

2020 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (2020 IEEE DISCOVER)

October 30 – 31, 2020

Shri Madhwa Vadiraja Institute of Technology and Management, Bantakal, Udupi, India

Organized by IEEE Mangalore Sub-Section

29-10-2020 3:15 - 4:15 PM Inauguration by Shri Shri Vishwavallabha Theertha Shripadaru

1st Day: October 30, 2020 Friday

30-10-2020	9:15 - 10:15 AM	Dr. Supawadee Aramvith	Deep Learning-Based Video Analytics for Surveillance IoT Applications
	10:15 - 11:15 AM	Dr. Lakshminarayana Sadasivuni	Role of Technology in minimizing the inequality in Human Development
	11:15 - 11:30 AM	Break	
	11:30 AM - 12:30 PM	Dr. Rajkumar Buyya	Neoteric Frontiers in Cloud and Edge Computing
	13:30 - 2:00 PM	Break	
	Paper Presentation Sessions - Distributed Computing Track		
	2:00 - 2:20 PM	12 <b>Rajashree Krishna</b> and Prema K V	Soybean Crop disease classification using machine learning techniques
	2:20 - 2:40PM	13 <b>Swapna Saturi</b>	Development of Prediction and Forecasting Model for Dengue Disease using Machine Learning Algorithms
	2:40 - 3:00 PM	27 <b>Seema Kanagond, Supriya Huddar, Sushma Hoolageri, Vinutha Kupatkar, Rajeshwari Itagi and Soumya Jolad</b>	Smart Assistive Device for Senior Citizens
	3:00 - 3:20 PM	52 <b>Tejas Khare</b> and Anuradha Phadke	Automated Crop Field Surveillance using Computer Vision
Paper Presentation Sessions - Communications Track			
3:40 - 4:00 PM	21 <b>Melchizedek Das</b> , Sai Santosh Ambati and K Chandrasekaran	A Heuristic Algorithm to Find a Path to be Blocked by Minimizing Traffic Disruption	
4:00 - 4:20 PM	14 <b>Vidya Rao</b> and Prema K V	Lightweight Authentication and Data Encryption Scheme for IoT Applications	
4:20 - 4:40 PM	34 <b>Soumya J Bhat</b> and Santhosh K V	Priority Based Localization for Anisotropic Wireless Sensor Networks	
4:40 - 5:00 PM	48 Pradeep A S, G A Bidkar, <b>Thippesha D</b> , Nagaraj, Spurthi M P M and Vishal	Design of Compact Beam-Steering Antenna with a Novel Metasubstrate Structure	
Paper Presentation Sessions - Robotics Track			
2:00 - 2:20 PM	17 <b>Sofia D'Souza</b> , Prema K V and Balaji S	Feature Selection and Modeling using Statistical and Machine learning Methods	
2:20 - 2:40PM	35 Anusheel Goswami, Tinkumoni Kalita, Rajneesh Kashyap, <b>Tabassum Rasul</b> and Koena Mukherjee	Homing of a Robot	
2:40 - 3:00 PM	60 <b>Maninder Singh</b> , Gurjinder Singh, Bob Gill, Ishu Bansal and Himanshu Kapoor	Enabling Online Education in Government Schools in India	
3:00 - 3:20 PM	132 <b>Mahesh S Gour</b> , Druva Kumar S, Pradeep Kumara V. H, Manjunatha S, Sunil Kumar K H and Chetan H	Arduino based smart and intelligent helmet system for two wheelers	
Paper Presentation Sessions - Healthcare Track			
3:40 - 4:00 PM	153 <b>Tejaswini H</b> , Manohara Pai, Radhika Pai, Girija Attigeri and Revathi P. Shenoy	An ontology based decision support system for nutrition deficiency	
4:00 - 4:20 PM	41 <b>Trivikrama Bhat</b> , Akanksha, Shrikara, Shreya Bhat and Manoj T	A Real-Time IoT Based Arrhythmia Classifier Using Convolutional Neural Networks	
4:20 - 4:40 PM	39 <b>Shreya Prabhu</b> and Roshan J Martis	Computer Aided Tool for diagnosing Epilepsy using Kolmogorov Complexity and Approximate Entropy	
4:40 - 5:00 PM	66 <b>Shyam Vattamthanam</b> , Mrudula G B and C, Santhosh Kumar	Sleep Apnea Classification Using Deep Neural Networks	
5:00 - 5:20 PM	67 <b>Aishwarya Balakrishnan</b> , Jeevan Medikonda and Pramod Namboothiri	Analysis of the effect of muscle fatigue on gait characteristics using data acquired by wearable sensors	
Paper Presentation Sessions - Electronics and Electrical Circuits Track			
2:00 - 2:20 PM	62 <b>Anirudh Sivakumar and Pratik Mohanty</b>	Electronic System Design of a Formula Student Electric Car	
2:20 - 2:40PM	29 <b>Mary Ann George</b> , I V L Durga Bhavani and Dattaguru V. Kamath	EX-CCII based FOPID controller for electric vehicle speed control	
2:40 - 3:00 PM	38 <b>Praveena Krishna P. S.</b> , Jayalakshmi N. S. and Sudarshan A.	Sliding Mode Control of Coupled Inductor Based Bidirectional Converter Topology for Electric Vehicle Application	
Paper Presentation Sessions - VLSI Design Track			
3:20 - 3:40 PM	42 <b>Sri Harsha Bandarupalli</b> , Bala Pavan Kalyan Bandi, Rahul Kumar Reddy Boggula and Kirti Pande	Compressor Using Full Swing XOR Logic Gate	
3:40 - 4:00 PM	51 <b>Konda Nandan Kumar</b> , Nagireddy Venkata Sai Anvesh Reddy, Peela Shamukh and M. Vinodhini	Matrix based Error Detection and Correction using Minimal Parity Bits for Memories	
4:00 - 4:20 PM	86 <b>Akash Kumar R</b> , Ashish Ashok Shetty, Mohammed Saud, Preemal Sharanya Serrao and Rohan Pinto	Design and Implementation of 64-bit Parallel Prefix Adder	
4:20 - 4:40 PM	24 <b>P Swetha</b> , P Sai Meghana, Jonnala Charisma and Kirti Pande	Speed Improvement in SRAM Cell Using Transmission Gates	
4:40 - 5:00 PM	109 <b>Swathi U</b> and Smitha U	Design and Implementation of Efficient RGB to Gray scale Converter Architectures Using Reversible Logic	
5:00 - 5:20 PM	128 <b>Melannie Fernandes</b> , Alrida Monteiro, Anjetha Joseph Mathew, Glany Vinita Colaco and Keith Raymond Fernandes	The Mechanism to Combat Data Leakage Trojans in Circuits using Randomized Encoding	
5:20 - 6:25 PM	Live Streaming of Yakshagana (Recorded Performance of SMVITM Staff members and Students)		
6:30 - 7:30 PM	Dr. P R Mukund		
Veda and Electronics			

2nd day: October 31, 2020 Saturday

	Paper Presentation Sessions - Communications Track		
	9:30 - 9:50 AM	18 <b>Ipsita Upasana</b> , Nanditha Nandanavanam, Ankitha Nandanavanam and Nadiya Naaz	Performance Characteristics of NTRU and ECC Cryptosystem in context of IoT Environment
	9:50 - 10:10 AM	108 <b>Y V Sneha</b> , Vimitha, Boloor Shravan, Vishwasini and N.D Adesh	Prediction of Network Congestion at Router using Machine Learning Technique
	10:10 - 10:30 AM	114 <b>Aslam Nandyal</b> and Dr. Mohammed Rafi	Determining Feature Gaps Of Open Source Cloud Platforms for Mobile Backend as service (MBaaS) in Enterprise Mobile Applications
Paper Presentation Sessions - Distributed Computing Track			
10:50 - 11:10 AM	65 <b>Meeradevi K</b>	Analysis of Agricultural Supply Chain Management for Traceability of Food Products using Blockchain-Ethereum Technology	
11:10 - 11:30 AM	78 <b>Ranjana Venkatesh</b> , Rithika Bellad, Meeradevi K, Soumya Sawkar and Poornima Keerthi	Design and Development of Efficient Techniques for Leaf Disease Detection using Deep Convolutional Neural Networks	
11:30 - 11:50 AM	116 <b>Sreesh Sangra</b> and Smitha N Pai	Price look out using web browser for the objects detected in the image	
11:50 - 12:10 PM	121 <b>Suhani Jattan</b> , Vineeth Kumar, Akhilesh R, Rachith R Naik and Sneha N S	Smart Complaint Redressal System Using Ethereum Blockchain	
12:10 - 12:30 PM	180 <b>Swathi Shetty</b> , Aishwarya Shetty, Aishwarya Hegde A, Anusha B Salian, Akshaya, Pruthviraj Umesh and K. V. Gangadharan	Experiential Learning of Physio-Chemical and Bacteriological Properties of Water using Virtual Labs	
Paper Presentation Sessions - Healthcare Track			

31-10-2020	9:30 - 9: 50 AM	143	<b>Shrikanth Rao S.K</b> and Roshan Joy Martis	Machine Learning Based Decision Support System for Atrial Fibrillation Detection using Electrocardiogram
	9:50 - 10:10 AM	76	Rakshith Kamath and <b>Anu Shaju Areekal</b>	Semi-automated estimation of spinal curvature from scoliosis radiographs using difference matrix
	10:10 - 10:30 AM	101	<b>Neha Sara John</b> , Natarajan Sriraam, Roshan Joy Martis, B. S. Supriya, M. S. Varsha and A. N. Jeevitha	Computational Method for Preterm Labor Prediction using Electrohysterogram
	10:30 - 10:50 AM	40	<b>Rudresh Shirwaikar</b> , Dinesh Acharya U, Tanvi Parate and Leslie Edward Simon Lewis	Risk Stratification of Neonates using Machine Learning Techniques
	<b>Paper Presentation Sessions - Robotics Track</b>			
	11:10 - 11:30 AM	135	<b>Girisha S</b> , Manohara Pai, Ujjwal Verma and Radhika Pai	Semantic Segmentation of UAV Videos based on Temporal Smoothness in Conditional Random Fields
	11:30 - 11:50 AM	136	<b>Ashutosh Holla</b> , Manohara Pai, Ujjwal Verma and Radhika Pai	Efficient Vehicle Counting by Eliminating Identical Vehicles in UAV aerial videos
	11:50 - 12:10PM	137	<b>Shreesha Surathkal</b> , Manohara Pai, Radhika Pai and Ujjwal Verma	COMPUTER VISION BASED FISH TRACKING AND BEHAVIOUR DETECTION SYSTEM
	12:10- 12:30 PM	64	<b>Anil B V</b> and Ravikumar M S	Voice Based Person Identification Using c-Mean and c-Medoid Clustering Techniques
	<b>Paper Presentation Sessions - Healthcare Track</b>			
	9:30 - 9: 50 AM	68	<b>Rahul Nanya</b> , Manjunath K N, Rajendra Kurady and Manuel K	Transmission of radiology images over an Unsecure Network Using Hybrid Encryption Schemes
	9:50 - 10:10 AM	118	<b>Rathi Adarshi Rammohan</b> , Jeevan Medikonda and Dan Issac Pothiyil	Speech Signal-Based Modelling of Basic Emotions to Analyse Compound Emotion: Anxiety
	10:10 - 10:30 AM	104	<b>Basavaraj Hiremath</b> , Natarajan Sriraam, B R Purnima and V Suresh Babu	Single Channel based Demarcation of Yogic and Non-Yogic Sleep Patterns using Observational Sleep EEG
	<b>Paper Presentation Sessions - Electrical and Electronics Circuits Track</b>			
	10:50 - 11:10 AM	142	<b>Bhagyashree Karur</b> and Sanjeevkumar R A	Multi level Transformerless PV inverter Based Real and Reactive Power Injection for Single Phase System
	11:10 - 11:30 AM	44	Jayalaxmi Rajesh Hanni and <b>Santhosh K V</b>	Time Response Analysis of Novel Helical Capacitance Level Sensor
	11:30 - 11:50 PM	117	Dr. Premananda B.S., <b>Nikhil K.J.</b> and Nirmal Jain C.M.	MEC S-box based PRESENT Lightweight Cipher for Enhanced Security and Throughput
	11:50 - 12:10 PM	90	Nagaraja Rao Sulake, <b>Veerabhadra</b> and Praveen Kumar Varanasi	Performance Analysis of Z – Source Inverter Topologies for Renewable Energy Sources and Fuel Cell Applications
	12:10 - 12:30 PM	91	<b>Nitin Kumar</b> , Sushma J Patil and M S Aspalli	A Switched Capacitor Multilevel Inverter with Voltage Boosting Ability
	12:30 - 2:00 PM		<b>Break</b>	
	2:00 -3:00 PM		<b>Valedictory Program</b>	