ribhu Abhusan Panda, Mihir Panda, Pawan Kumar Nayak[3], Debasish Mishra | Log Periodic Implementation of Butterfly Shaped Patch Antenna with Gain Enhancement Technique for X-Band Applications |
| 15. | 7E18_i4CD_CO_23 | Jayashree Ratnam[1],and Sabita Mali[2] | Power-efficiency in Asymmetrically-Clipped Optical OFDM System with Truncated-PAPR |
| 16. | 8m55_i4CD_CO_32 | Vinita Kumari1*, Mohd Iqbal1 | Development of model for sustainable development in Agriculture using IoT based Smart farming |
| 17. | 61m33_i4CD_CO_28 | Mohammad Reza Hosenkhan, Binod Kumar Pattanayak | Security Issues in Internet of Things (IoT):A Comprehensive Review |

# TECHNICAL SESSION II – MICROWAVES, ANTENNAS AND DEVICES

**DATE**: 17-12-2018                     **TIME**: 3:15 PM – 5:15 PM                     **VENUE**: E - 314
**SESSION CHAIRS**: PROF. LAXMI PRASAD MISHRA, PROF. SIDHARTHA DASH          **SESSION MANAGER**: PROF. MANORANJAN DAS

| Sl. | Paper ID | Authors | Title |
|-----|----------|---------|-------|
| 1. | 19E7_i4CD_DE_1 | Satish Kumar Das, Sudhansu Mohan Biswal, Sanjit kumar Swain[3],Biswajit Baral[4] | Analysis of Junction-less Triple-Material Cylindrical Surrounding Gate MOSFET. |
| 2. | 20E8_i4CD_DE_2 | G S Sahoo1*, S Dash1, and G P Mishra2 | Incorporation of different quantum superlattices in a single junction GaAs Solar cell: A comparative study |
| 3. | 21E14_i4CD_DE_3 | Sikha Mishra1, Soumya S. Mohanty2*, Subhashree Bhol2 and Guru Prasad Mishra3 | A Compact Analytical model and Electrostatic performance investigation of Multilayer groove gate SOI-MOSFET |
| 4. | 22E15_i4CD_DE_4 | Soumya S Mohanty1, Sikha Mishra2*, Debatanaya Sathpathy2 and Guru Prasad Mishra3 | An extensive simulation based study of symmetrical work function variation of In0.53Ga0.47As/InP DG hetero MOSFET |
| 5. | 64m36_i4CD_DE_5 | SristiDasgupta, JeemutBahanSangri, Farida A Ali, Priyabrata Pattanaik,Sushanta K. Kamilla | Fabrication of n-ZnO/p-Si Heterojunction by Chemical Wet and Dry (CWD) Method |
| 6. | 35m57_i4CD_DE_7 | Usharani panda, Arun K. Das, Farida A. Ali, Priyabrata Pattanaik, Sushant K. Kamilla | Effect of transition metal doped ZnO coated on Al working electrode prepared by sol-gel CWD for electrochemical biosensor |
| 7. | 69m41_i4CD_DE_6 | Subhashree Patra[1], Kamal Lochan Mohanta[1*], Chhatrapati Parida[2] | Mechanical analysis of bio-composites using Gamma irradiated fibers of luffa cylindrica |
| 8. | 53M26_i4CD_MA_17 | AnupaChatterjee[1], ManasMidya[2], L.P.Mishra[3], M.Mitra[4] | A novel compact diamond shaped slot antenna for UWB application |
| 9. | 66m38_i4CD_MA_18 | Satya Swaroop Nanda ,Jabakankshya Das , Sarmistha Satrusalya , Mihir Narayan Mohanty | Design of Multiband Microstrip Antenna for Ku-Band Applications |
| 10. | 79E32_i4CD_MA_20 | Sanjay Kumar Sahu, BhukyaArun Kumar, Kaibalya Kumar Sethi | DUAL NOTCH BAND REJECTED FILTER WITHDEFECTED SLOT FOR WLAN AND SATELLITEAPPLICATIONS |
| 11. | 48M24_i4CD_MA_15 | Diksha[1] and Vipin Gupta[2] | Quality Assessment of Massive Multiple-Input Multiple-Output (MIMO) Wireless Systems |
| 12. | 49M25_i4CD_MA_16 | Barsa Samantaray, Kunal Kumar Das and Jibendu Sekhar Roy | Performance of Variable Step-size LMS Algorithm for Beamforming of Smart Antenna of Dipole Array |
| 13. | 70m43_i4CD_MA_19 | Priyadarshini Raiguru [1], R.K.Mishra [2], Mihir  Narayan Mohanty | DOA Estimation considering Mutual Coupling with Fractal based Array using Model Based Approach |

# TECHNICAL SESSION III – SOFT COMPUTING AND MACHINE LEARNING - 1

| Sl. | Paper ID | Authors | Title |
|---|---|---|---|
| 1. | 32E23_i4CD_SM_19 | Srikanta Kumar Mohapatra ,Sushanta Kumar Kamilla, Tripti Swarnkar, Gyana Ranjan Patra | Forecasting world petroleum fuel crisis by Nonlinear Autoregressive Network |
| 2. | 36m11_i4CD_SM_22 | Bishnupriya Panda | A novel approach for breast cancer classification using Deepforest network |
| 3. | 37m12_i4CD_SM_23 | Rakesh Kumar | Android App based Cryptographic End-to-End Verifiable Election System |
| 4. | 38m13_i4CD_SM_24 | Mitali Madhusmita Sahoo, Rasmita Dash, Rajashree Dash, Rasmita Rautray | CUCKOO SEARCH ALGORITHM: A REVIEW |
| 5. | 39m14_i4CD_SM_25 | SayantanSaha , Arnab Mitra | Towards exploration of Green computing in energy efficient optimized algorithm for uses in Fog computing |
| 6. | 40m15_i4CD_SM_26 | Sipra Sahoo, Mihir Narayan Mohanty | Stock Market Price Prediction employing Artificial Neural Network optimized by Grey Wolf Optimization |
| 7. | 42m17_i4CD_SM_28 | Madhusmita Sahu | RSA based Encryption and Decryption of any Text withthe help of XOR operation and Color MappingTechnique |
| 8. | 43m18_i4CD_SM_29 | Soumen Nayak, Nabajyoti Majumdar, Chiranjeev Kumar[1], Sachin Tripathi | An Improved Approach to Enhance the Test Case Prioritization Efficiency |
| 9. | 44m19_i4CD_SM_30 | Sangram Panigrahi, Kesari Verma, and Priyanka Tripathi | Qualitative Analysis of RSA: A Land Cover Change Detection Algorithm |
| 10. | 45m20_i4CD_SM_31 | SmitaPrava Mishra, Priyanka Kumari | Analysis of Techniques for Credit Card Fraud Detection: A Data Mining Perspective |
| 11. | 46m21_i4CD_SM_32 | Sushree Bibhuprada B. Priyadarshini[1, *] | Concentric Quadrivial Scalar Premier Selection Scheme based on Sensing Region Segregation (CQSPS-SRS): An innovative Marching  towards Optimum Camera Actuation and Enhanced Event Coverage in Wireless Multimedia Sensor Networks |
| 12. | 50E28_i4CD_SM_33 | Rajeswari, P. Kanungo, T. Pattnaik and P. K. Sahoo | Mean feature based Age estimation |
| 13. | 56m29_i4CD_SM_34 | Narmada Ranarahu, J.K. Dash | A New Type of Fuzzy Transportation Problem |
| 14. | 65m37_i4CD_SM_38 | Bindu Rani[1] and Shri Kant | An Approach towards Integration of Big data into Decision Making Process |
| 15. | 67m39_i4CD_SM_39 | Saumendra Kumar Mohapatra[1], M N Mohanty[2] | Big Data Analysis and Classification of Bio-medical Signal using Random Forest Algorithm |
| 16. | 72m42_i4CD_SM_40 | Manjit Bahadur Singh, Sushobhan Pal, Siddharth Mohanty and M K Debnath | Use of Fuzzy Enabled FOPID Controller for AGCInvestigation Utilizing Squirrel Search Algorithm |
| 17. | 82m57_i4CD_SM_43 | Manisha Chate1, VinayaGohokar | Vehicle  detection using faster  Recurrent Convolution Neural Network |
| 18. | 83m58_i4CD_SM_44 | Manisha Chate1, Vinaya Gohokar 2 | Effective pedestrian detection and tracking invarying light conditions |

# TECHNICAL SESSION IV - SOFT COMPUTING AND MACHINE LEARNING - 2

**DATE**: 18-12-2018          **TIME**: 2.00 PM TO 4:00 PM          **VENUE**: E - 314

**SESSION CHAIRS**: PROF. AJIT NAIK, PROF. TRIPTI SWARNKAR          **SESSION MANAGER**: PROF. KUNDAN KUMAR

| Sl. | Paper ID | Authors | Title |
|-----|----------|---------|-------|
| 1. | 84m59_i4CD_SM_45 | Monalisa Jena, and Satchidananda Dehuri | An Experimental Study on Decision Tree Classier Using Discrete and Continuous Data |
| 2. | 86E33_i4CD_SM_46 | N Md Jubair Basha and Sankhayan Choudhury | An algorithmic approach for evaluation and assessment of reusability of software components |
| 3. | 28E9_i4CD_SM_15 | Saswat Sahoo, Santosh Kumar Majhi | Building a Re-Selling System using the Ethereum Blockchain Technology |
| 4. | 41m16_i4CD_SM_27 | Madhusmita Das, Rasmita Dash | Visual Cryptography for Colour Image using Symmetric Key |
| 5. | 91m65_i4CD_SM_48 | Shweta Kharya, Sunita Soni, Tripti Swarnkar | Weighted Bayesian Association Rule Mining Algorithm to construct Bayesian Belief Network |
| 6. | 27E2_i4CD_SM_14 | Ashish kumar mourya[1], Harleen Kaur[1], Moin Uddin[1] | A Novel Approach to Heterogeneous Multi-Class SVM Classification |
| 7. | 29E11_i4CD_SM_16 | Ashish kumar mourya[1], Harleen Kaur[1], Moin Uddin[1] | An Ensemble Approach to Model Selection using Deep Support Vector Machine with Genetic Algorithm |
| 8. | 30E13_i4CD_SM_17 | ShafqatUlAhsaan, Harleen Kaur, and SameenaNaaz | An Empirical Study of Big Data: Opportunities, Challenges and Technologies |
| 9. | 31E19_i4CD_SM_18 | Ipsita Pradhan, SmitaPrava Mishra, Ajit Kumar Nayak | A Collation of Machine Translation Approaches with Exemplified Comparison of Google and Bing Translators |
| 10. | 33E24_i4CD_SM_20 | Subhabrata Acharya and Pradipta Kumar Nanda | Fast adjacent LBP based background modelling for foreground detection in video sequences |
| 11. | 52m22_i4CD_SM_42 | Archana Sarangi, Shubhendu Kumar Sarangi , Bibhuprasad Mohantyand Shweta Prasad Bhusal | Gaussian Mutated Particle Swarm Optimization with Modified Velocity for Function Optimization |
| 12. | 62m34_i4CD_SM_36 | Sandhya. N.[1], Rama Prasath. A | Application of Artificial Intelligence Methods for Detection of Fronto Temporal Dementia |
| 13. | 63m35_i4CD_SM_37 | Suneha Panda[1], Mamata Nayak[1], Ajit Kumar Nayak | Clustering of Odia Character Images using K-means Algorithm & Spectral Clustering Algorithm |
| 14. | 76m48_i4CD_SM_41 | Nilima R. Das[1], Satyananda C. Rai[2], and Ajit Nayak[1] | Energy Cost Minimization with Reduced Dissatisfaction for Household Consumers |
| 15. | 80m51_i4CD_SM_42 | Bhavya Alankar, Nowsheena Yousf, and Shafqat Ul Ahsaan | Predictive Analytics for Weather Forecasting Using Back propagation and Resilient Back Propagation Neural Network |

# TECHNICAL SESSION V – POWER AND CONTROL

**DATE**: 18-12-2018        **TIME**: 04:00 P M TO 06:00 PM        **VENUE**: E - 214

**SESSION CHAIRS**: PROF. PRAVAT KUMAR ROUT, PROF. SANJIB KUMAR KAR        **SESSION MANAGER**: PROF. SIKHA MISHRA

| Sl. | Paper ID | Authors | Title |
|---|---|---|---|
| 1. | 16m4_i4CD_PC_13 | Manjit Bahadur Singh, Sushobhan Pal, Siddharth Mohanty[1], and Manoj Kumar Debnath | Use of Fuzzy Enabled FOPID Controller for AGC Investigation Utilizing Squirrel Search Algorithm |
| 2. | 18m6_i4CD_PC_15 | Manorath Prasad, Subhranshu Sekhar Puhan, and Subham Patra | Contingency selection in the context of voltage security margin determination |
| 3. | 54m27_i4CD_PC_18 | Jaffar Sadiq Ali, A and Ramesh,G.P | ANALYSIS OF OPEN, CLOSED LOOP PI , PID & FLC CONTROLLABLE WIND ENERGY SYSTEM USING Γ- ZSI WITH PMSM |
| 4. | 57m10_i4CD_PC_23 | Basanta K.Panigrahi, Anshuman Bhuyan, Arpan. K.Satapathy, Ruturaj. Pattanayak and Bhagyashree Parija | Fault Analysis of Grid Connected Wind/PV Distributed Generation System |
| 5. | 73m45_i4CD_PC_20 | Tanmoy Parida  Niranjan Nayak, Himanshu Shekhar Sahoo | Dynamic Stability Improvement of STATCOM Based Power System Using Optimized Improved Sliding Mode Controller |
| 6. | 77m49_i4CD_PC_21 | Mohan Debarchan Mohanty, Mihir Naryan Mohanty | Design of Fuzzy Logic based PID Controller for Heat Exchanger used in Chemical Industry |
| 7. | 78m50_i4CD_PC_22 | Raghavendra Vedula, Amitash Nanda, KeshabKishor Swain, Siddharth Das[1], Mihir Narayan Mohanty | Plant Sustainability Monitoring Using Unmanned Aerial Vehicle |
| 8. | 17m5_i4CD_PC_14 | Tapas Kumar MohapatrA, Binod Kumar Sahu | Implementation of SSA based Fuzzy FOPID controller for AGC of multi area interconnected Power System with diverse source of generation |
| 9. | 14E16_i4CD_PC_16 | Ambika Prasad Hota and Sivkumar Mishra, | A new approach for fair loss allocation in radial distribution networks with various types of distributed generators. |
| 10. | 15E20_i4CD_PC_17 | Sangeeta Sahu, Byamakesh Nayak | Optimization of PI Coefficients of PMSM Drive Using Particle Swarm Optimization |
| 11. | 60m30_i4CD_PC_19 | Devbrat Gupta, Vishal Goyal, Jitendra kumar | An Optimized Fractional Order PID Controller for Integrated Power System |

# TECHNICAL SESSION VI – SIGNAL AND IMAGE PROCESSING

**DATE**: 18-12-2018        **TIME**: 04:00 PM TO 06:00 PM        **VENUE**: E - 314

**SESSION CHAIRS**: PROF. KUNAL DAS,  PROF. MANOJ KUMAR NAIK        **SESSION MANAGER**: PROF. KUNTAL GHOSH

| Sl. | Paper ID | Authors | Title |
|-----|----------|---------|-------|
| 1. | 23E6_i4CD_SI_16 | Deepika Palo[1] and Ribhu Abhusan Panda[2] | Ease of Designing Fractional Filters Compared to Integer Order Filters |
| 2. | 26m8_i4CD_SI_15 | Janardhan chidadala, Sri Nagesh Maganti, and Prakash N | Automatic Seeded Selection Region Growing Algorithm for Effective MRI brain Image Segmentation and Classification |
| 3. | 55m28_i4CD_SI_18 | Arvind Kumar, S. K. Dash, Mahesh Chandra | Language diversity and technology development on languages of Jharkhand |
| 4. | 58m31_i4CD_SI_19 | Krishna Dutta, Salam Nadakishore and Debadatta Pati | Combining multiple evidences for Performance Improvement in Speaker Recognition System |
| 5. | 59m32_i4CD_SI_20 | Salam Nandakishor and Debadatta Pati | Extraction of Lip Contour and Geometric Lip Features for Audio-Visual Phoneme Recognizer |
| 6. | 68m40_i4CD_SI_21 | Janardhan Chidadala[1], Venkata Ramanaiah Kota[2], Babulu K | High Level Synthesis of VLSI based Image Scaling Architecture for High Definition Displays |
| 7. | 71m44_i4CD_SI_22 | Bikash Meher, S. Agrawal | A Multimodality Medical Image Fusion Method Using Region Based Approach |
| 8. | 75m47_i4CD_SI_23 | Pritisman Kar[1], Mihir Narayan Mohanty | An Intelligent approach to detect Cracks on a surface in an Image |
| 9. | 11m56_i4CD_SI_24 | Dr. Jitesh R. Shinde, Dr. Sanjeev Sharma Ms. Lipsa Dash | An Optimization Design Approach for Arithmetic Logic Unit |
| 10. | 24E27_i4CD_SI_17 | Sandhyalati Behera1 and Mihir Narayan Mohanty2* | A novel approach for Artifact Removal from Brain Signal |
| 11. | 25m7_i4CD_SI_14 | Dinesh Kumar[1], Sunil Ahuja[2], Sorab Kumar[3], Mihir Narayan Mohanty | Sentiment Study Approach Based on Chart Summarization |