2023 IEEE Pune Section International Conference (PuneCon 2023)

Pune, India
14-16 December 2023

Additional Copies of This Publication Are Available From:

Day 1 - (15th December 2023)			Afternoon Slot 1 (2:15 pm to 3:45 pm)

Session 1 (Venue: AC201)
Microsoft Teams meeting link - https://msteams.link/Q4D8

Page #	Paper Title	Time Slot	Mode of Presentation
1	Non invasive approach for Dental Caries detection	2:15 pm to 2:30 pm	Online
6	Impact of Electric Vehicles on DISCOM: A vision to get prepared for the future	2:30 pm to 2:45 pm	
13	Analysis of uday scheme in improving financial health of indian power distribution companies pre covid-19	2:45 pm to 3:00 pm	
20	Design and Analysis of Thin Film Holographic Metasurface-Based Leaky wave Antenna	3:00 pm to 3:15 pm	
24	Automatic Attendance System Using Face Recognition	3:15 pm to 3:30 pm	

Session 2 (Venue: AC202)
Microsoft Teams meeting link - https://msteams.link/1C15

Page #	Paper Title	Time Slot	Mode of Presentation
28	Advanced Face Authentication using Deep Learning Models	2:15 pm to 2:30 pm	Online
34	Photonic Sensor For The Detection Of Hemoglobin In Blood For Development Of Point Of Care Diagnostics	2:30 pm to 2:45 pm	
38	Design and IoT Implementation of a LiDAR Assisted Large-area Video Surveillance Network	2:45 pm to 3:00 pm	
44	Lightweight Authentication Protocols for IoT Networks	3:00 pm to 3:15 pm	
50	A Comparative Analysis of Different Pre-processing Pipelines for EEG-based Preference Prediction in Neuromarketing	3:15 pm to 3:30 pm	
57	Feasibility Study of UV Spectroscopy for Measurement of Bone Mineral Density	3:30 pm to 3:45 pm	

Session 3 (Venue: AC203)
Microsoft Teams meeting link - https://msteams.link/GQG8

Page #	Paper Title	Time Slot	Mode of Presentation
63	Analysing various compensation schemes for inductive wireless power transfer	2:15 pm to 2:30 pm	Online
69	Mayfly Algorithm Optimized FOPID Regulator for Frequency Improvement in Wind Power Systems	2:30 pm to 2:45 pm	
74	Enhanced Vulnerability Discovery in Embedded Firmware Binaries through Function-Level Fuzzing	2:45 pm to 3:00 pm	
79	Enhanced 3D Scene Reconstruction using Synchronized Multiple Kinect Depth Cameras	3:00 pm to 3:15 pm	
83	Hybrid Clutter Suppression Technique for FOPEN Target Imaging Radar	3:15 pm to 3:30 pm	

Day 1 - (15th December 2023)		Afternoon Slot 1 (2:15 pm to 3:45 pm)	
Session 4 (Venue: AC204) **Microsoft Teams meeting link - https://msteams.link/RUDK**			
Page #	**Paper Title**	**Time Slot**	**Mode of Presentation**
89	XAI meets Ophthalmology: An Explainable Approach to Cataract Detection using VGG-19 and Grad-CAM	2:15 pm to 2:30 pm	Online
97	Exploring the Efficacy of Partial Denoising Using Bit Plane Slicing for Enhanced Fracture Identification: A Comparative Study of Deep Learning-Based Approaches and Handcrafted Feature Extraction Techniques	2:30 pm to 2:45 pm	
103	Advanced Disease Management: An Encoder-Decoder Approach for Tomato Black Mold Detection	2:45 pm to 3:00 pm	
107	Harnessing Deep Learning for Tea Tree Leaf Disease Management: A CNN-SVM Perspective	3:00 pm to 3:15 pm	
113	Multi-Level Citrus Greening Disease Recognition in Oranges using CNN and Random Forest	3:15 pm to 3:30 pm	
Session 5 (Venue: AC101) **Academic Complex, COEP Technological University**			
119	Fingerprint Quality Metric Fusion Framework	2:15 pm to 2:30 pm	Offline
123	CogniDrip: Real-time Saline Infusion Management with Measurement and Alert System	2:30 pm to 2:45 pm	
128	Leveraging Data Science for Mitigating GNSS Multipath and Signal Interference in IoT Devices	2:45 pm to 3:00 pm	
134	Home Automation System using Internet-of-Things & Blynk App	3:00 pm to 3:15 pm	
138	Penetration testing of smart meters against cyber attacks	3:15 pm to 3:30 pm	
Session 6 (Venue: AC102) **Academic Complex, COEP Technological University**			
143	Nanomaterial Based Biosensor For Diabetic Applications	2:15 pm to 2:30 pm	Offline
147	Silage Density Prediction using Neural Network	2:30 pm to 2:45 pm	
151	Thermal Image Enhancement Techniques Using Histograms for Better Visualization of the Larynx and Vocal Folds	2:45 pm to 3:00 pm	
155	An appropriate Histogram Equalization Technique for Thermal Image Enhancement of neck region	3:00 pm to 3:15 pm	
160	A Bow-Tie shaped Slot Antenna with Substrate Integrated Waveguide (SIW) and Periodic Patches for Gain and Bandwidth Improvement	3:15 pm to 3:30 pm	

Day 1 - (15th December 2023)		**Afternoon Slot 1 (2:15 pm to 3:45 pm)**	
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Session 7 (Venue: AC103) **Academic Complex, COEP Technological University**			
164	Opto-Electronic Oscillator Design for Photonic Radar System.	2:15 pm to 2:30 pm	
170	A Linear Closed Loop Feedback System for Beam Wander Correction in Medium-range Optical Link	2:30 pm to 2:45 pm	**Offline**
175	Development of SFCW based GPR for Sub-surface Scanning	2:45 pm to 3:00 pm	

Day 1 - (15th December 2023)		**Afternoon Slot 2 (4:00 pm to 5:45 pm)**	
Session 1 (Venue: AC201) **Microsoft Teams meeting link - https://msteams.link/1C15**			
Page #	**Paper Title**	**Time Slot**	**Mode of Presentation**
181	Advanced AI for Helianthus Disease Detection: A Hybrid CNN-KNN Model	4: 00 pm to 4:15 pm	
185	Application of Levenberg-Marquardt Algorithm in Neural Network based Actual Engine Torque Estimation and Monitoring	4:15 pm to 4:30 pm	
190	Multi Criteria Decision Making in Fantasy Sports	4:30 pm to 4:45 pm	**Online**
196	A Real-Time Object Dimension Estimation System	4:45 pm to 5.00 pm	
202	Medical Assistance for Detecting Cataract, Jaundice and Strabismus using Deep Learning	5:00 pm to 5:15 pm	
Session 2 (Venue: AC202) **Microsoft Teams meeting link - https://msteams.link/1C15**			
208	Smart Wearable For The Visually Impaired	4:15 pm to 4:30 pm	
214	Transforming the Prediction of Heart Disease: An Empirical Analysis of Machine Learning Classifiers	4:30 pm to 4:45 pm	
219	Classification Of Underwater Sea Species Using Convolutional Neural Network	4:45 pm to 5.00 pm	**Online**
224	A Comprehensive Analysis of Privacy Attacks and Mitigation Strategies in Federated Learning	5:00 pm to 5:15 pm	
230	Development of firm Security Plan for IoT with Continual Learning Algorithms	5:15 pm to 5:30 pm	

Day 1 - (15th December 2023)			Afternoon Slot 2 (4:00 pm to 5:45 pm)
Session 3 (Venue: AC203) **Microsoft Teams meeting link - https://msteams.link/1C15**			
Page #	**Paper Title**	**Time Slot**	**Mode of Presentation**
237	Magnetostrictive Sensor Based Bridge Health Assessment Using Machine Learning Classifiers	4: 00 pm to 4:15 pm	Online
243	Enhancing Fabric Integrity: Seg-YOLO-Based Defect Detection in Handloom Fibers	4:15 pm to 4:30 pm	
249	Xavier Vision: Pioneering Autonomous Vehicle Perception with YOLO v8 on Jetson Xavier NX	4:30 pm to 4:45 pm	
255	Solanaceae Family Plants Disease Classification using Machine Learning Techniques	4:45 pm to 5.00 pm	
261	Combining Deep features with the Invariant Local Binary Pattern features for Skin Cancer Classification	5:00 pm to 5:15 pm	
266	Characterizing Neural Network Weights for Class Imbalanced Learning	5:15 pm to 5:30 pm	
Session 4 (Venue: AC204) **Microsoft Teams meeting link - https://msteams.link/1C15**			
272	Potato Leaf Disease Identification with Multi-Stage Approach: A Comparative Study	4: 00 pm to 4:15 pm	Online
277	Data-driven Insights into Snake-bite Incidents: A Visual Analysis Approach	4:15 pm to 4:30 pm	
283	YOLOv8-Based Visual Detection of Road Hazards: Potholes, Sewer Covers, and Manholes	4:30 pm to 4:45 pm	
289	The conglomerate compression approach for visual pattern recognition networks in edge AI applications	4:45 pm to 5.00 pm	
294	Visual Sentinel: Data Analytics for Missing Subject Identification	5:00 pm to 5:15 pm	
300	Digital Implementation of Depthwise Separable Convolution Network for AI Applications	5:15 pm to 5:30 pm	
Session 5 (Venue: AC101) **Academic Complex, COEP Technological University**			
305	An intelligent software tool for Audio Signal-based Hinglish to English language translation	4: 00 pm to 4:15 pm	Offline
311	Enhanced Convolutional Neural Network Model for Crop Disease Identification using UAV Imagery	4:15 pm to 4:30 pm	
318	Forecasting of financial time series data possessing stable distributions by employing Stochastic Differential Equations: A review	4:30 pm to 4:45 pm	
324	Enhancing Malicious Domain Detection using Advanced Machine Learning Techniques	4:45 pm to 5.00 pm	

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Session 6 (Venue: AC102)
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330	An Effective Checkerboard Calibration Technique for a Stereo Camera System	4: 00 pm to 4:15 pm	**Offline**
335	Harnessing Machine Learning for Predictive Analysis of Air Quality in Pune City: A Comparative Study	4:15 pm to 4:30 pm	
340	Automated Table Detection Using R-CNN: A Cloud-Based Approach	4:30 pm to 4:45 pm	
346	SPECTER-Based Transformer Model For Multi-Label Research Paper Classification	4:45 pm to 5.00 pm	
353	Exploring the Horizons of Speaker Recognition: Contemporary Advancements and Prospective Trajectories in the Age of Deep Learning	5:00 pm to 5:15 pm	

Session 7 (Venue: AC103)
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Page #	Paper Title	Time Slot	Mode of Presentation
359	Automative Feedback System for Descriptive Answers in LMS using Machine Learning Algorithm	4: 00 pm to 4:15 pm	**Offline**
365	A Systematic Literature Review of Classical and Quantum Machine Learning Approaches for Mutual Fund Portfolio Optimization	4:15 pm to 4:30 pm	
371	Unveiling Early Autism Spectrum Disorder Detection: A Comprehensive Study of Machine Learning and Deep Learning Approaches	4:30 pm to 4:45 pm	
377	Balance Relation-Aware Attention Embedding Model for Knowledge Graph Completion	4:45 pm to 5.00 pm	

Session 8 (Venue: AC104)
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382	Adult Autism Screening and Prediction using Ensemble Approach	4: 00 pm to 4:15 pm	**Offline**
388	Explainable AI for reliable detection of cyberbullying	4:15 pm to 4:30 pm	
394	Hybridization Unleashed: Advancing Movie Recommendations through Collaborative, Content Based and Hybrid Filtering	4:45 pm to 5.00 pm	

Day 2 - (16th December 2023)		Morning Slot (9:30am to 11:15 am)	

Session 1 (Venue: AC201)
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399	Web-based emergency alert system for driver's drowsiness and medical exigency	9:30 am to 9:45 am	
405	Secure File Transfer on Cloud Using Blockchain and Encryption	9:45 am to 10:00 am	
411	Comparison of Interpolation scaling algorithm and efficient VLSI Design of Win-scale Interpolation for run time digital picture spreading	10:00 am to 10:15 am	**Online**
416	Sliding mode control with power frequency compensation for Pumped Storage Hydropower stations	10:15 am to 10:30 am	
422	Peti-Chain – Blockchain based Judicial Petition Filing System	10:30 am to 10:45 am	

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427	Metaverse and student engagement - instructor's perspective	9:30 am to 9:45 am	
433	Role of engineering projects in prospective of teaching-learning process	9:45 am to 10:00 am	
438	Incorporating Innovative Teaching-learning for Analog Circuit Design Course	10:00 am to 10:15 am	**Online**
443	Throttle Less Electric Bicycle Controller Using Fuzzy Logic	10:15 am to 10:30 am	
447	A deep learning approach to irrigation management in smart agriculture	10:30 am to 10:45 am	
454	OMS - CRM Application for B2B FMCG Business	10:45 am to 11:00 am	

Session 3 (Venue: AC203)
Microsoft Teams meeting link - https://msteams.link/1C15

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460	Identification and Mitigation of Unintentional Insider Information Leak Threats in Public Repositories	9:30 am to 9:45 am	
467	Breast Cancer Detection using various Machine Learning Algorithms and their Comparative Analysis	9:45 am to 10:00 am	
473	Detecting Mental Health Disorders Using NLP	10:00 am to 10:15 am	**Online**
480	Detection Of Thoracic Diseases Using Chest X-ray: A Comparative Study of Binary Class and Multiclass Classification Using Deep Learning	10:15 am to 10:30 am	
486	ML powered analytics for sensing demand in consumer industry	10:30 am to 10:45 am	

Day 2 - (16th December 2023)		Morning Slot (9:30am to 10:30 am)	
Session 4 (Venue: AC101) **Academic Complex, COEP Technological University**			
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493	Revolutionizing Robotics: A Scalable and Versatile Mobile Robotic Arm for Modern Applications	9:30 am to 9:45 am	**Offline**
500	Face database protection using encryption technique	9:45 am to 10:00 am	
505	Energy Consumption Prediction Using Machine Learning Algorithms	10:00 am to 10:15 am	