



18th International Conference on Distributed Computing and Intelligent Technology

Organized By
Kalinga Institute of Industrial Technology (KIIT),
Deemed to be University, Bhubaneswar, Odisha, India
19th - 23rd, January 2022

Program Schedule (Online)

Wednesday, January 19, 2022 [Day: 1] (Venue: WL1 – Campus 15)

Time	Program												
9.00 AM – 10.00 AM	Registration and Preparation												
10.00 AM – 11.00 AM	Invited Talk 1: Prof. U. Deva Priyakumar, IIIT Hyderabad, India Title: Role of AI in the COVID19 Pandemic Session Chair: Dr. Raju Bapi, IIIT Hyderabad, India												
11.00 AM – 11.20 AM	Tea Break												
11.20 AM – 12.20 PM	Paper Presentation Session 1: Distributed Computing (DC) Track (Full Paper ID: 36,43,45) & (Short Paper ID: 46)												
	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 15%;">Full Paper ID</th> <th>Paper Details</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">36</td> <td>Paper Title: A Distributed Algorithm for Constructing an Independent Dominating Set Paper Author: Suman Banerjee, Abhishek Dogra, Anurag Kumar Singh, and Subhasis Bhattacharjee</td> </tr> <tr> <td style="text-align: center;">43</td> <td>Paper Title: An Approach to Cost Minimization with EC2 Spot Instances using VM based Migration Policy Paper Author: Sharmistha Mandal, Sk Shahryar Saify, Anurita Ghosh, Giridhar Maji, Sunirmal Khatua and Rajib K Das</td> </tr> <tr> <td style="text-align: center;">45</td> <td>Paper Title: Transforming medical resource utilization process to verifiable timed automata models in Cyber-Physical Systems Paper Author: Rizwan Parveen and Neena Goveas</td> </tr> <tr> <th colspan="2" style="background-color: #f2f2f2;">Short Paper ID</th> </tr> <tr> <td style="text-align: center;">46</td> <td>Paper Title: MCDPS: An Improved Global Scheduling Algorithm for Multiprocessor Mixed-criticality Systems Paper Author: Lalatendu Behera</td> </tr> </tbody> </table>	Full Paper ID	Paper Details	36	Paper Title: A Distributed Algorithm for Constructing an Independent Dominating Set Paper Author: Suman Banerjee, Abhishek Dogra, Anurag Kumar Singh, and Subhasis Bhattacharjee	43	Paper Title: An Approach to Cost Minimization with EC2 Spot Instances using VM based Migration Policy Paper Author: Sharmistha Mandal, Sk Shahryar Saify, Anurita Ghosh, Giridhar Maji, Sunirmal Khatua and Rajib K Das	45	Paper Title: Transforming medical resource utilization process to verifiable timed automata models in Cyber-Physical Systems Paper Author: Rizwan Parveen and Neena Goveas	Short Paper ID		46	Paper Title: MCDPS: An Improved Global Scheduling Algorithm for Multiprocessor Mixed-criticality Systems Paper Author: Lalatendu Behera
	Full Paper ID	Paper Details											
	36	Paper Title: A Distributed Algorithm for Constructing an Independent Dominating Set Paper Author: Suman Banerjee, Abhishek Dogra, Anurag Kumar Singh, and Subhasis Bhattacharjee											
	43	Paper Title: An Approach to Cost Minimization with EC2 Spot Instances using VM based Migration Policy Paper Author: Sharmistha Mandal, Sk Shahryar Saify, Anurita Ghosh, Giridhar Maji, Sunirmal Khatua and Rajib K Das											
	45	Paper Title: Transforming medical resource utilization process to verifiable timed automata models in Cyber-Physical Systems Paper Author: Rizwan Parveen and Neena Goveas											
Short Paper ID													
46	Paper Title: MCDPS: An Improved Global Scheduling Algorithm for Multiprocessor Mixed-criticality Systems Paper Author: Lalatendu Behera												
12.20 PM – 1.20 PM	Lunch Break												
1.20 PM – 1.30 PM	Inauguration of Ph.D. Research Symposium												



1.30 PM – 2.30 PM	Ph.D. Research Symposium Paper Presentation Session 1: (Paper ID: 5, 7, 10, 11)										
	<table border="1"><thead><tr><th>Paper ID</th><th>Paper Details</th></tr></thead><tbody><tr><td>5</td><td>Paper Title: Design of Efficient Algorithms for Mobile Charging in Wireless Sensor Networks Paper Author: <i>Abhinav Tomar</i></td></tr><tr><td>7</td><td>Paper Title: Registration of Point Clouds for Human Face Recognition Paper Author: <i>Parama Bagchi</i></td></tr><tr><td>10</td><td>Paper Title: Classifying the Social Media Author Profile through a Multimodal Representation Paper Author: <i>Miguel Angel Alvarez Carmona</i></td></tr><tr><td>11</td><td>Paper Title: An Investigation into Effective Fault Localization Paper Author: <i>Arpita Dutta</i></td></tr></tbody></table>	Paper ID	Paper Details	5	Paper Title: Design of Efficient Algorithms for Mobile Charging in Wireless Sensor Networks Paper Author: <i>Abhinav Tomar</i>	7	Paper Title: Registration of Point Clouds for Human Face Recognition Paper Author: <i>Parama Bagchi</i>	10	Paper Title: Classifying the Social Media Author Profile through a Multimodal Representation Paper Author: <i>Miguel Angel Alvarez Carmona</i>	11	Paper Title: An Investigation into Effective Fault Localization Paper Author: <i>Arpita Dutta</i>
	Paper ID	Paper Details									
	5	Paper Title: Design of Efficient Algorithms for Mobile Charging in Wireless Sensor Networks Paper Author: <i>Abhinav Tomar</i>									
	7	Paper Title: Registration of Point Clouds for Human Face Recognition Paper Author: <i>Parama Bagchi</i>									
10	Paper Title: Classifying the Social Media Author Profile through a Multimodal Representation Paper Author: <i>Miguel Angel Alvarez Carmona</i>										
11	Paper Title: An Investigation into Effective Fault Localization Paper Author: <i>Arpita Dutta</i>										
2.30 PM – 2.40 PM	<i>Tea Break</i>										
2.40 PM – 2.50 PM	Inauguration of Industry Symposium										
2.50 PM – 3.50 PM	Invited Talk: <i>Debashish Das, Moderator, TCS Cyber Security Practice, India</i> Title: <i>Innovative Strategies to Build Secure Enterprise Applications at Scale</i> Session Chairs: Dr. Prachet Bhuyan, KIIT, 9337019321										
3.50 PM – 4.50 PM	Panel Discussion - Industry Symposium - "Application Security - A Paradigm Shift in the context of the pandemic" Panelists: <i>Anupama Ganta Edward</i> (Vice President, Global Cyber Security Services, Standard Chartered Bank) <i>Karthigeyan Sethumadhavan</i> (Country Head, TCS Taiwan) <i>Srimant Acharya</i> (Global Head, Enterprise Vulnerability Management, TCS Cyber Security Practice) <i>Tanya Kravtsov</i> (Senior Director, Audible Inc., USA) <i>Debasish Das</i> (Moderator, TCS Cyber Security Practice, India)										
4.50 PM – 5.00 PM	<i>Tea Break</i>										
5.00 PM – 6.00 PM	Invited Talk 2: <i>Prof. Matthew E. Taylor, University of Alberta, Canada</i> Title: <i>Reinforcement Learning and Human-Agent Teaming: Challenges and Opportunities</i> Session Chair: Dr. Swarup Mahalik, Research Scientist, Ericsson, Bangalore										
6.00 PM – 6.20 PM	<i>Tea Break</i>										



6.20 PM – 7.30 PM	Ph.D. Research Symposium Paper Presentation Session 2: (Paper ID: 12, 13, 17, 18, 20)	
	Paper ID	Paper Details
	12	Paper Title: Dependability Analysis for Transaction Processing in On-Demand Computing System Paper Author: Dharmendra Prasad Mahato
	13	Paper Title: Investigating and Devising Privacy Preserving Approaches for Location-based Services Paper Author: Ruchika Gupta
	17	Paper Title: Design of Intelligent Scheduling Algorithms for Cloud Computing Paper Author: Kaushik Mishra
	18	Paper Title: Studies in Algorithms and Architectures for Sample Preparation with Digital Microfluidics Paper Author: Nilina Bera
20	Paper Title: Application of Soft Computing Techniques in Database Intrusion Detection Paper Author: Anitarani Brahma	

Thursday, January 20, 2022 [Day: 2] (Venue: Conference Hall 4 – Campus 6)

Time	Program						
9.00 AM – 10.00 AM	Registration and Preparation						
10.00 AM – 11.00 AM	Paper Presentation Session 2: Distributed Computing (DC) Track (Full Paper ID: 62, 68) & (Short Paper ID: 65)						
	<table border="1"> <thead> <tr> <th>Full Paper ID</th> <th>Paper Details</th> </tr> </thead> <tbody> <tr> <td>62</td> <td>Paper Title: An SDN Implemented Adaptive Load balancing Scheme for Mobile Networks Paper Author: Madhukrishna Priyadarsini and Padmalochan Bera</td> </tr> <tr> <td>68</td> <td>Paper Title: Rewriting Logic & Petri Nets: a natural model for distributed, self-adaptive systems Paper Author: Lorenzo Capra</td> </tr> </tbody> </table>	Full Paper ID	Paper Details	62	Paper Title: An SDN Implemented Adaptive Load balancing Scheme for Mobile Networks Paper Author: Madhukrishna Priyadarsini and Padmalochan Bera	68	Paper Title: Rewriting Logic & Petri Nets: a natural model for distributed, self-adaptive systems Paper Author: Lorenzo Capra
	Full Paper ID	Paper Details					
	62	Paper Title: An SDN Implemented Adaptive Load balancing Scheme for Mobile Networks Paper Author: Madhukrishna Priyadarsini and Padmalochan Bera					
68	Paper Title: Rewriting Logic & Petri Nets: a natural model for distributed, self-adaptive systems Paper Author: Lorenzo Capra						
<table border="1"> <thead> <tr> <th>Short Paper ID</th> <th>Paper Details</th> </tr> </thead> <tbody> <tr> <td>65</td> <td>Paper Title: Replication Based Fault Tolerance Approach for Cloud Paper Author: Kamal K Agarwal and Hari Babu</td> </tr> </tbody> </table>	Short Paper ID	Paper Details	65	Paper Title: Replication Based Fault Tolerance Approach for Cloud Paper Author: Kamal K Agarwal and Hari Babu			
Short Paper ID	Paper Details						
65	Paper Title: Replication Based Fault Tolerance Approach for Cloud Paper Author: Kamal K Agarwal and Hari Babu						
11.00 AM- 11.20 AM	Tea Break						



11.20 AM-12.20 PM	Paper Presentation Session 3: Intelligent Technology (IT) Track (Full Paper ID: 34, 60, 66) & (Short Paper ID: 42)	
	Full Paper ID	Paper Details
	34	Paper Title: A comparative study on MFCC and Fundamental Frequency-based speech emotion classification Paper Author: <i>Asfahan Shah and Tanmay Bhowmik</i>
	60	Paper Title: Efficient Traffic Routing in Smart Cities to Minimize Evacuation Time during Disasters Paper Author: <i>Sayan Sen Sarma, Bhabani P Sinha, and Koushik Sinha</i>
	66	Paper Title: Early Detection of Parkinson's Disease as a Pre-diagnosis Tool Using various classification techniques on Vocal features Paper Author: <i>Vaibhaw Vaibhaw, Pratik Behera, Vaibhav Bal and Jay Sarraf</i>
	Short Paper ID	Paper Title
	42	Paper Title: Deep Learning and Linguistic based Automatic Multiple Choice Question generation from text Paper Author: <i>Rajat Agarwal, Vaishnav Negi, Akshat Kalra, and Ankush Mittal</i>
12.20 PM – 1.20 PM	Lunch Break	
1.20 PM – 2.30 PM	Ph.D. Research Symposium Paper Presentation Session 3: (Paper ID: 21, 22, 24, 27)	
	Paper ID	Paper Details
	21	Paper Title: Design and Applications of Improved Meta-Heuristic Algorithms for Neural Network Training Paper Author: <i>Nibedan Panda</i>
	22	Paper Title: Self-Organized and Self-Sustainable Autoscaling for Scientific Workflow Application in Cloud Environment Paper Author: <i>Monika Kumari</i>
	24	Paper Title: Development of Fuzzy based Methodologies for Decision Making Problem Paper Author: <i>Avijit De</i>
27	Paper Title: Density-Based Mining Algorithms for Dynamic Data: An Incremental Approach Paper Author: <i>Panthadeep Bhattacharjee</i>	
2.30 PM – 3.30 PM	Invited Talk 3: Prof. Hagit Attiya, Technion, Israel Title: <i>Preserving Hyperproperties when Using Concurrent Objects</i> Session Chair: Dr. Sandeep Kulkarni, Michigan State University, USA	
3..30 PM – 3.50 PM	Tea Break	
3.50 PM – 4.50 PM	Invited Talk 4: Prof. Michael Cashmore, Univ. of Strathclyde, Glasgow Title: <i>Some advanced topics in Explainable AI Planning (XAIP)</i> Session Chair: Dr. Swarup Mahalik, Research Scientist, Ericsson, Bangalore	
6.00 PM Onwards	Inaugural Function	



Friday, January 21, 2022 [Day: 3] (Venue: WL 1 – Campus 15)

Time	Program												
9.00 AM – 10.00 AM	Registration and Preparation												
10.00 AM – 10.10 AM	Inauguration of Project Innovation Contest (PIC)												
10.10 AM – 11.00 AM	PIC Evaluation: Project Presentation Project ID: 8, 14												
11.00 AM – 11.20 AM	Tea Break												
11.20 AM – 12.20 PM	Paper Presentation Session 4: Intelligent Technology (IT) Track (Full Paper ID: 71, 72, 73) & (Short Paper ID: 44)												
	<table border="1"> <thead> <tr> <th>Full Paper ID</th> <th>Paper Details</th> </tr> </thead> <tbody> <tr> <td>71</td> <td>Paper Title: Extracting Emotion Quotient of Viral Information over Twitter Paper Author: Pawan Kumar, Reiben Eappen Reji, & Vikram Singh</td> </tr> <tr> <td>72</td> <td>Paper Title: A Novel Modified Harmonic mean combined with Cohesion Score for Multi-document Summarization Paper Author: Rajendra Kumar Roul and Jajati Keshari Sahoo</td> </tr> <tr> <td>73</td> <td>Paper Title: Multi-channel Deep Model for Classification of Alzheimer's Disease Using Transfer Learning Paper Author: Sriram Dharwada, Jitendra Tembhurne, & Tausif Diwan</td> </tr> <tr> <th>Short Paper ID</th> <th>Paper Details</th> </tr> <tr> <td>44</td> <td>Paper Title: A Deep Multi-Kernel Uniform Capsule Approach For Hate Speech Detection Paper Author: Vipul Shah, Sandeep Udmale, Vijay Sambhe & Amey Bhole</td> </tr> </tbody> </table>	Full Paper ID	Paper Details	71	Paper Title: Extracting Emotion Quotient of Viral Information over Twitter Paper Author: Pawan Kumar, Reiben Eappen Reji, & Vikram Singh	72	Paper Title: A Novel Modified Harmonic mean combined with Cohesion Score for Multi-document Summarization Paper Author: Rajendra Kumar Roul and Jajati Keshari Sahoo	73	Paper Title: Multi-channel Deep Model for Classification of Alzheimer's Disease Using Transfer Learning Paper Author: Sriram Dharwada, Jitendra Tembhurne, & Tausif Diwan	Short Paper ID	Paper Details	44	Paper Title: A Deep Multi-Kernel Uniform Capsule Approach For Hate Speech Detection Paper Author: Vipul Shah, Sandeep Udmale, Vijay Sambhe & Amey Bhole
	Full Paper ID	Paper Details											
	71	Paper Title: Extracting Emotion Quotient of Viral Information over Twitter Paper Author: Pawan Kumar, Reiben Eappen Reji, & Vikram Singh											
	72	Paper Title: A Novel Modified Harmonic mean combined with Cohesion Score for Multi-document Summarization Paper Author: Rajendra Kumar Roul and Jajati Keshari Sahoo											
	73	Paper Title: Multi-channel Deep Model for Classification of Alzheimer's Disease Using Transfer Learning Paper Author: Sriram Dharwada, Jitendra Tembhurne, & Tausif Diwan											
Short Paper ID	Paper Details												
44	Paper Title: A Deep Multi-Kernel Uniform Capsule Approach For Hate Speech Detection Paper Author: Vipul Shah, Sandeep Udmale, Vijay Sambhe & Amey Bhole												
12.20 PM – 1.20 PM	Lunch Break												
1.20 PM – 2.20 PM	Invited Talk 5: Prof. Philippas Tsigas, Chalmers University of Technology, Sweden Title: <i>Convergence, Consistency, and Adaptiveness in Parallel Stochastic Gradient Descent</i> Session Chair: Dr. Sathya Peri, IIT Hyderabad, India												
2.20 PM – 2.40 PM	Tea Break												
2.40 PM – 3.40 PM	Invited Talk 6: Prof. Roger Wattenhofer, ETH Zurich, Switzerland Title: <i>Graph Neural Networks</i> Session Chair: Dr. Sathya Peri, IIT Hyderabad, India												
3.40 PM – 4.00 PM	Tea Break												
4.00 PM – 7.00 PM	PIC Evaluation - Project Presentation Project ID: 1, 5, 6, 9, 10, 11, 13, 15												



Saturday, January 22, 2022 [Day - 4] (Venue: WL 1 - Campus 15)

1st Workshop Deep Learning and its Applications

Inaugural Session

(9:15 AM - 9:25 AM)

Time	Speaker	Talk title
Technical Session-I		
9:30 AM - 10:00 AM	Dr. Dipti Prasad Mukherjee Deputy Director and Professor (HAG) Electronics and Communication Sciences Unit, CCSD, Indian Statistical Institute, Kolkata	Deep Learning or Cheap Learning
10:00 AM - 11:30 AM	Dr. Bikash Santra Visiting Scientist, Electronics and Communication Sciences Unit, Indian Statistical Institute, Kolkata	Let's Recognize Objects in Images: From Theory to Practice (Part- I)
12:00 PM - 1:30 PM	Mr. Saikat Sarkar Asst. Professor, Dept. of Computer Science, Bangabasi College, University of Calcutta	Let's Recognize Objects in Images: From Theory to Practice (Part- II)
Lunch Break		
Technical Session-II		
2:30 PM - 3:30 PM	Dr. Rituparna Sarkar Scientific Researcher, Institut Pasteur, Paris Researcher in the area of image analysis, machine learning, and bioimage informatics	Deep learning applications for bioimage informatics
Feedback Session		
Word of Thanks		
4:15 PM – 5:15 PM	Closing Ceremony	