

International Conference on Computational Intelligence in Pattern Recognition (CIPR 2022)

IEST Shibpur, India

April 23-24, 2022

Program Schedule

23 April 2022 (Day 1)

(All times are in IST)

09:00-09:30	Inaugural Ceremony	
09:30-09:45	Tea Break	
09:45-10:45	KEYNOTE TALK-1 Speaker: Dr. Sudip Sarkar, Professor, Dept. of CSE, University of South Florida, Tampa Title: <i>Towards Open World Video Event Understanding - Flexible Representations and Commonsense Priors.</i> Session Chair: Prof. Susanta Chakrabarti, IEST, Shibpur Co-ordinators: Priyanka Das, Subinoy Sikdar	
10:45-11:00	Tea Break	
11:00 -13:00	<p style="text-align: center;">Session – TS:1 Applications of Machine Learning</p> <p style="text-align: center;">Session Chairs: 1. Dr. B. Kameswar Rao, AITAM, Tekkali, AP 2. Dr. Sharmila Subudhi, MSCB University, Baripada, Odisha</p> <p style="text-align: center;">Co-ordinators: Priyanka Das, Jayanta Paul</p> <p style="text-align: center;">Paper ID: 17 An Approach to Medical Diagnosis using Smart Chatbot Authors: Shreya Verma, Mansi Singh, Ishita Tiwari, and B.K. Tripathy</p> <p style="text-align: center;">Paper ID: 26 Perceptive Analysis of Chronic Kidney Disease Data Through Conceptual Visualization Authors: P.Antony Seba and J. V BibalBenifa</p> <p style="text-align: center;">Paper ID: 39 A survey on Prediction of Heart Disease using Machine Intelligence Techniques Authors: Farzana Begum and J. Arul Valan</p> <p style="text-align: center;">Paper ID: 46 Efficient Scheduling Algorithm Based On Duty-Cycle For e-Health Monitoring System Authors: Dibyendu Ghosh, Rohan Mojumder, Tanima Bhowmik and Indrajit Banerjee</p> <p style="text-align: center;">Paper ID: 68 A Deep Learning-Based Approach to Measure Confidence for Virtual Interviews Authors: Ravi Kumar Rungta, Parth Jaiswal, and B.K. Tripathy</p>	<p style="text-align: center;">Session – TS:2 Intelligent Techniques for Image and Video Analysis</p> <p style="text-align: center;">Session Chairs: 1. Dr. Dipak Kumar Kole, Jalpaiguri Govt. Engineering College, Jalpaiguri 2. Dr. Soumya Ranjan Nayak, AMITY University, Noida</p> <p style="text-align: center;">Co-ordinators: Subinoy Sikdar, Debasmita Dey</p> <p style="text-align: center;">Paper ID: 15 Vehicle Number Plate Recognition System Authors: Ibidun Christiana Obagbuwa, Vincent Mohale, and Mishu Makade</p> <p style="text-align: center;">Paper ID: 30 Identification of Lung Cancer Nodules from CT scan images using 2D Convolutional Neural Networks Authors: Sutrisna Anjoy, Paramita De, and Sekhar Mandal</p> <p style="text-align: center;">Paper ID: 33 A Pixel Dependent Adaptive Gamma Correction based Image Enhancement Technique Authors: Satyajit Panigrahi, Abhinandan Roul, and Rajashree Dash</p> <p style="text-align: center;">Paper ID: 48 Image Splicing Detection Using Feature-Based Machine Learning Methods and Deep Learning Mechanisms Authors: Debjit Das and Ruchira Naskar</p> <p style="text-align: center;">Paper ID: 79 Fractal Analysis of RGB Color Images</p>

	<p style="text-align: center;">Paper ID: 112 Deep Learning-Based Identification of Three Exotic Carp Fish Species Authors: Arnab Banerjee, Roopsia Chakraborty, Samarendra Behra, Nagesh Talagunda, Debotosh Bhattacharjee, and Nibaran Das</p> <p style="text-align: center;">Paper ID: 140 Predictive Geospatial Crime Data Analysis and their Association with Demographic Features through Machine Learning Approaches. Authors: Anupam Mukherjee and Anupam Ghosh</p> <p style="text-align: center;">Paper ID: 174 Deep Learning Based Framework For Breast Cancer Mammography Classification Using Resnet50 Authors: Pandit Byomakesha Dash, H.S. Behera, and Manas Ranjan Senapati</p>	<p>Authors: Sukanta Kumar Das, Jibitesh Mishra, and Soumya Ranjan Nayak</p> <p style="text-align: center;">Paper ID: 97 Agricultural Image Augmentation with Generative Adversarial Networks GANs Authors: Sayan De, Ishita Bhakta, Santanu Phadikar, and Koushik Majumder</p> <p style="text-align: center;">Paper ID: 113 Single Image Fog Removal using WLS smoothing filter combining CLAHE with DWT Authors: Soumya Chakraborty, Biswapati Jana, and Sharmistha Jana</p> <p style="text-align: center;">Paper ID: 118 is-Entropy: A Novel Uncertainty Measure for Image Segmentation Authors: Bhaveskumar Choithram Dharmani</p>
13:00-14:00	Lunch Break	
14:00 -15.00	<p style="text-align: center;">KEYNOTE TALK-2</p> <p style="text-align: center;">Speaker: Prof. Xin-She Yang, Dept. of Design Engineering & Maths, Middlesex University, London Title: <i>Nature Inspired Optimization</i> Session Chair: Prof. Somnath Pal, IEST, Shibpur Co-ordinators: Arnab Dey, Deeptanu Choudhury</p>	
15:00 -15.15	Tea Break	
15:15 -17.15	<p style="text-align: center;">Session – TS:3 <u>Intelligent Techniques for Image and Video Analysis</u></p> <p style="text-align: center;">Session Chairs: 1. Dr. Diptendu Sinha Roy, NIT Meghalaya 2. Dr. Sanjoy Pratihar, IIT Kalyani</p> <p style="text-align: center;">Co-ordinators: Arnab Dey, Utsa Roy</p> <p style="text-align: center;">Paper ID: 12 Low-Computation IoT System Framework For Face Recognition Using Deep Learning Algorithm Authors: Jayanta Paul, Rajat Subhra Bhowmick, and Jaya Sil</p> <p style="text-align: center;">Paper ID: 21 Transmission of Aggregated Data in LOADng-based IoT Networks Authors: Sayeda Suaiba Anwar and Asaduzzaman</p> <p style="text-align: center;">Paper ID: 25 Adversarial Surround Localization and Robust Obstacle Detection with Point Cloud Mapping Authors: Rapti Chaudhuri and Suman Deb</p> <p style="text-align: center;">Paper ID: 94 Issues, Challenges, and Possibilities in IoT and Cloud Computing Authors: Vinay Kumar Mishra, Rajeev Tripathi, Raj Gaurang Tiwari, Alok Misra, and Sandeep Kumar Yadav</p>	<p style="text-align: center;">Session – TS:4 <u>Handling COVID-19 with Intelligent Computing</u></p> <p style="text-align: center;">Session Chairs: 1. Dr. Samit Biswas, IEST, Shibpur 2. Dr. Ruchira Naskar, IEST, Shibpur</p> <p style="text-align: center;">Co-ordinators: Deeptanu Choudhury, Raimoni Hansda</p> <p style="text-align: center;">Paper ID: 22 Deep Learning Based Facial Mask Detection Using Mobilenetv2 Authors: Arijit Goswami, Biswarup Bhattacharjee, Rahul Debnath, Ankita Sikder, and Sudipta Basu Pal</p> <p style="text-align: center;">Paper ID: 4 COVID-19 detection using Deep Learning: A comparative study of Segmentation Algorithms Authors: Pranchal Sihare, Azeem Ullah Khan, PoritoshBardhan, and B. K. Tripathy</p> <p style="text-align: center;">Paper ID: 6 Time series analysis on Covid 19 Summarized Twitter data Using Modified TextRank Authors: Ajit Kumar Das, Kushagra Chitkara, and Apurba Sarkar</p> <p style="text-align: center;">Paper ID: 40 Predictive analysis of child’s mental health/psychology during the COVID-19 pandemic Authors: Sandipan Saha, Sandip Murmu, Surajit Manna, Bappaditya Chowdhury, and Nibaran Das</p>

	<p style="text-align: center;">Paper ID: 101</p> <p>Learning Temporal Mobility Patterns to Improve QoS in Mobile Wireless Communications Authors: Satyaki Roy, Bilas Chandra, Anubhav Anand, Preetam Ghosh, and Nirnay Ghosh</p> <p style="text-align: center;">Paper ID: 130</p> <p>MANDS: Malicious Node Detection System for Sinkhole attack in WSN using DRI and Cross Check Method Authors: Minakshi Sahu, Nilambar Sethi, Susant Kumar Das, and Umashankar Ghugar</p> <p style="text-align: center;">Paper ID: 138</p> <p>Deep Learning Approach For Anamoly Detection In CAN Bus Network: An Intelligent LSTM-Based Intrusion Detection System Authors: Ch. Ravi Kishore, D. Chandrasekhar Rao, and H.S. Behera</p> <p style="text-align: center;">Paper ID: 143</p> <p>Gravitational Search Optimized Light Gradient Boosting Machine for Identification of malicious access in IoT Network Authors: Geetanjali Bhoi, Bighnaraj Naik, Etuari Oram, and S.Vimal</p>	<p style="text-align: center;">Paper ID: 45</p> <p>An Evaluative Review On Various Tele-HealthSystems Proposed In COVID Phase Authors: Tanima Bhowmik, Rohan Mojumder, Dibyendu Ghosh, and Indrajit Banerjee</p> <p style="text-align: center;">Paper ID: 91</p> <p>Deep Features for COVID-19 Detection: Performance Evaluation on Multiple Classifiers Authors: Asifuzzaman Lasker, Mridul Ghosh, Sk Md Obaidullah, Chandan Chakraborty, and Kaushik Roy</p> <p style="text-align: center;">Paper ID: 165</p> <p>An Impact Study on Covid-19 with Sustainable Sports Tourism: Intelligent Solutions, Issues and Future Challenges Authors: Saumendra Das, Sharmila Subudhi, and Prof. Janmenjoy Nayak</p>
17.15-17.30	Break / Networking	
17.30 -18:30	Cultural Program	
24 th April 2022 (Day 2) (All times are in IST)		
09:00-10:00	<p style="text-align: center;">KEYNOTE TALK- 3</p> <p>Speaker: Prof. Preetam Ghosh (Virginia Commonwealth University) & Dr. Satyaki Roy (Frederick National Laboratory for Cancer Research) Title: <i>Computational Models to Inform Public Behavior and Policymaking in the Post Pandemic World</i> Session Chair: Dr. Surajeet Ghosh, IEST, Shibpur Co-ordinators: Mehwish Naushin, Sriparna Mandal</p>	
10.00-10:15	Tea Break	
10:15-11:15	<p style="text-align: center;">KEYNOTE TALK- 4</p> <p>Speaker: Prof. Sheryl Brahnem, Professor ITS, Missouri State University Title: <i>Building Robust CNN Ensembles with Tools such as different Activation Functions and Data Augmentation Techniques</i> Session Chair: Prof. Asit Kumar Das, IEST, Shibpur Co-ordinators: Mrinal Kanti Ghosh, Ardhendu Sarkar</p>	
11:15-11:30	Tea Break	
11.30-13.30	<p style="text-align: center;">TS: 5</p> <p style="text-align: center;">Intelligent Text and Video Processing</p> <p style="text-align: center;">Session Chairs:</p> <ol style="list-style-type: none"> 1. Dr. Soumi Dutta, IEM, Kolkata 2. Dr. Tamal Pal, IEST, Shibpur <p style="text-align: center;">Co-ordinators: Mehwish Naushin, Sourav Kumar Mitra</p>	<p style="text-align: center;">TS:6</p> <p style="text-align: center;">Computational Intelligence in Control and Communication</p> <p style="text-align: center;">Session Chairs:</p> <ol style="list-style-type: none"> 1. Dr. Paramita Chattopadhyay, IEST, Shibpur 2. Dr. Debdeep Saha, IEST, Shibpur <p style="text-align: center;">Co-ordinators: Sriparna Mandal, Susmita Das</p>

	<p>Paper ID: 36 Summarization of Comic Videos Authors: Tanushree Das, Arpita Dutta, and Samit Biswas</p> <p>Paper ID: 38 TextUnet: Text Segmentation Using U-net Authors: Awritrojit Banerjee, Ranjit Ghoshal, and Arijit Ghosal</p> <p>Paper ID: 50 Audio Driven Artificial Video Face Synthesis Using GAN and Machine Learning Approaches Authors: Arnab Kumar Das and Ruchira Naskar</p> <p>Paper ID: 102 Automatic Question Generation from Education Videos Authors: Janani Priya T, Sabari Priya K P, Raxxelyn Jenneyl L, and Uma K V</p> <p>Paper ID: 106 A Proposed Federated Learning Model for Vaccination Tweets Authors: Medha Singh, Madhulika, and Shefali Bansal</p> <p>Paper ID: 116 Smart Surveillance Video Monitoring for Home Intruder Detection using Deep Neural Network Authors: Rishav Chakraborty, Shubham Kumar, Shubhadip De, and Oishila Bandyopadhyay</p> <p>Paper ID: 141 Design of an image transmission system employing a hybridization of bit-plane slicing, run-length encoding and vector quantization based visual cryptography scheme Authors: Surya Sarathi Das and Kaushik Das Sharma</p> <p>Paper ID: 155 Secure Sharing of Medical Images using Watermarking Technique Authors: Priyanka Priyadarshini, Alina Dash, and Kshiramani Naik</p>	<p>Paper ID: 18 Performance Analysis of Hybrid Filter using PI and PI-Fuzzy based UVTG Technique Authors: B. Pavankumar and Saroj Pradhan</p> <p>Paper ID: 24 A Novel Approach to Detect Power Theft in a Distribution System Using Machine Learning and Artificial Intelligence Authors: Abhinandan De and Somesh Lahiri Chakravarty</p> <p>Paper ID: 29 Islanding Detection in Microgrid Using Decision Tree Pattern Classifier Authors: Shyamal Das and Abhinandan De</p> <p>Paper ID: 56 Design of an Elevator Traffic System Using MATLAB Simulation Authors: Ibidun Christiana Obagbuwa and MorapediTshepang Duncan</p> <p>Paper ID: 108 A proposed Fuzzy Logic model for Waste Water Treatment Analysis Authors: Kanishk Srivastava, Chirag Handa, and Dr Madhulika</p> <p>Paper ID: 121 AGC based Market Modeling of Deregulated Power System Employing Electric Vehicles and Battery Energy Storage System Authors: Debdeep Saha, Rajesh Panda and Bipul Kumar Talukdar</p> <p>Paper ID: 179 Moth Flame Optimization Algorithm optimized Modified TID Controller for automatic generation control of multi area power system Authors: K. Alfoni Jose, G RaamDheep, and Tulasichandra Sekhar Gorripotu</p>
13:30-14:30	Lunch Break	
14:30-16:30	<p style="text-align: center;"><u>TS: 7</u></p> <p style="text-align: center;"><u>Computational Intelligence with Data Mining</u></p> <p style="text-align: center;">Session Chairs:</p> <p style="text-align: center;">1. Dr Janmenjoy Nayak, MSCB University, Baripada 2. Dr. Bighnaraj Naik, VSSUT, Burla</p> <p style="text-align: center;">Co-ordinators: Mrinal Kanti Ghosh, Raina Paul</p> <p style="text-align: center;">Paper ID: 64 A Simple Strategy for Handling 'NOT' can Improve the Performance of Sentiment Analysis Authors: Ranit Kumar Dey and Asit Kumar Das</p>	<p style="text-align: center;"><u>TS: 8</u></p> <p style="text-align: center;"><u>Advances in Intelligent Simulation & Modeling</u></p> <p style="text-align: center;">Session Chairs:</p> <p style="text-align: center;">1. Dr. Apurba Sarkar, IEST, Shibpur 2. Dr. Santanu Phadikar, MAKAUT, WB</p> <p style="text-align: center;">Co-ordinators: Ardhendu Sarkar, Sangita Dutta</p> <p style="text-align: center;">Paper ID: 43 Impact of Security in Blockchain based Real Time Applications Authors: Ankush Kumar Gaur and J. Arul Valan</p>

	<p>Paper ID: 67 Rule-based Classification using Particle Swarm Optimization for Heart Disease Prediction Authors: Udit Basu, Shraya Majumdar, Shreyasee Dutta, Soumyajit Mullick, Sagnik Ganguly, and Priyanka Das</p> <p>Paper ID: 78 A Commercial Banking Industry Resilience in the Case of Pandemic: An Impact Analysis through ANOVA Authors: Sweta Mishra, Shikta Singh and Debabrata Singh</p> <p>Paper ID: 104 Features Selection for Vessel Extraction inspired by Survival of the Fittest method Authors: Sumit Mukherjee, Ranjit Ghoshal, and Bibhas Chandra Dhara</p> <p>Paper ID: 107 A New Reversible Data Hiding Scheme by Altering Interpolated Pixels Exploiting Neighbor Mean Interpolation (NMI) Authors: Manasi Jana, Biswapati Jana, and Shubhankar Joardar</p> <p>Paper ID: 124 Acute Lymphocytic Leukemia Classification using Color and Geometry Based Features Authors: Sourav Chandra Mandal, Oishila Bandyopadhyay, and Sanjoy Pratihar</p> <p>Paper ID: 128 Wrapper based Feature Selection Approach using Black Widow Optimization Algorithm for Data Classification Authors: Himanshu Dutta, Mahendra Kumar Gourisaria, and Himansu Das</p> <p>Paper ID: 131 An Intelligent Framework towards Managing Big Data in Internet of Healthcare Things Authors: Sujit Bebornta and Sumanta Kumar Singh</p>	<p>Paper ID: 98 Thermal Image Augmentation with Generative Adversarial Network for Agricultural Disease Prediction Authors: Ishita Bhakta, Santanu Phadikar, and Koushik Majumder</p> <p>Paper ID: 126 Thermal Strain Resolution Improvement in Brillouin OTDR based DTS System using LWT-MPSO Technique Authors: Ramji Tangudu and P. Sirish Kumar</p> <p>Paper ID: 129 Multi-objective Optimization for Complex Trajectory Tracking of 6-DOF Robotic Arm Manipulators Authors: Bivash Chakraborty, Rajarshi Mukhopadhyaya, and Paramita Chattopadhyay</p> <p>Paper ID: 149 A Hybrid Semi-Supervised Learning with nature-inspired Optimization for Intrusion Detection System in IoT Environment Authors: Dukka Karun Kumar Reddy, Janmenjoy Nayak, and H.S Behera</p> <p>Paper ID : 176 A Game Theoretic Group Coordination Strategy for Multi Robot Navigation Authors: Buddhadeb Pradhan, Jnyana Ranjan Mohanty, Rabindra Kumar Barik and Diptendu Sinha Roy</p> <p>Paper ID : 180 Identification of malicious access in IoT Network by using Artificial Physics Optimized Light Gradient Boosting Machine Authors: Etuari Oram, Bighnaraj Naik, Manas Ranjan Senapati, and Geetanjali Bhoi</p>
16:30-16:35	Break	
16:35-17:00	Valedictory / Vote of Thanks	