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# CONIT 2023 Schedule

3rd INTERNATIONAL CONFERENCE OF INTELLIGENT TECHNOLOGIES (3<sup>rd</sup> CONIT 2023)

Technical Co-Sponsored By: IEEE Bangalore Section

Venue: - K L E Institute of Technology ,Hubballi, Karnataka, India.

23<sup>rd</sup> – 25<sup>th</sup> June 2023

Conference Main Schedule

Venue- Auditorium

	Time	Events
Day 1: 23 <sup>rd</sup> June 2023	8.45 am -10.45 am	Session -I
	9.30 am -10.15 am	Break Fast & Tea
	11.00am - 11.05 am	Welcome Note by Dr. Yerriswamy T( <b>Convener – CONIT, Professor and Head, Department of CSE, KLE Institute of Technology, Hubballi</b> )
	11.05 am – 11.10 am	Lamp Lighting & Video playback of CONIT
	11.10 am – 11.15 am	Release of Conference Proceedings
	11.15 am -11.20 am	Brief about Conference by General Chair <b>Dr. Sharad Joshi, Principal KLE Institute of Technology, Hubballi</b>
	11.20 am -11.30 am 11.30 am – 11.35 am	Address by Hon Chief Guest: Dr. Zia Saquib (Senior Vice President of Technology Innovation & Development at Jio Platforms Ltd,Mumbai) Presidential Remarks: <b>Shri S C Metgud (Chairman, Governing Body, KLE Institute of Technology, Hubballi)</b>
	11.35 am – 11.40 am	Vote of Thanks By : <b>Dr. Manu T, Professor and Head, Department of ECE, KLE Institute of Technology, Hubballi</b>
	11.40 pm -11.45 am	Photo Session
	11.45 am -12.30 pm 12.30 pm -1.15 pm	Keynote Session – Mr. Suman De (SAP LABS ) Keynote Session – Dr. Jayprakash Thakur (Principal Engineer, INTEL)
	1.00 pm- 1.45 pm	Lunch
	1.45 pm - 3.45 pm	Session –II
4.00 pm - 6.00 pm	Session –III	
Day 2: 24 <sup>th</sup> June 2023	8.45 am - 10.45am	Session –I
	2.30 pm - 3.15 pm	Keynote Session I – <b>Dr. Jona Rosak (Univerisy of Zanila)</b>
	4.00 pm - 6.00 pm	Session -III
Day 3: 25 <sup>th</sup> June 2023	11.00am - 12.00 pm	Keynote Session I – <b>Dr. Hussain Mahdi (IEEE PES Chair )</b>

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**3rd International Conference for Intelligent Technologies (CONIT 2023)**

Technical Co-Sponsored By

IEEE BANGLORE SECTION.

Venue: - K. L. E. Institute of Technology, Hubballi. , Karnataka, India.

Session Schedule

23rd JUNE 2023

**CONFERENCE ORAL SESSIONS SCHEDULE**

Time : 8:45 AM - 10:45 AM TRACK- A1: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing

HALL NAME : CSE-01

Session coordinator : Mrs. Malathi S Y

Session Chair : Dr.NALINI N

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	8	Muluk, Manasi Arun*; Patole, Eshwari B; Parkhi, Apurva; More, Surabhi J; Chhajed, Rachana	Stroktor-A system to predict Ischemic brain stroke using Learning Techniques	8.45 AM	9.00 AM
2	17	Pradeep, Aneesh*	Web Mining: Opportunities, Challenges, and Future Directions	9.01 AM	9.15 AM
3	18	Pradeep, Aneesh*	Enhancing Business Intelligence through Business Analytics and Data Mining Techniques using Python	9.16 AM	9.30 AM
4	28	Puduri, Sri Harshini*; Pamulapati, Sai Rohith; K, Naresh; Prana , Lavanya	Diagnosis Of Liver Diseases Using Machine Learning Algorithms and Their Prediction using Logistic Regression and ANN	9.31 AM	9.45 AM
5	32	Selvam, Saravanan*; A, Amruth; R, Ramanan; Paul, Rhea; S, Vishal	Big Data Application in Cancer Classification by Analysis of RNA-seq Gene Expression	9.46 AM	10.00 AM
6	33	Meenakshi, K*; Vignesh Teja, Nagandla; Adepu, Abhiram; Agrawal , Siddhanth	A Machine learning based melanoma skin cancer using hybrid texture features	10.01 AM	10.15 AM
7	46	Rao, R V Raghavendra*; Reddy, Srinivasulu; Ch, Ram Mohan Reddy	Soil Data Analytics using Machine Learning Techniques – A Survey	10.16 AM	10.30 AM
8	47	Yerunkar, Pooja*; Ramtekkar, Pankaj; Kalbande, Kamlesh	The Machine Learning Model with Hybrid Pooling Approach For Transmission Line Insulator Classification and Faults Detection	10.30 AM	10.45 AM

Time : 11:30 AM- 1.30 PM TRACK A2: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing

HALL NAME : CSE-01

Session coordinator : Mr. Girish Saunshi

Session Chair : Dr. Sonam Gupta

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	51	Attuluri, Sasidhar; B, Sathya Bama; Anand, Ketan*	Swarm based optimized key generation for preserving the privacy in cloud environment	11.30 AM	11.45 AM
2	60	A, Anu H*; Palsapure, Pranita Niraj	Deep Learning Approach To Enhance Accuracy For Early Detection Of Glaucoma	11.45 AM	12.00 PM
3	66	Pradeep, Aneesh*	Intelligent Advertising System Incorporating User Feedback: Design and Implementation using OpenCV and Python	12.00 PM	12.15 PM
4	68	Pradeep, Aneesh*	Intelligent Traffic Management System: AI-Enabled IoT Traffic Lights to Mitigate Accidents and Minimize Environmental Pollution	12.15 PM	12.30 PM
5	72	Gupta, Lakshya*; Jaiswal, Prateek; Lather, Ishita; Agarwal, Ritu; Thakur, Anita	Image Encryption using Chaotic maps: State of the art	12.30 PM	12.45 PM
6	74	Sharma, Sachin*; Kadayat, Yunika; Tyagi, Ranu	Artificial Intelligence enabled Sustainable Life Cycle System using Vedic Scripture and Quantum Computing	12.45 PM	1.00 PM
7	86	Karthik, Samudrala; Kolisetty , Jaswanth; Chakravadhanula,	Novel Distributed Architecture for Frequent Pattern Mining using Spark Framework	1.00 PM	1.15 PM

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		Abhiram Shri; Seru, Bharat Preetham; Senapati, Rajiv*			
8	87	Mounika Jenny, Ardhala*; Raja Sekhar, R; Sreshta, Dubba; Vikas, Manchala; Badri Nageshwar Ajay , Dasari; Ganesh, Mankena	Prediction of Distributed Denial of Service Attacks in SDN using Machine Learning Techniques	1.15 PM	1.30 PM

**Time : 1.45 PM- 3.45 PM TRACK- A3: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing**  
**HALL NAME : CSE-01**  
**Session coordinator: Mr. Swati Sajjan**  
**Session Chair : DR NEETU MITAL**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	92	Katipally, Vighneshwar Reddy*; Kumar S, Sachin; K.P, Soman	Sentiment Analysis at Document level of Telugu Data from Multi-Domains	1.45 PM	2.00 PM
2	95	Pednekar, Prachi*; Srivastava, Abheet; Jadhav, Anil	Fire Detection using Transfer Learning and Pre-Trained Model	2.01 PM	2.15 PM
3	116	Budaraju, Raja Rao*; O, Sri Nagesh	Multi-level image thresholding using improvised cuckoo search optimization algorithm	2.16 PM	2.30 PM
4	125	Ashwini, Dr. Ashwini K*	Analysis and Prediction of Liver Cirrhosis Using Machine Learning Algorithms	2.31 PM	2.45 PM
5	127	Godage, Suraj; Pandya, Hardik*; Kumar, T Rohith; Bhosale, Shubham; Patil, Rushali	Web Interface for Distributed Transaction System	2.45 PM	3.00 PM
6	128	Chowdhury, Md Naseef-Ur-Rahman*; Haque, Ahshanul	ChatGPT: Its Applications and Limitations	3.01 PM	3.15 PM
7	129	Dhir, Surbhi; Sinha, Astha; Bansal, Charvi; Rani, Dr. Ritu*; Goel, Nidhi; Bhutani, Pawan	A Robust CNN-based Approach for Skin Lesion Detection and Classification	3.16 PM	3.30 PM
8	134	Rajput, Saksham*; S, Ramesh	Student Performance Analysis based on Machine Learning Algorithms	3.31 PM	3.45 PM

**Time : 4:00 PM - 6:30 PM TRACK- A4: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing**  
**HALL NAME : CSE-01**  
**Session coordinator : Mrs. Suman Yeligar**  
**Session Chair : Dr. Suhaib Ahmed**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	147	Nandgaonkar, Abhinav A*; Mane, Sunil B; Khatavkar, Vaibhav K	Creativity index calculation with question answering system using BERT model	4.00 PM	4.15 PM
2	148	Kolte, Sakshi*; Dakore, Rupali; Bhakkad, Pragati ; Patil, Janhavi ; Khairkar, Ashwini Deepak; Kanade, Ashwini V	Travelling Chatbot using Android Application	4.15 PM	4.30 PM
3	149	Vellela, Sai Srinivas*	Prediction And Anlysis Using A Hybrid Model For Stock Market	4.30 PM	4.45 PM
4	150	Vellela, Sai Srinivas*	Design And Implementation Of An Integrated Iot Blockchain Framework For Drone Communication	4.45 PM	5.00 PM
5	157	Chakraborty, Swarnendu Kr*	Privacy-Preserving of Edge Intelligence using Homomorphic Encryption	5.00 PM	5.15 PM
6	176	Ashwini, Dr. Ashwini K*	Prediction of Diabetes using Machine Learning Algorithms and Correlation with Pregnancy	5.15 PM	5.30 PM
7	196	Patil, Ajit*; Patil, Sandip	Energy Management System for Smart Microgrid Systems using Adaptive Fuzzy Logic	5.30 PM	5.45 PM
8	208	Dutta, Anurag*; Harshith, John; Lakshmanan, K; A, Ramamoorthy	Propositional modelling of a modus operandi to conduct manned mission to Venus apropos Венера Program data	5.45 PM	6.00 PM
9	211	Patil, Vaishnavi; Thakur, Vedangi;	Deep Learning-Based Analysis Of Affective	6.00 PM	6.15 PM

		Gupta, Nehul; Vishnoi, Tamanna; Bhangale, Kishor B*; Kawade, Rupali Ramdas; Dhake, Dipali; Dhamale, Triveni Deepak	Computing For Marathi Corpus		
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**Time : 8:45 AM- 10.45 AM TRACK- B1: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing**  
**HALL NAME : CSE-02**  
**Session coordinator : Mr. Prashant Hanasi**  
**Session Chair : Dr. Arati Kishanrao Manjaramkar**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	212	Hossen, Mohammad Sahinur *; Chowdhury, Md Naseef-Ur-Rahman; Haque, Ahshanul	Identity-Based Key Agreement Algorithm for Smart Meter Technology to ensure Anonymity	8.45 AM	9.00 AM
2	219	Meenakshi, K*; Aamuktha Sai Sree, T; Pavan, Kodimela; Sohail, MD	Lung cancer detection using textural features.	9.01 AM	9.15 AM
3	234	Singh, Sanjay*; Pilania, Urmila; Kumar, Manoj	Image Processing based Skin Cancer Recognition using Machine Learning	9.16 AM	9.30 AM
4	238	Rane, Milind *; Kalal, Sahil; Chandegara, Jenil ; Jain, Vishwas; Kakkad, Toshish ; Jagtap, Simran	Career Prediction Website using Machine Learning	9.31 AM	9.45 AM
5	243	Kaustubh, Kumar*; Kumari S, Kushala ; M, Kiran	Visualization and Creation of Image using Processed Dataset and Python Model Architecture	9.46 AM	10.00 AM
6	245	K, POORANAKALA*	Securing Medical Images using Compression techniques with Encryption and Image Steganography	10.01 AM	10.15 AM
7	248	Kapoor, Amardeep Singh*; Jain, Akshat	Detection and Classification of Diabetic and Hypertensive Retinopathy Using CNN & Autoencoder	10.16 AM	10.30 AM
8	253	Dey, Arnab*; Dutta, Arpita; Biswas, Samit	WorkoutNet: A Deep Learning Model for the Recognition of Workout Actions from Still Images	10.30 AM	10.45 AM

**Time : 11.30 AM- 1.30 PM TRACK- B2: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing**  
**HALL NAME : CSE-02**  
**Session coordinator : Mr. Vishwas Patil**  
**Session Chair : Dr. Pooja Raundale**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	254	M.G, Adarsh*; K, Bhargavi	Reinforcement Learning-Based Bonobo Optimizer for Efficient Load Balancing in Cloud Computing	11.30 AM	11.45 AM
2	256	Savla, Manan V; Gopani, Dhruvi*; Ghuge, Mayuri; Chaudhari, Sheetal; Raundale, Pooja J	Sentiment Analysis of Human Speech using Deep Learning	11.45 AM	12.00 PM
3	270	ESWARAN, VIGNESH; Kumar S, Sachin*	Random Fourier Features based approach for Covid-19 Twitter Sentiment Classification using Machine Learning and Deep Learning	12.00 PM	12.15 PM
4	276	D, Hemalatha *; Reddy , Tharun	Iris Flower Species Detection using Machine Learning Technique	12.15 PM	12.30 PM
5	279	Mehra, Anu*; Bhan, Anupama	Data-Driven Predictive Analysis of Global Temperature Changes with Deep Learning	12.30 PM	12.45 PM
6	285	Shelke, Kavita R*	Metaheuristic Evolutionary Algorithms: Types, Applications, Future Directions, and Challenges.	12.45 PM	1.00 PM
7	287	V, Sreedhar*	Predicting the Blood Culture Positivity from Hematological Parameters using Machine Learning Model	1.00 PM	1.15 PM
8	305	A L, Ajay Joshuva; J, Shanmuga Priyan; N, Karupiah*; Mounica, Patil	Detection Of Malfunction In Solar Panel Using Machine Learning Algorithms	1.15 PM	1.30 PM

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Time : 1:45 PM - 2:45 PM TRACK- B3: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing

HALL NAME : CSE-02

Session coordinator : Mr. Mahaveer C

Session Chair : Dr. Navjeet Kaur

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	313	Sonawane, Omkar Rajesh*; Saraswat, Haripriya P; Tadphale, Anushka; Deshmukh, Pratiksha	Impact of news sentiment on foreign exchange rate prediction	1.45 PM	2.00 PM
2	314	Goyal, Charu*; Singh Bisht, Vansh; Singh Narang, Simar Jyot; Kaur, Manpreet; Magoo, Chandni	Student Writing Segmentation Using Various Classification Techniques	2.01 PM	2.15 PM
3	320	Chakraborty, Swarnendu Kr*	Privacy-Preserving sensitive data on Medical diagnosis using Federated Learning and Homomorphic Re-encryption	2.16 PM	2.30 PM
4	325	Hiremath, Mrutyunjaya S*; Biradar, Rajashekar	Early Stage Detection of Alzheimer's using Hybrid Artificial Intelligence Model: A Review	2.31 PM	2.45 PM
5	351	B, Chempavathy; Sundaram, Dr. B.Meenakshi; Shaynam, Anant*; Goswami, Aditya ; S, Bindya	Deep Learning Implemented Communication System for the Auditory and Verbally Challenged	2.45 PM	3.00 PM
6	396	Singh, Harjot; Hasabnis, Amey Rajeev; ., Shailendra*	Securing IoT In Quantum World	3.01 PM	3.15 PM
7	422	Singhal, Anisha*; Singhal, Neha ; ., Divya; Sharma, Kanchan	Machine Learning Methods for Detecting Car Insurance Fraud: Comparative Analysis	3.16 PM	3.30 PM
8	425	Jagannadha Swamy, Tata*; B, Pallavi ; Amaraveni, Varsha ; Sireesha, Yampati ; S, Siddarth	Secure Data Dissemination in Wireless Sensor Networks with The Help of Module Based Blockchain Technology	3.31 PM	3.45 PM

Time : 4:00 PM- 6.30 PM TRACK- B4 : Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing

HALL NAME : CSE-02

Session coordinator: Mrs. Soumya P

Session Chair : Dr. Supreeth S

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	437	A, Abhirami*; G. S., Anisha	Indian Sign Language Phrase Estimation using PoseNet	4.00 PM	4.15 PM
2	451	D, Balakrishnan*; Praneeth Kumar, Anumula	AGRICULTURAL CROP RECOMMENDATION SYSTEM	4.15 PM	4.30 PM
3	541	Mhatre, Sonali*; Satre, Shilpa M; Hajare, Mansi ; Hire, Aditi ; Itankar, Aniket ; Patil, Shruti	Text Comparison Based on Semantic Similarity	4.30 PM	4.45 PM
4	568	K Das, Sanitha Lakshmi*; D Anand, Nandha; V R, Rajalakshmi	Analysis and Early Diagnosing Tool for Learning Disability Using Machine Learning Models	4.45 PM	5.00 PM
5	585	Kadam, Priyanka*	Blockchain Based e-Voting System	5.00 PM	5.15 PM
6	626	Shafi, Shaik*	Deep Learning based Real-time Stolen Vehicle Detection Model with Improved Precision and Reduced Look Up Time	5.15 PM	5.30 PM
7	663	Sable, Nilesh *; Rathod, Vijay U.	Deep Learning Techniques Using Lightweight Cryptography For IoT Based E-Healthcare System	5.30 PM	5.45 PM
8	698	Rahman, Asif*; Hoque, Safiyatul ; Khan, Mossran Thamid; Rahman, Faisal Bin Abdur; Islam, Anharul; Shumona, Sadia Islam; Salam, Kazii Mohammad Abdus	Early Prediction of Ischemic Stroke Using Machine Learning Boosting Algorithms	5.45 PM	6.00 PM
9	706	Tiwari, Vivek*; Verma, Mani Kant	Prediction Of Groundwater Level Using Advance Machine Learning Techniques	6.00 PM	6.15 PM
10	713	Gill, Kanwarpartap Singh*; Anand, Vatsala; Gupta, Rupesh	Website Classification through Exploratory Data Analysis Using Naive Bayes, Random Forest, and Support Vector Machine Classifier	6.15 PM	6.30 PM

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**Time : 8.45 PM- 10.45 PM TRACK- C1: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-03**  
**Session coordinator: Mrs. Shanta Kallur**  
**Session Chair : Peeta Basa Pati**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	715	Gill, Kanwarpartap Singh*; Anand, Vatsala; Gupta, Rupesh; Pahwa , Vivek	Invasive Ductal Carcinoma Classification Using ResNet18 Model on Transfer Learning Concepts	8.45 AM	9.00 AM
2	746	Soni, Rinku *; Shaik, Saeedah Zaina; Latha , Dr.Y.L Malathi	Unlocking the Potential of Machine Learning for Accurate Diagnosis of Breast Cancer	9.01 AM	9.15 AM
3	748	Sharma, Kapil*; Sharma, Shivansh	Analyzing Employee's Attrition And Turnover At Organization Using Machine Learning Technique	9.16 AM	9.30 AM
4	780	Singh, Indu; Aditya, Nilesh*; Srivastava, Pranjal; Mittal, Shivanshu; Mittal, Taruvar; Surin, Noel	Credit Card Fraud Detection using Neural Embeddings and Radial Basis Network with a novel hybrid fruitfly-fireworks algorithm	9.31 AM	9.45 AM
5	823	Salunke, Neeraj D*; Gangal, Devang M; Kadam, Aniket Mohan; Aylani, Amit	Mapping Social Connections: A Graph Mining and Ensemble learning Approach to Link Prediction	9.46 AM	10.00 AM
6	839	Srinivasa Perumal, Byri Manoj*; K, Sanjay; Banerjee, Swapnil; Kalel, Dattatraya; R, Raja Singh	IoT Enabled Hybrid PV Powered PMSM Drive for E-Compressor Systems	10.01 AM	10.15 AM
7	852	Singla, Surbhi*; Chadha, Raman	Detecting Criminal Activities From CCTV by using Object Detection and machine Learning Algorithms	10.16 AM	10.30 AM
8	931	Anand, Deva*; P, Sheela Gowr; S, Logesh; S.M, Anand	Deep Learning-Based Alzheimer's Disease Classification using Transfer Learning and Data Augmentation	10.30 AM	10.45 AM

**Time : 11:30 AM - 1:30 PM TRACK- C2: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-03**  
**Session coordinator : Mr. Gurudev Hiremath**  
**Session Chair : Dr. Peeta Basa Pati**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	935	Baresary, Devdutt ; Saini, Anuradha; Kumar Sharma, Ravi; Bordoloi, Dibyahash; Sharma, Rishabh*; Kukreja, Vinay	MangoSpot: A Hybrid CNN-SVM Model for Multi-Classification of Mango Leaf Spot Disease Based on Seriousness Levels	11.30 AM	11.45 AM
2	936	Jatti, Ashwini V.*; Chankhore, Neha; Narayanan, Aadithya; Jain, Aksh; Parashar, Akshat; Vengali, Abhinav	Card Blitz: Memory Retention Football Card Matching Game	11.45 AM	12.00 PM
3	1034	Afreen, Sana*; Ravula, Shivani; Nagula, Rishitha; Deshini, Yashwanth Goud; Azmeera, Srinivas	Breast Tumor Segmentation using Cuckoo based Optimization	12.00 PM	12.15 PM
4	1035	Batla, Arnav*; Gupta, Archit; Kumar, Chaitanya	Comparative Analysis Of Machine Learning Models For Fake News Classification	12.15 PM	12.30 PM
5	1050	Chaudhary, Akanksha*	Prediction And Analysis of Air Pollution Using Machine Learning Algorithms	12.30 PM	12.45 PM
6	1095	Alamanda, Rajasekhar Hima Naga*; Gurrarn, Kavya; Kotu, Sriya; Belwal, Meena	Face Mask Detection Using CNN via Active Learning	12.45 PM	1.00 PM
7	1112	Gupta, Vanshika*; Singhal, Abhishek; Tripathi, Aniket	Classification of Lung Diseases using Deep Learning Techniques: A Comparative Study of Classification Algorithms	1.00 PM	1.15 PM

**Time : 1:45 PM- 3.45 PM TRACK- C3: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-03**  
**Session coordinator : Ms Supriya**  
**Session Chair : Dr. Shalini Puri**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1113	Kuntal, Divya*; Vishwakarma, Dinesh Kumar	Blockchain-Enabled Healthcare Records Management: A Survey of Implementation Strategies	1.45 PM	2.00 PM
2	1116	Shourie, Poonam*; Anand, Vatsala; Gupta, Sheifali	An Efficient CNN Framework for Radiologist level Pneumonia Detection Using Chest X-ray Images	2.01 PM	2.15 PM
3	1117	Nanda, Shivangi*; Singh, Sunny; Singh, Gurpreet	Real-Time Traffic Flow Management Using OPENCV	2.16 PM	2.30 PM
4	1118	Sharma, Kaustubh*; Mandapati, Koushik V; Kumar, Kk Tarun; Pattekar, Malhar; Srinivasa, Gowri	Food Recommendation System Based on Collaborative Filtering and Taste Profiling	2.31 PM	2.45 PM
5	1128	Im, Sio-Kei; Chan, Ka-Hou*	ROI Encryption for the CABAC in VVC Codec	2.45 PM	3.00 PM
6	1138	Shrivastava, Prateek*; Yadav, Rajesh K	Research Investigation Comparing the Effectiveness of Deep Learning-Driven Intrusion Detection Systems Against Various Other Available Algorithms	3.01 PM	3.15 PM
7	1161	Surisetty, Hima Varshini*; Gottimukkala, Sarayu Varma	A Recognizer and Parser for Basic Sentences in Telugu using CYK Algorithm	3.16 PM	3.30 PM
8	1196	Song, Xing ; Li, Li*	Application Research of Machine Vision Platform Based on Ant Colony Algorithm and Software Engineering	3.31 PM	3.45 PM

**Time : 4.00 PM- 6.30 PM TRACK- C4: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-03**  
**Session coordinator : Mr. Pradeep Surasura**  
**Session Chair : Dr Kavitha H**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1201	Yuan, Yanan ; Li, Li*	Human computer interaction design practice in poster design	4.00 PM	4.15 PM
2	1206	Sharma, Anshika*	An Analysis of Android Malware and IoT Attack Detection with Machine Learning	4.15 PM	4.30 PM
3	1221	Beniwal, Rohit; Jha, Shivam; Mehta, Smarth*; Dhiman, Riyan	Cyberbullying Detection using Deep Learning Models in Bengali Language	4.30 PM	4.45 PM
4	1224	Ting, Kong ; Li, Li*	Research and implementation of fusion machine learning algorithm in tourism recommendation	4.45 PM	5.00 PM
5	1225	Guo, Kaimeng ; Li, Li*	Research on the application and development of intelligent algorithm in the field of new media-communication	5.00 PM	5.15 PM
6	1232	D, Dharani; R, Soorya*; Kumari K, Anitha	Quantum Resistant Cryptographic Systems for Blockchain Network	5.15 PM	5.30 PM
7	1235	Jain, Anuj Kumar; Sharma, Vikrant; Goel, Sandeep; Tiwari, Raj Gaurang*; Vajpayee, Amit; Bhandari, Rahul	Driver Drowsiness Detection using Deep Learning	5.30 PM	5.45 PM
8	1237	Heena Kauser, Sk.; Gowda V, Dankan*; Tanguturi, Rama Chaithanya; Sri Venkata Sai. L, Lakshmi ; Charan. K, Sai Rahul ; C H, Venkatesh	Implementation of Machine Learning Approach for Detecting Cardiovascular Diseases	5.45 PM	6.00 PM
9	1246	Sahu, Bibhuprasad *	Hybrid Multifilter Ensemble-Based Feature Selection Model from Microarray Cancer Datasets Using GWO with Deep Learning	6.00 PM	6.15 PM
10	1252	A, Rajini*; S, Jayashree	Forecasting Power Consumption by Deep Learning Approaches in the State of Telangana	6.15 PM	6.30 PM

**Time : 8:45 AM - 10:45 AM TRACK- D1: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-04**  
**Session coordinator : Mr. Shobha Hiremath**  
**Session Chair : Dr. Aparna Joshi**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1260	Goswami, Neelankit Gautam*; Goswami, Anushree G; Sampathila, Niranjana; Bairy, G Muralidhar Muralidhar	Sickle Cell Classification Using Deep Learning	8.45 AM	9.00 AM
2	1263	Singh, Gurpreet; Ferede, Kaleab H*; Madata, Mariam; Elyse Yao, Amemou Franck ; Singh, Jaspreet	Emerging of Machine Learning and Deep Learning Technology: Addressing in Intelligent Wireless Network Optimization	9.01 AM	9.15 AM
3	1268	Nara, Amit G*; Karekar, Atharva; Limaye, Sahil ; Panchal, Smit	Bhagavad Geeta Based ChatBot	9.16 AM	9.30 AM
4	1270	Pawar, Paibhav Eknath*; Kadam, Sanjay Shahaji	MindScape Jr: Cognitive well-being analysis system for young minds	9.31 AM	9.45 AM
5	1275	Nara, Amit G*; Panchal, Smit; Dange, Suchita	Recyclable and Non-Recyclable Waste Recognition using Image Processing with Machine Learning: Recycle Mate	9.46 AM	10.00 AM
6	1324	Jain, Niyati P*; Patel, Meet J; Rane, Kartikay D; Mhatre, Praneel Girish; Jaswal, Shree	Image Forgery Detection Using CNN	10.01 AM	10.15 AM
7	1330	Sekhon, Gursimran*; Ahuja, Sachin	Review Machine Learning Models for Managing Hotel Cancellations in the Tourism Industry	10.16 AM	10.30 AM
8	1339	Patil, Pallavi; Doshi, Rhitik N*; Kothari, Harsh; Mehta, Khush	IsItPhish: Dynamic Phishing website detection	10.30 AM	10.45 AM

**Time : 11:30 AM- 1.30 PM TRACK- D2: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-04**  
**Session coordinator : Mrs. Kavita M**  
**Session Chair : Dr. B. Padmavathi**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1340	Duvvuri, Kavya*; Kanisetypalli, Harshitha; Masabattula, Teja Nikhil; Palaniswamy, Suja	Classification of Diabetic Retinopathy Using Image Pre-processing Techniques	11.30 AM	11.45 AM
2	1372	Chakraborty, Pritam*; Gupta, Tripurari Nath; Kumar , Nitesh	SOGI-SF filter based three phase grid tied solar energy conversion system	11.45 AM	12.00 PM
3	1389	Chuchra, Sheenam*; Kumar, Abhay	Advanced CNN-Based Approach for Accurate Tomato Plant Disease Recognition	12.00 PM	12.15 PM
4	1394	Tanwar, Vishesh*	Stratification of Parsley Leaf Crown Disease Using a Blended CNN Model based on Deep Learning	12.15 PM	12.30 PM
5	1412	Mehta, Shiva*; Kukreja, Vinay; Gupta, Richa	Empowering Precision Agriculture: Detecting Apple Leaf Diseases and Severity Levels with Federated Learning CNN	12.30 PM	12.45 PM
6	1417	Changle, Anisha Sunil*	Implementation of S-box for lightweight block cipher.	12.45 PM	1.00 PM
7	1418	Mehta, Shiva*; Kukreja, Vinay; Yadav, Rishika	Advanced Mango Leaf Disease Detection and Severity Analysis with Federated Learning and CNN	1.00 PM	1.15 PM
8	1422	Yadav, Mahima*; Kumar, Ishan	Transliteration from Hindi to English using Image processing	1.15 PM	1.30 PM

**Time : 1.45 PM- 3.45 PM TRACK- D3: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-04**  
**Session coordinator : Mr. Shridar Chinni**  
**Session Chair : Dr. Arvind Selwal**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start Time	End Time
1	1425	Talati , Trusha *; Bhat, Akshat; Kalbande, Dr. Dhananjay	Effects of Image Augmentation Techniques for Rice Leaf Disease Detection	1.45 PM	2.00 PM
2	1429	Mathew, Austin; Satam, Hrushikesh S*; Tiwari, Saumya; Thorve, Sudhanshu; Sawant, Arti Rohan	Secure E-Voting System	2.01 PM	2.15 PM
3	1442	Bansal, Shreya*; Mohammed, Ranya; Kumar, Uttam; Taori, Trupti	A Comparative Analysis of the Brain Lobes and Feature Techniques in the Detection of Emotion	2.16 PM	2.30 PM
4	1458	Pereira, Kristen; Parikh, Aman; Kumar, Pranav*; Devadkar, Kailas	Audio-Visual Deepfake Detection System Using Multimodal Deep Learning	2.31 PM	2.45 PM
5	1459	Pasha, Jahir M*; R. Sreevani, R. Sreevani; Chandana, Sirichandana; Manda, Sreenidhi	Brain Tumour Image Segmentation Using Deep Networks	2.45 PM	3.00 PM
6	1490	Mehta, Shiva*; Kukreja, Vinay; Vats, Satvik	Improving Crop Health Management: Federated Learning CNN for Spinach Leaf Disease Detection	3.01 PM	3.15 PM
7	1561	Das, Saradindu*	Apple Leaves Disease Detection Using Multilayer Convolutional Neural Network	3.16 PM	3.30 PM
8	1562	Rawat, Priyanshu*; Bajaj, Madhvan; Mehta, Shreshtha; Vats, Satvik; Sharma, Vikrant; Kukreja, Vinay	Predicting Breast Cancer An Evaluation of Machine Learning Approaches	3.31 PM	3.45 PM

**Time : 4.00 PM- 6.30 PM TRACK- D4: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-04**  
**Session coordinator : Mrs Saritha U**  
**Session Chair : Dr. Sandeep Kumar**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start Time	End Time
1	1566	Bikku, Thulasi*; Jarugula, Jyothi; Kongala, Lavanya; Tummala , Navya Deepthi; Donthiboina, Naga Vardhani	Exploring the Effectiveness of BERT for Sentiment Analysis on Large-Scale Social Media Data	4.00 PM	4.15 PM
2	1576	Narkhede, Namrata Subhash*; Menon, Anupama; Mathane, Itisha R; Nikam, Sayali Ramesh ; Dange, Suchita	Facial Recognition and Machine Learning-based Student Attendance Monitoring System	4.15 PM	4.30 PM
3	1581	VINOD, ANAND*; Mohan, Neethu; Kumar S, Sachin; K.P, Soman	Covid cough Identification using machine learning and deep learning networks	4.30 PM	4.45 PM
4	1582	Chinmulgund, Avanti ; Tapas, Poomima ; Khatwani, Ritesh; Shah, Pritesh B*; Sekhar, Ravi	Anthropomorphism of AI based chatbots by users during communication	4.45 PM	5.00 PM
5	1588	Dhiman, Hitesh*; Goel, Keshav; Yadav, Himanshu; Kumar, Shailender	Facial Image Pre-processing for Enhanced Ethnicity Classification	5.00 PM	5.15 PM
6	1589	Marulkar, Shweta; Narain, Bhavana; Marulkar, Shweta V*	Nail Disease Prediction using a Deep Learning Integrated Framework	5.15 PM	5.30 PM
7	1601	D, Balakrishnan*	Credit Score Prediction using Support Vector Machine and Gray Wolf Optimization	5.30 PM	5.45 PM
8	1624	Sethi, Chirag*; Garg, Chirayu; Varun, Deepanshu; Pandey, Rajeshwari	Adaptive Biased Voltage Differencing Buffered Amplifier	5.45 PM	6.00 PM

9	1625	Latheef, Fathima Nihla*; G, Rubell Marion Lincy; Sameer, Mustafa; Sreenivasa, Sumadithya	Detecting Diabetic Retinopathy Using Deep Learning Techniques	6.00 PM	6.15 PM
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**Time : 8:45 AM - 10:45 AM TRACK- E1: Computational Intelligence / Blockchain / AI / ML / IOT / Cloud Computing / CN**  
**HALL NAME : CSE-05**  
**Session coordinator : Mrs. Madhu Gudgunti**  
**Session Chair : Dr. Nihar Ranjan**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1627	Lohi, Chanchal*; Shukla, Dr. Piyush Kumar; Agarawal, Dr. Ratish	Dynamic Computing Networks in the Modern Era	8.45 AM	9.00 AM
2	1628	Sharma, Vikrant; Goel, Sandeep; Jain, Anuj Kumar; Vajpayee, Amit; Bhandari, Rahul; Tiwari, Raj Gaurang*	Machine Learning based Classifier Models for Detection of Celestial Objects	9.01 AM	9.15 AM
3	1629	Mandani, Akshit Dinesh*; Labde, Shubhada S; Mehta, Aayushi V; Siddiqui, Rehan	E-Certificate Generation using MVC Model	9.16 AM	9.30 AM
4	1657	Das, Prasanta*; Chakraborty, Angshuman; Sankar, Ravi; Singh, Om Krishan ; Ray, Hena ; Ghosh, Alokesh	Deep Learning-Based Object Detection Algorithms on Image and Video	9.31 AM	9.45 AM
5	1661	Saji, Anna*; Prakash, Arya; Krishnan, M Soumya	Electricity Demand Forecasting In Kerala Using Machine Learning Models	9.46 AM	10.00 AM
6	1663	Kalra, Mehar P; Sameer, Mustafa; Ahmad, Gufran*	A Deep Convolutional Neural Network Approach for Reliable Brain Tumor Detection and Segmentation System	10.01 AM	10.15 AM
7	1667	Akther, Mahnur; Chowdhury, Zahara Rahman R; Tabassum, Anika; Kohinoor, Md Saidur Rahman*	A Comparative Study on Different Machine Learning Techniques in Diabetes Risk Assessment	10.16 AM	10.30 AM
8	1669	Chandran B, Arsha*; Padmavilochanan, Durga ; Pathinarupothi, Rahul Krishnan ; K. A, Unnikrishna Menon; Chandra, Subhash ; Pillai M, Gopala Krishna	Minimal Features based Non Invasive Cholesterol Computation using Machine Learning	10.30 AM	10.45 AM

**Time : 11:30 AM- 1.30 PM TRACK- E2: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-05**  
**Session coordinator : Mrs Aishwarya G Patil**  
**Session Chair : Dr.Sonali Kadam**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1672	Misale, Mrunal*; Nirmal, Ajay; Jain, Suchit; Murthy, Suhas K; Bhuwad, Harshali S	Notebook Junction – An E-Stationery System	11.30 AM	11.45 AM
2	1678	Garg, Sarthak; Parmar, Rhythm; , Arish; Singh, Jaspreet; Ahmed, Dr. Suhaib*	Augmented Reality in Education: An Insight into Current Trends and Limitations	11.45 AM	12.00 PM
3	1682	S, Avinash*; Akkina, Sai Ram Srikar; Naik, Vedant; Bhaskaran, Sreebha	SDN-based Hybrid Load Balancing Algorithm	12.00 PM	12.15 PM
4	1688	Trivedi, Himani*; Goyani, Mahesh	A Transition of Face Recognition to Mask Face Recognition Using Improved Attention DL Model	12.15 PM	12.30 PM
5	1719	Kakati, Sangeeta*; Brorsson,	WebAssembly Beyond the Web: A Review of Runtimes	12.30 PM	12.45 PM

		Mats	in the Edge-Cloud Continuum		
6	1738	Goel, Shivangi*; Kaushal, Rishabh; Jain, Aastha; Agarrwal, Cheshtaa	Twitter Mining and Analysis of Traffic Conditions in India	12.45 PM	1.00 PM
7	2	Akhila, N*	Comparative Study of Bert Models and Roberta in Transformer based Question Answering	1.00 PM	1.15 PM
8	37	Chowdhury, Mahfuzulhoq*; Ahmad, Alve	Trump Card: An User Engagement Based Mobile Application With Citizens Daily Work Reminder, Instant Help, and Financial Assistance Facilities	1.15 PM	1.30 PM

**Time : 1.45 PM- 3.45 PM TRACK- E3: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-05**  
**Session coordinator : Mr. Ramachandra T**  
**Session Chair : Dr.R.Karthikeyan**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start Time	End Time
1	39	Mahmood, Tahreer*	An Algorithmic State Machine Design Approach for Digital Divider Controller	1.45 PM	2.00 PM
2	44	Patel, Shalini*; Khatun, Munteha; Sarkar, Subhasish; Mitra, Debasis ; Koley, Chaitali	Investigation of an Alternate method for disease detection using a liquid CSRR sensor	2.01 PM	2.15 PM
3	55	Chauhan, Kunal*; ., Khushi; Agarwal, Ritu	GitOps: Integrate CD pipeline within the cluster itself to increase performance	2.16 PM	2.30 PM
4	62	Singh, Vishal*; Singh, Dhanpratap	Reliability of Wireless Mesh Networks and Smart Grids: A Review	2.31 PM	2.45 PM
5	65	S, Lakshmikanth*; R M, Devarajaiah	Analytical Design of 3Kw BLDC Motor for Electric Vehicle Applications	2.45 PM	3.00 PM
6	73	Barmola , Pareshwar Prasad ; Sharma, Sachin*; Bhadula, Shuchi	Intelligent Bioinformatics System Architecture for Water Borne Diseases Diagnosis and Monitoring	3.01 PM	3.15 PM
7	77	Mahapatra, Ranjan Kumar; Kaliyath, Yajunath*; Satapathi, Gnane Swarnadh; B, Manjukiran ; Kumar, Pradeep ; Shetty, Akshith N; Shet, N S V; Srichandan, Rajalaxmi; Patro, B Shivalal; Senapati, Anupama	Design and analysis of microstrip Wideband Filter	3.16 PM	3.30 PM
8	78	R, Rashmi*; G Seshikala, Dr	Link Aware Multipath Routing to Defend Against Blackhole Attacks For MANETs	3.31 PM	3.45 PM

**Time : 4.00 PM- 6.30 PM TRACK- E4: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-05**  
**Session coordinator : Mrs. Shanta Kallur**  
**Session Chair : Dr R LALITHA**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start Time	End Time
1	81	Kumari, Shweta*	Contactless Measurement of Error in Lathe Tool Positioning	4.00 PM	4.15 PM
2	82	K V, Anu*; Krishna, Sruthi; Rachel Paulose, Roopa	Computer-Aided Detection of Nuclei from histopathology image: Evaluating the Effectiveness of U-Net and Modified Networks for Nuclei Segmentation.	4.15 PM	4.30 PM
3	83	Nijhawan, Dr Rahul*; Mendiratta, Neha; Dass, Alpna ; Dhankhar, Ayush; Kumar, Sanyam; Yadav, Ashima	A Novel Framework Approach for Diabetic Retinopathy Detection	4.30 PM	4.45 PM
4	84	Yerramneni, Siddhesh ; Kotta , Sai Vara Nitya; Nalluri,	A Generalized Grayscale Image Processing Framework for Retinal Fundus Images	4.45 PM	5.00 PM

		Sirikrishna; Senapati, Rajiv*			
5	85	Manda, Sarath Chandra; Muttineni, Sricharan; Venkatachalam, Gowtham; Kongara, Bharath Chandra; Senapati, Rajiv*	Image Stitching using RANSAC and Bayesian Refinement	5.00 PM	5.15 PM
6	91	Wagle, Madhur*; Agnihotri, Anuja Milind; Patare, Aniket P; Bhangale, Prathamesh V; Murali, Meera	Estimation of State of Charge in Electric Vehicle using the Battery Digital Twin	5.15 PM	5.30 PM
7	98	Mohapatra, Tanu Trushna*; Kumar, Sananda; Kar, Tejaswini	Frequency Domain Filter Implementation For Input Containing Outlier	5.30 PM	5.45 PM
8	99	Reshma, Varnika*; Rai, Shekha; Reshma, Varnika	An Effective SOM-Based Approach for low-Quality PMU Measures to Recognize Oscillatory Modes in Power System	5.45 PM	6.00 PM
9	100	K, Swarnamuhi*; TIRUMALAI, SWETHA A; Mohan, Neethu; Kumar S, Sachin; K.P, Soman	Multi-Focus Image Fusion using 2D Compact Variational Mode Decomposition	6.00 PM	6.15 PM
10	111	K, Pavithra*; Gudodagi , Raveendra	Contention based MAC collision avoidance technique for mobile ad hoc networks	6.15 PM	6.30 PM

**3rd International Conference for Intelligent Technologies (CONIT 2023)**

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Venue: - K. L. E. Institute of Technology, Hubballi. , Karnataka, India.

Session Schedule

24th JUNE 2023

**CONFERENCE ORAL SESSIONS SCHEDULE****Time : 8:45 AM - 10:45 AM TRACK- A1: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing****HALL NAME : CSE-01****Session coordinator : Mrs. Malathi S Y****Session Chair : Dr. Praveen Kumar B**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	112	Rana, Vineet; Garg, Vyom*; Mago, Yatharth; Bhat, Aruna	Compact BERT-Based Multi-Models for Efficient Fake News Detection	8.45 AM	9.00 AM
2	170	Gupta, Dr Amit*; Dargar, Shashi Kant ; Reddy, Telukuntla Surendra; Subbaramaiah, Talapala ; Nagineni, Venkatesh ; Sainath Reddy, Ranganna Gari	Analysis of Block Level PnR Flow to Increase the Cell Density in Less Congested Regions	9.01 AM	9.15 AM
3	173	Srivastava, Gaurisha R*; Gera, Pooja; Goyal, Nishtha; Sharma, Dr. Arun; Rani, Dr. Ritu	From Clicks to Carts: Developing an Autonomous E-Grocery Shopping System	9.16 AM	9.30 AM
4	181	Haque, Ahshanul*; Chowdhury, Md Naseef-Ur-Rahman; Soliman, Hamdy	Wireless Sensor Networks Data Anomaly Detection: A Smart Approach	9.31 AM	9.45 AM
5	184	K, ASHOK*; Rajalakshmi , B ; Sai Chaitanya Reddy, Konapalli ; Guggulla , Geetha Priyanka ; Krishna , Santhosh B V	A Novel Women Safety Analysis and Monitoring System over Social Media using Machine Learning	9.46 AM	10.00 AM
6	197	Kunwar , Uma *; Shupao, Asarhu ; Tamrakar, Archana ; Shrivastava, Anant	Advantages And Challenges Of DC Standalone Decentralized Microgrid For Institutional Buildings: A Case Study Of The Installed Microgrid In Rewa Engineering College	10.01 AM	10.15 AM
7	220	Sharma, Yogitha; P, Rachana; M, Milina; Sabhahit, Neel Ganapathi*; Ainain, Mohammad	Breast Histopathology Image Classification: A Comparative Evaluation of SVM, Random Forest and CNN	10.16 AM	10.30 AM
8	221	Dangi, Sarishma; Ghanshala, Kamal; Sharma, Sachin*	Approaches to Selective Imaging of Live Systems via Memory Forensics	10.30 AM	10.45 AM

**Time : 11:30 AM- 1.30 PM TRACK A2: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing****HALL NAME : CSE-01****Session coordinator : Mr. Girish Saunshi****Session Chair : Dr Deekshitha S Nayak**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	231	Chishiri, Warren T*	Analysis of Beamforming Performance in 5G Communication	11.30 AM	11.45 AM
2	235	Singh, Sanjay*; Pilania, Urmila; Kumar, Manoj	Enhancing the Channel Quality in Cognitive network by Traffic Reduction Method	11.45 AM	12.00 PM
3	240	Agarwal, Reshu*; Chauhan, Mansi	Impact Of Screens On How Users Think	12.00 PM	12.15 PM
4	244	Nallamilli, Sai Satwik Reddy*; Addala, Venkata Siva Manoj;	A Fast Iterative Filtering Method for Efficient Denoising of Phonocardiogram Signals	12.15 PM	12.30 PM

		Vali, Poorna Muni Sasidhar Reddy; Mohan, Neethu; Kumar S, Sachin; K.P, Soman			
5	246	Chowdhury, Mahfuzulhoq*; Alam, Shah	Altruistic: An Assistive Mobile Application Featuring Cluster Based University Admission and University Suggestion for the Bangladeshi Students	12.30 PM	12.45 PM
6	260	Syed, Kulsoom; Ramanathan, Sivasubramanian*	Data-driven visual analytics of Human Mobility data and green cover using Image Processing for Smart Cities	12.45 PM	1.00 PM
7	265	Kapile, Anil S.*; Kalani, Dr. Nilesh; Kapile, Anil S	Energy Consumption and Prediction, Self-power Generation and Driving Range of Electric Vehicles: A Literature Survey	1.00 PM	1.15 PM

**Time : 1.45 PM- 3.45 PM TRACK- A3: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-01**  
**Session coordinator: Mr. Swati Sajjan**  
**Session Chair : Dr. Usha Desai**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	266	Mehetre, Sakshi R*; Mangle, Rutuja; Karvanje, Poonam; Sarode, Rohini Y	Crop Disease Diagnosis using Convolutional Neural Network	1.45 PM	2.00 PM
2	267	Naik, Jay C*; Jadhav, Anil	Imputation Method for Multidimensional Data	2.01 PM	2.15 PM
3	269	Kambli, Shardul Gajanan*; Shivsharan, Dr. Nitin; Kudtarkar, Kedar; Nikharge, Om	Facilitating Cryptocurrency Analysis and Watchlist Management with a Web-Based Platform	2.16 PM	2.30 PM
4	271	Kanaparti, Bhavya Sri*; Chandrasekaran, K.	Partial Discharge Signal Denoising Analysis Using Wavelet Transformation with Singular Value Decomposition Method	2.31 PM	2.45 PM
5	278	Pabanaas, Vaibhav; Singhal, Shreyasi; Saxena, Ayush; Chatterjee, Joyjit; Mehra, Anu*	Analysis of CPU Utilization of a Cross-Platform Web Application for Facial Recognition based Remote User Tracking System	2.45 PM	3.00 PM
6	280	Teeparthi, Kiran*; Kolipaka, Spandana; Mudhiminchi, Akhil Yadav	Robust Type-2 Fuzzy Controller For DC-DC Power Converter Feeding Constant Power Load	3.01 PM	3.15 PM
7	282	Karunakaran, Prashobh*; Osman, M. Shahril; Karunakaran, Shanthi; Karunakaran, Arjun	Research and Development of a Coconut Meat Extraction System	3.16 PM	3.30 PM
8	283	Roy, Ritocheta; Mandal, Siddharth; Kavya, Saguturu; Dedeepya, Seetha Sai; Singh, Alpana; Reddy, Elluri Lokesh; Patil, Rujula Nitin; Ramamoorthi, Jaya Subalakshmi*	Real-time XSS Vulnerability Detection	3.31 PM	3.45 PM

**Time : 4:00 PM - 6:30 PM TRACK- A4: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-01**  
**Session coordinator : Mrs. Suman Yeligar**  
**Session Chair : Dr. Apurva Kumari**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
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1	292	., Shailendra*; Joseph, K. Tony	Analysis on IoT Networks Security : Threats, Risks, ESP8266 based Penetration Testing Device and Defense Framework for IoT Infrastructure	4.00 PM	4.15 PM
2	304	Pawar, Shilpa Devram*; Tiwari, Ayush; Singh, Abhishek kumar; Banerjee, Anubhav; Lokhande, Sharayu A; Bagate, Rupali Amit	Remote Health Monitoring System using Secure Communication Techniques	4.15 PM	4.30 PM
3	310	Kapoor, Shriyanshi*; Kota, Naga Srinivasarao Batta; Nagpal, Jatin	Emulation: Accelerating Simulation for Rapid Verification of Modern Processor-based Subsystems	4.30 PM	4.45 PM
4	346	R, Praveen *; V, Sridhar ; K, Sriram sundhar ; C, Saranya	Experimental Evaluation of Independent Component Analysis Design with Enhanced Performance Metrics using ALJM	4.45 PM	5.00 PM
5	376	M, Deepa*; Pb, Ruhi; Prakash, Sneha; Royal, Jahnavi; Naik, Shiva Kumar R	Determination and Diagnosis of Autism Spectrum Disorder using Efficient Machine Learning Algorithm	5.00 PM	5.15 PM
6	377	S, Yadhu Krishnan*	Design and Implementation of MIPI I3C master controller SubSystems	5.15 PM	5.30 PM
7	381	B, Lingam*; Penta, Samyuktha; Vandana, B.	Vehicle to Grid Technology: EV Power Generation Analysis through Plug in Charging Method	5.30 PM	5.45 PM
8	389	Kaushik, Pankhuri*; Singh, Manjeet	Proposed model of Thermal management for Pure Electric Vehicles	5.45 PM	6.00 PM
9	412	Sarveshwaran, Velliangiri; Roy, Srijarko; Mathur, Ankit*	An improved LinkNet-based approach for Retinal Image Segmentation	6.00 PM	6.15 PM
10	421	Praveen Kumar, Archech*; Kumar, Kiran	Digital Image watermarking using DWT and Encryption with RGB Pixel shuffling and PWP techniques	6.15 PM	6.30 PM

**Time : 8:45 AM- 10.45 AM TRACK- B1: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-02**  
**Session coordinator : Mr. Prashant Hanasi**  
**Session Chair : Dr. Manitha P.V**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	430	Sanjay, Koyyala; Charitha, Keshannagari; Shiva Kumar, Sriramoju; Shanmugasundaram, Ravivarman*	Switched Quasi Z-Source DC-DC Converter For Photovoltaic System	8.45 AM	9.00 AM
2	466	Gupta, Deepak*; Pingat, Sanjaykumar; Mali, Nilesh; Jha, Pallavi; Yadav, Pradeep; Gujar, Satish	MRI Segmentation Using Deep Neural Network-based Unet Architecture for Brain Tumor	9.01 AM	9.15 AM
3	478	Mehta, Shweta; Gautam, Shashank; Tatawat, Sameer; Saini, Abhilasha; Anand, Kundan*; Kumar, Bhavnesh	Maximum Power-Point Tracking Algorithms implementation on Arduino Uno for Photovoltaic systems	9.16 AM	9.30 AM
4	479	Satre, Shilpa M.; Satre, Shilpa M*; Joshi, Bharti	Analysis on Quantum Cryptographic Approaches for Image encryption	9.31 AM	9.45 AM
5	485	Sunori, Sandeep Kumar*; Mittal, Amit ; Singh, Nandan; Manu, Mehul; Juneja, Pradeep	Fuzzy C-Means Clustering of Soil data Samples	9.46 AM	10.00 AM
6	489	Sevak, Mayur M; Dwivedi, Dr. Vedvyas; Patel, Dr. Shraddha; Pandya, Rahul N*; Shah, Vatsal	Brain Tumor Detection Using ResNet Architectures	10.01 AM	10.15 AM
7	507	S Kumar, Lakshmi*; M Nair, Anjana; E R, Vimina	Multiclass Brain Tumor Classification of MR Images Using ResNet-50 and Dimensionality Reduction Techniques	10.16 AM	10.30 AM

8	537	Prasher, Shikha*; Nelson, Leema	Inception V3 model for Tuberculosis detection using chest x-ray images	10.30 AM	10.45 AM
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**Time : 11.30 AM- 1.30 PM TRACK- B2: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-02**  
**Session coordinator : Mr. Vishwas Patil**  
**Session Chair : Dr. Sagar Bhilaji Shinde**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	544	Matta, Priya Dr*	LSTM Approach For Efficient Stock Market Prediction	11.30 AM	11.45 AM
2	552	Sarkar, Debayan*; Sadhu, Pradip Kumar	Power enhancement by Hybrid BIPV arrays with fewer Peaks and reduced Mismatch losses under Partial Shading	11.45 AM	12.00 PM
3	576	Pg, Suprith*; Ahmed, Mohammed Riyaz	Power Extracting BeamSpace MIMO-NOMA for mm-Wave Communication Uses an Array of Antennas	12.00 PM	12.15 PM
4	579	Sachdev, Sandesh Thakurdas*; Murarka, Vaidik; Naidu, Devishree	Network Security Tools for Rapid Inspection	12.15 PM	12.30 PM
5	601	Ajim Sha, Amina; Addagalla, Sahith; N B, Sai Shibu*; P K, Indukala ; Singh, Balmukund; M, Nitinkumar	Enhancing Rain Gauge Sensor Reliability with Renewable Energy and Edge Analytics for Landslide Detection	12.30 PM	12.45 PM
6	608	Subudhi, Akanksha*; Hasan, Nazmul; Nene, Manisha	DeEN: Deep Ensemble Framework for Neurotypicality Classification	12.45 PM	1.00 PM
7	615	Pal, Debabrata*; Singh, Anvita; Khairnar, Hemant Mr.; Alladi, Abhishek	OpenMarshall: Open-Set Recognition of Aircraft Marshalling Signals for Safe Docking	1.00 PM	1.15 PM
8	617	Rathod, Rutuja; Barve, Yashoda N*; Saini, Dr. Jatinderkumar R.; Rathod, Sourav Prakash	From Data Pre-processing to Hate Speech Detection: An Interdisciplinary Study on Women-targeted Online Abuse	1.15 PM	1.30 PM

**Time : 1:45 PM - 2:45 PM TRACK- B3: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing HALL NAME : CSE-02**  
**Session coordinator : Mr. Mahaveer C**  
**Session Chair : Dr. Gajanan D Nagare**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	643	Reddy, T. Vasudeva; Reddy, Anirudh R; Bhanu Teja, C S *; Sai Charan Reddy, N; Hima Chandra Sekhar Rao, N	Classification and detection of skin diseases based on CNN-powered image segmentation	1.45 PM	2.00 PM
2	645	Reddy, T. Vasudeva*; K, Madhava Rao ; Reddy, Anirudh R; P, Kavitha Reddy	Low leakage and high speed Sub-threshold 128-bit Fin-FET SRAM for ultra-low-power applications	2.01 PM	2.15 PM
3	662	Yadav, Satyam*; Lakhra, Pradeepti	Voltage Profile Improvement by Optimal Placement of Static VAR Compensator	2.16 PM	2.30 PM
4	674	Moorthy, Prajna*; Soans, Mcvean; Murudkar, Mrunal; Das, Saptarshi; Patel, Himali	Swasthya - An EHR Built on Blockchain	2.31 PM	2.45 PM
5	676	Rohith Karthikeya Naidu, Vissa *; Muniapalle, Venkata Lakshmi Supraja; Kurri, Dharani	Sparse-Attention Based Deep Convolutional Neural Network for Pneumonia Detection	2.45 PM	3.00 PM
6	680	Sara, Dioline*; Mandava, Ajay Kumar	Screening of Baggage X-ray Images Using Convolutional Neural Networks	3.01 PM	3.15 PM
7	687	Mondal, Priyotosh*; Bhatia, Aditi; Panjwani, Roshini Omprakash ; Panchamia , Shrey	Image-based classification of skin cancer using convolution neural network	3.16 PM	3.30 PM

		T; Dokare, Indu			
8	689	Tang, Xiyong ; Li, Li*	Trajectory Tracking Of Industrial Robot Based On PDAG Algorithm	3.31 PM	3.45 PM

**Time : 4:00 PM- 6.30 PM TRACK- B4 : Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-02**  
**Session coordinator : Mrs. Soumya P**  
**Session Chair : Dr. Ambar Bajpai**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	690	Lu, Xiaoyan ; Li, Li*	Visual localization of workpiece based on evolutionary algorithm and its application in industrial robot	4.00 PM	4.15 PM
2	691	Li, Shanshan; Li, Li*	Research on prefabricated building quality management system based on Internet of things	4.15 PM	4.30 PM
3	692	Tu, Jinglu ; Li, Li*	Research on road traffic state discrimination technology based on RFID electronic license plate	4.30 PM	4.45 PM
4	693	Jiang, Jingzi *; Li, Li	Research on sports video tracking technology based on mean shift algorithm and color histogram algorithm	4.45 PM	5.00 PM
5	702	Kumari, Pallavi*; Agarwal, Ruchi	Root Locus Analysis for Swinging Up and Stabilizing Inverted Pendulum Cart System	5.00 PM	5.15 PM
6	703	Md, Suhaib*; Agarwal, Ruchi	Stabilization and Control of Inverted Pendulum Cart System using Fuzzy Logic Controller	5.15 PM	5.30 PM
7	716	Nand, Krishna*	Algorithms for Adaptive Beamforming in smart Antenna in 5G	5.30 PM	5.45 PM
8	724	Naikodi, Dr. Chandrashekhar B*; M, Mohan; V, Geetha	Forecast Model for Scheduling an HPC Application on CPU and GPU Architecture	5.45 PM	6.00 PM
9	728	Pradhan, Devasis*; C, Suma; Carva, Celso Barbosa	Implications of Resource Optimization in D2D Communication for Efficient Usage of RF Energy: Practice and Challenges	6.00 PM	6.15 PM
10	731	Wang, Jinli; Li, Li*	Self-Learning Fuzzy Feedforward Compensation Algorithm In Photovoltaic MPPT	6.15 PM	6.30 PM

**Time : 8.45 PM- 10.45 PM TRACK- C1: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-03**  
**Session coordinator : Mr. Manjunath Ranadev**  
**Session Chair : DR. ARNAB GHOSH**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	747	Tang, Yuantao; Li, Li*	Robot Learning Method Based On Video	8.45 AM	9.00 AM
2	749	Zhang, Chuanjiang ; Li, Li*	Predicting the adsorption capacity of organic compounds using neural network models	9.01 AM	9.15 AM
3	767	Janawade, Santosh A*; K, Prabu K; K, Krishnamoorthy	Switchable Wideband phase gradient beam steering reflector/absorber for applications such as Intelligent reflecting surfaces	9.16 AM	9.30 AM
4	775	Guo, Liyong ; Li, Li*	Threshold segmentation bridge crack detection algorithm based on Deep learning	9.31 AM	9.45 AM
5	783	Mariserla, Bhavana*; Kandala, Kalyana Srinivas; Gande, Chandrashekar; Paidipalli, Uday Sree	Likelihood Maximization for Estimation of Time Delay in DSSS based 5G networks	9.46 AM	10.00 AM
6	800	Shafiulla, Mohammed; Math, Naveen S*; B, Akash; Naidu B T, Aditi; Shreya, Bm	noQ : An Innovative Approach to Virtualize and Automate Queues	10.01 AM	10.15 AM
7	814	Sandeep, Singudasu Anupam*; K.P, Pinkymol	Soft-Switching Bridge-less Ćuk Converter based EV Charger for 2/3-Wheeler	10.16 AM	10.30 AM
8	820	Gupta, Apoorv*; Pandey, Abhi	Sarcasm Detection On News Headline Dataset Using	10.30 AM	10.45 AM

**Time : 11:30 AM - 1:30 PM TRACK- C2: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing HALL NAME : CSE-03**  
**Session coordinator : Mr. Gurudev Hiremath**  
**Session Chair : Dr. Mamatha Samson**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	826	Gupta, Ujjval*; Gangian, Vaibhav; Yagnik, Subrut; ., Anupama	Low Supply QFGMOS CCCII with Low-pass and High-pass Filter Applications	11.30 AM	11.45 AM
2	827	Waware, Tanmay D*; Patil, Mayur; Yawalkar, Atharva; Kumbhar, Vijayalaxmi S; Andhare, Maithili; Tekade, Arti	Design of Ultra Low Power, Area Efficient Ring Counter Based SAR ADC	11.45 AM	12.00 PM
3	857	Pandey, Divyanshu*; Bhat, Rajeshwari; Ahmad, Faizan; Gupta, Prakhar	Analysis and optimization of 16-bit RISC processor and 32-bit MIPS processor: A review	12.00 PM	12.15 PM
4	860	Khurana, Rohan; Arora, Saksham; Sharma, Parakh Rushil; Ramana, Vanjari Venkata *	An Online Sensorless Fractional Open Circuit Voltage Based Method for Tracking Maximum Power from Photovoltaic Module	12.15 PM	12.30 PM
5	870	Behera, Sagarika*	Suggestion of Appropriate Crops Based on Rainfall and Underground Water Analysis	12.30 PM	12.45 PM
6	877	Bommareddy, Sahithi*; Samyal, Tanya; Dahiya, Sonika	Implementation of a Deepfake Detection System using Convolutional Neural Networks and Adversarial Training	12.45 PM	1.00 PM
7	883	Akash, Awanish*; Sreejeth, Mini	Isolated DC- DC Converter with Synchronous Rectification For Electric Vehicle Battery Charging	1.00 PM	1.15 PM
8	903	Jain, Dhvani; Jagya, Sahil; Garg, Jiya; Shukla, A.*; Ra, Sasikala	A Supply Chain Management Framework and Relationship Visualizations For Revenue Prediction	1.15 PM	1.30 PM

**Time : 1:45 PM- 3.45 PM TRACK- C3: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing HALL NAME : CSE-03**  
**Session coordinator : Ms Supriya**  
**Session Chair : Dr. Ch. Rajendra Prasad**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	904	Thakur, Ayush; Shukla, A.*; Atrey, Jonathan; Kaushik, Naval	Using Variational Encoders to Enhance Classification in Indian Roads Analysis	1.45 PM	2.00 PM
2	905	Bohre, Aashish Kumar*; Prem Sai, Appasani Prem Sai	Energy Trading in the Internet of Energy Using Ethereum Smart Contracts and Smart Energy Meters	2.01 PM	2.15 PM
3	910	Johnson, Plezzant C*; Kant, Prof Dr.Shri; Kumar, Sandeep	Implementing Three Factors Authentication System (3FA) to maintain employee attendance record to enhance security	2.16 PM	2.30 PM
4	938	Kumar, Neeraj*; Satapathy, Rk; Ray, Kp	Design of a Stacked Circular Differential Microstrip Antenna for operating frequency of 2.45 GHz	2.31 PM	2.45 PM
5	939	Golla, Naresh Kumar*; Gadeela, Shiva Sai Krishna; Hussamali, Shaik; Bhargav, P V P E R; Sudabattula, Suresh Kumar	Solar PV and Grid-based EV Charging using SEPIC Converter	2.45 PM	3.00 PM
6	965	Singh, Chirag*; Arora, Ankita; Kumar, Gautam; Kumar, Himanshu	Power Quality Enhancement using Adaptive Notch Filter in Grid Distribution System	3.01 PM	3.15 PM
7	979	Bikki, Pavankumar*; Sai	Design and Implementation of FinFET 12-T SRAM	3.16 PM	3.30 PM

		Poojitha, Anuvala Setty Vlp ; Chowdary, S Linaa ; Sree, Akula Navya	cell for low power Applications		
8	980	Bikki, Pavankumar*; Ruchitha, Aavula ; Veena, Palli ; Akash, Nathani	Characteristics of a Dual-Gate Junction-less Transistor	3.31 PM	3.45 PM

**Time : 4.00 PM- 6.30 PM TRACK- C4: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-03**  
**Session coordinator : Mr. Pradeep Surasura**  
**Session Chair : Dr. Aswini Kumar Samantaray**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1025	Palas P, Bini*; Charan S, Saketh ; Shankar J, Ravi	Design of Wideband Antenna for Brain Imaging System	4.00 PM	4.15 PM
2	1036	Kakde, Sandeep*; Khan, Nadeem	Testing Significance of Layout Dependent Impacts on Silicon Chips Performance	4.15 PM	4.30 PM
3	1043	Chen, Jueyu ; Li, Li*	Automatic Detection Method of Operation Error of Smart Electricity Meter Based on Machine Vision	4.30 PM	4.45 PM
4	1044	Li, Li*; Feng, Xingyi	Bionic Algorithm Based on Plant Physiological Characteristics	4.45 PM	5.00 PM
5	1060	Liu, Lu ; Li, Li*	The cognitive load based on language big data and the construction of intelligent classroom for college oral English mixed teaching	5.00 PM	5.15 PM
6	1092	Sharma, Ashish*; Garg, Rinku	Braking in Electrical Vehicle for Control of heat flow	5.15 PM	5.30 PM
7	1093	S, Guru Prasad M*; Chauhan, Kritika; Goyal, Sakshi	An Automated Attendance System Using Face Recognition Technique based on Haar Cascade with LBPH	5.30 PM	5.45 PM
8	1107	G, Srinivas*	Performance of inverter fed induction motor drive using neuro fuzzy type-2 controller	5.45 PM	6.00 PM
9	1154	J, Tini Mercy*; V.G, Samyukthaa; S, Sharanyaa	Emotion Recognition using Speech Processing	6.00 PM	6.15 PM
10	1156	P, Nageswara Rao*; Bootla, Jayasurya; Afrin, Shiak	A Millimeter Wave 4X4 Circular Shaped MIMO Antenna with Half-moon and Elliptical Shaped Slots for 5G Networks	6.15 PM	6.30 PM

**Time : 8:45 AM - 10:45 AM TRACK- D1: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-04**  
**Session coordinator : Mr. Shobha Hiremath**  
**Session Chair : Dr. Pratik J Mhatre**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1158	Kumar C, Ramesh; M, Sandhiya; Kumar B , Sreeman*; H, Shyam; M, Yuvaraj	Speech Enhancement Using Modified Wiener Filtering With Silence Removal	8.45 AM	9.00 AM
2	1160	Sharma, Ashish*	Fuzzy Logic Based Power Train Controller For Different Hybrid Electric Vehicle Configurations	9.01 AM	9.15 AM
3	1170	V, Chethan*; P V, Bhaskar Reddy	Comprehensive Approach to Multi Model Speech Emotion Recognition System	9.16 AM	9.30 AM
4	1177	Mandal, Priti*; Roy, Lakshi Prosad; Das, Santos Kumar	Hybrid Cryptographic Technique of Data Security for UAV Applications	9.31 AM	9.45 AM
5	1182	Sunori, Sandeep Kumar*; Manu, Mehul; Juneja, Pradeep	Control System Design for Electric Vehicle using IMC, LQG, and Loop Shaping Techniques	9.46 AM	10.00 AM
6	1194	Venkatesan, Dharshini; K, Nirmala*; Mahadevan, Shriraam	Study on Hyperthyroidism using Thermal Image Analysis	10.01 AM	10.15 AM

7	1198	Wang, Yarong; Li, Li*	Detection and analysis of engineering quality of mine oil and gas reservoir based on computer image analysis technology	10.16 AM	10.30 AM
8	1200	Li, Yijia; Li, Li*	Exploration Practice of Data Mastery Traceability Algorithm Based on Knowledge Graph in Data Governance of Electric Power Industry	10.30 AM	10.45 AM

**Time : 11:30 AM- 1.30 PM TRACK- D2: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-04**  
**Session coordinator : Mrs. Kavita M**  
**Session Chair : Dr. Meenakshi K**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1217	Samala, Srinivas*; Reddy, Nihal Raj ; Bhuvaneshwar, Poshala; Krishpartha , Kranthi ; Sai Varun , Chirra ; Ch, Rajendra Prasad	Cooperative spectrum sensing with improved energy detection over different fading channels: a performance analysis	11.30 AM	11.45 AM
2	1223	Liu, Kejia ; Li, Li*	Machine Learning Methods in Natural Language Information Extraction	11.45 AM	12.00 PM
3	1228	Liu, Lu ; Li, Li*	The Construction of Intelligent Classroom for Blended Teaching of Cognitive Load and College English Spoken Language Based on Data Mining	12.00 PM	12.15 PM
4	1277	M, Sakthivel*; Pentamsetty, Sreekarni; Peruri, Rishika; Potteti, Jyoshna; P, Navya	Pneumonia Detection Using X-Ray Images	12.15 PM	12.30 PM
5	1283	Chuchra, Sheenam*; Khattar, Sonam	Automated Wheat Plant Disease Detection using Deep Learning: A Multi-Class Classification Approach	12.30 PM	12.45 PM
6	1287	Sadique Ahemed Siddiqui, Saba Siddiqua*; Siddi Habib Hyder, Rimsha Taskeen; Manjaramkar, Arai; Jonnalagedda, Megha V.	Automatic Detection of Lung Diseases Using CNN and SVM	12.45 PM	1.00 PM
7	1293	Kumar, Purushottam*; Reddy, Srinivasulu	Estimating fish weight growth in aquaponic farming through machine learning techniques	1.00 PM	1.15 PM
8	1297	Bhardwaj, Anagha ; Singhal, Akshita ; Mamgain, Prakhar; Joshi, Utkarsh; Thapliyal, Siddhant*	A Real Time Conversion Model for Hand Gestures to Textual Content	1.15 PM	1.30 PM

**Time : 1.45 PM- 3.45 PM TRACK- D3: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-04**  
**Session coordinator : Mr. Shridar Chinni**  
**Session Chair : Dr. Amanpreet Kaur**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start Time	End Time
1	1299	Gupta, Shivank*; Beniwal, Rohit; Batra, Satvik; Shekhar, Shashi	Hindi Hit Songs Prediction Using Machine Learning Algorithms	1.45 PM	2.00 PM
2	1305	Mullamuri, Venkata Yaswanth*; Gupta, Ayush; S P , Maniraj; Soumya, Prateek	Breast Cancer Detection and comparative analysis of Convolutional Neural Networks and VGG-16	2.01 PM	2.15 PM
3	1319	Kaushal , Neeraj*; Singh, Gurpreet	An Addressing Techniques for Maintaining Security and Privacy Framework for Internet of Things	2.16 PM	2.30 PM
4	1322	Mishra, Raghvendra*; Sharma, T P	SRS: Scalable and Robust Snapshot Algorithm For Wireless Sensor Networks	2.31 PM	2.45 PM
5	1396	Tanwar, Vishesh*	Classification of Multiple Maize Leaf Diseases Using a Blended Convolutional Neural Network	2.45 PM	3.00 PM

6	1401	Anand, Abhishek; Maurya, Rajnish ; Kumar, Pankaj; Chakraborty, Amit*; Ray, Saheli	Equilibrium optimizer algorithm for optimal sizing of utility-connected hybrid PV-biomass systems	3.01 PM	3.15 PM
7	1403	Anantha, Bharathi*; Ravi Shankar Reddy, Gosula	Successive Detection Logarithmic Amplifier for ECCM features of RADAR	3.16 PM	3.30 PM
8	1404	Anantha, Bharathi*; Ravi Shankar Reddy, Gosula	2D Metamaterials for Blinds and Polarization Conversion Applications	3.31 PM	3.45 PM

**Time : 4.00 PM- 6.30 PM TRACK- D4: Antennas & Propagation, Control, / Computer Networks/ Power Electronics / WSN / Computational Intelligence**  
**HALL NAME : CSE-04**  
**Session coordinator : Mrs Saritha U**  
**Session Chair : Dr. M. Rizwan**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start Time	End Time
1	1408	Borkar, Nishant Madhukar*; Parlewar, Pallavi K	Design of Directive Microstrip Slot Feed Patch Antenna for Medical Applications	4.00 PM	4.15 PM
2	1415	Mehta, Shiva*; Kukreja, Vinay; Vats, Satvik	Advancing Agricultural Practices: Federated Learning-based CNN for Mango Leaf Disease Detection	4.15 PM	4.30 PM
3	1444	Singh, Gurpreet*; Chaudhary, Mansi; Singh, Jaspreet; Madaan, Nikita	Parameter Design Approaches based on AI Techniques for Transformer Neural Network Optimization	4.30 PM	4.45 PM
4	1447	Ritharson P , Isaac*; J, Anitha; Juliet, Sujitha; Alex Pandian, Dr. Immanuel	Multi-Document Summarization Made Easy: An Abstractive Query-Focused System Using Web Scraping and Transformer Models	4.45 PM	5.00 PM
5	1450	Sharma, Sachin *; Semwal, Gourav; RAWAT, TANUJ	Comparative Analysis of Different Optimization Technique for Optimal Size and Location of Non-Dispatchable Energy Resources	5.00 PM	5.15 PM
6	1452	Smak, Azad*	Stochastic Scheduling for Stability of Networked Control Systems – A Short Review	5.15 PM	5.30 PM
7	1461	Maheswara Rao, V V R*; K, Meenakshi; N, Silpa; Gottumukkala, V S S P Raju ; M, Narasimha Raju ; Pamarthi, Nagaraju	An Innovative Machine Learning based Heart Disease Assessment System by Sequential Feature Selection Approach	5.30 PM	5.45 PM
8	1464	Kapoor, Nandini; K, Meenakshi*; Gupta, Ayush	Colon and Lung Cancer Detection using Histopathological Images	5.45 PM	6.00 PM
9	1479	Ritharson P , Isaac; J, Anitha*; J, Brema; Juliet, Sujitha; S, Srinithisathian	Modeling Precipitation Patterns in Alappuzha - Kerala: An Analysis of Regression and Time Series Approaches	6.00 PM	6.15 PM
10	1498	Joshya, Devika M*; Sunil, Diya Theresa; Das, Abhijith; M M, Amijith ; Safar, Seema	Enriching Transformer using Fourier Transform for Image Captioning	6.15 PM	6.30 PM

**Time : 8:45 AM - 10:45 AM TRACK- E1: Antennas & Propagation, Control, / Computer Networks/ Power Electronics / WSN / Computational Intelligence**  
**HALL NAME : CSE-05**  
**Session coordinator : Mrs. Madhu Gudgunti**  
**Session Chair : Dr.K.Deepa**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1522	T, Deepti; K, Dr.Deepa*; A, Anoop	High Power Bi-Directional Converter for Electric Vehicle Application	8.45 AM	9.00 AM
2	1528	Patil, Ritesh T*; G, Narayan D	Mitigation of DDoS Attacks using Entropy and Proof-of-Work Based Puzzle in OpenStack Cloud	9.01 AM	9.15 AM
3	1531	Shaik, Farook*	A Fuzzy Logic-Based Control Strategy For Power Balance And Enhance Power Quality In A Grid-Tied Pv System	9.16 AM	9.30 AM

4	1542	C S, Anand*; Shanker, Ravi Mr.	Zero Trust Resilience Strategy for Linux crypto ransomware obviation and recuperation	9.31 AM	9.45 AM
5	1544	Saleem, Salman*; M D, Anirudh; K R, Bharath ; Rao R, Pavan; P, Vimala	Design and Analysis of Dual Material Double Gate Tunnel-Field Effect Transistor (DMDG-TFET) with Gate Oxide Stack	9.46 AM	10.00 AM
6	1546	Devavaram Jebaraj, Sam *; N, Srinidhi	JPEG-XL based Compression of DICOM Images for Reduced Storage and Transmission Costs	10.01 AM	10.15 AM
7	1549	Mathiyalakendran, Aarthi Elaveini*; T, Deepa; N, Bharathiraja	Compressive Sensing of Natural Images with Hybrid Transform based Sensing Matrix	10.16 AM	10.30 AM

**Time : 11:30 AM- 1.30 PM TRACK- E2: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-05**  
**Session coordinator : Mrs Aishwarya G Patil**  
**Session Chair : Dr. Patil Mounica**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1573	Adlakha, Akshaya*; Hussain, Waqar; Solay, Leo Raj; Amin, S. Intekhab; Anand, Sunny; Kumar, Pradeep	Design and Analysis of 6T SRAM Implementation upon Dual Gate Junctionless FET	11.30 AM	11.45 AM
2	1594	Yatendra, Kuwar; Saini, Adarsh *	Comparative analysis of FACTS device in the transmission line network on the zonal protection	11.45 AM	12.00 PM
3	1642	Ansari, Monish*; Yadav, Gaurav; Singh, Mukhtiar	A 3.3kW Modified LLC Resonant Converter for Grid-Tied EV System Under Wide Voltage Range	12.00 PM	12.15 PM
4	1645	Shilaskar, Swati*; Bhatlawande, Shripad S; Dhande, Harshal Ravindra; Deshmukh, Shivpriya; Deshmukh, Jayesh B; Dohale, Manoj Ramprasad	Action Recognition of Skateboarding Tricks – Ollie and Kickflip Using Neural Network	12.15 PM	12.30 PM
5	1652	Devana, V N Koteswara Rao*; G, Asa Jyothi; Savanam, Chandra Sekhar; Ponnappalli, V L N Phani ; G, Sekhar Reddy; N, Radha	A Compact MIMO Antenna for GPS/PCS/Bluetooth Wireless Applications	12.30 PM	12.45 PM
6	1673	Chaudhri, Shiv Nath; Mishra, Ashutosh; Rajput, Naveen Singh *; Rao, Y. M.; Subramanyam, M. V.	Synergetic Effect of Complementary Nature of Hyperspectral and LiDAR Data for High Performance LULC Classification	12.45 PM	1.00 PM
7	1696	Gupta , Deepanshu; Ramana, Vanjari Venkata *	Solar Power Prediction Based on Recurrent Neural Networks Using LSTM and Dense Layer With ReLU Activation Function	1.00 PM	1.15 PM
8	1698	Chahar, Ravita; Dubey, Ashutosh Kumar*; Narang, Sushil Kumar	A mental health performance assessment using support vector machine	1.15 PM	1.30 PM

**Time : 1.45 PM- 3.45 PM TRACK- E3: Antennas & Propagation, Control, Instrumentation and Automation/ Power Electronics / Signal & Image Processing**  
**HALL NAME : CSE-05**  
**Session coordinator : Mr. Ramachandra T**  
**Session Chair : Dr.T.KAVITHA**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start Time	End Time
1	1707	Sheikh, Tanisha*; Hutke, Sonal; Gope, Shruti Narayan; Sharma, Srishti; Thikekar, Tanishka	Wearable CPW Antenna for WBAN Applications	4.00 PM	4.15 PM
2	1713	Dhake, Dipali ; Walunj, Sanket Nivrutti*; Gunjal , Shreyas ; Gaikwad, Kunal	LSTM Algorithm For The Detection Of Mental Stress In EEG	4.15 PM	4.30 PM
3	1714	Kantipudi, Revathi Annapurna*; Pati, Peeta Basa	Black and White Image Colorization Using Convolutional Neural Networks	4.30 PM	4.45 PM

4	1716	Jain, Sanyam; Goel, Saransh; Kunwar , Sarthak; Ramana, Vanjari Venkata *	Design and Implementation of Motion Capture Suit using MPU9250 and I2C Mux TCA9548A	4.45 PM	5.00 PM
5	1720	Balasubramanian, Hemant Kumar*; Thirugnanam, Hemalatha	Neural Networking to Predict Sap Flow Using AI- Synthesized Relative Meteorological Data.	5.00 PM	5.15 PM
6	1721	Soni, Aastha *; Dhiman, Rohit; Chandel, Rajeevan	Design and Performance Analysis of Voltage-Controlled Oscillator	5.15 PM	5.30 PM
7	1725	Singh, Sruti*	Vertical Tunnel Field Effect Transistors (VTFETs): A Potential Candidate for Low Power Applications	5.30 PM	5.45 PM
8	1729	Shendre, Jayant*; Jagtap, Prashant P; Khubalkar, Swapnil	Optimized Power Flow Control using ANN-based UPFC Technique	5.45 PM	6.00 PM
9	1734	Ee, Nikhil; Sharma, Ketan; Khubalkar, Swapnil*; Daigavane, Prema; Vaidya, Prajakta Satish	IoT-Enabled Battery Monitoring System for Enhanced Electric Vehicle Performance	6.00 PM	6.15 PM

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Venue: - K. L. E. Institute of Technology, Hubballi., Karnataka, India.

Session Schedule

25th JUNE 2023

**CONFERENCE ORAL SESSIONS SCHEDULE****Time : 8:45 AM - 10:45 AM TRACK- A1: Computational Intelligence / Antennas & Propagation / Control&Systems / Computer Networks/ Power Electronics / WSN****HALL NAME : CSE Seminar Hall****Session coordinator : Prof. Shridar Chinni****Session Chair : Dr. Halkarnimath B**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	7	Kosuru, Sai Malleswar Malleswar*; Khan, Karam Ilahi; Afzaal, Khan; Das, Sirshendu ; Bs, Himani; R Valke, Suman; N., Ramalakshmi ; D, Dr. Venkataramana	Development of Low Cost Automated Test System for RF Power Amplifiers using Open Sourced Python Programming	8.45 AM	9.00 AM
2	247	Aadhithya A, Aadharsh; Edpuganti, Anirudh; Rejathalal, Vinith; Kumar S, Sachin*; K.P, Soman; Poornachandran, Prabhakaran	An Informal Introduction to Semirings for GraphBLAS using Matlab	9.01 AM	9.15 AM
3	444	Puranik, Kishansmaran*; Patil, Kiran; Ghaligi, Guruprasad; Jannu, Rajath; Patil, Sangamesh; G, Narayan D; Kachavimath, Amit	A Two-level DDoS attack Detection using Entropy and Machine Learning in SDN	9.16 AM	9.30 AM
4	672	Lanke, Phani Veera Prasad*; Reddy, Dr. R Venkata Siva; Kulkarni, Chidambar ; P, Govindan	Solar Beam Uniformity Measurement System	9.31 AM	9.45 AM
5	686	S.J, Shabnam Ara*; R, Tanuja	Investigating the Influential Factors of Learner Performance in Online Education using Learning Analytics Approach	9.46 AM	10.00 AM
6	727	Pradhan, Devasis*; A B, Nataraju; Jambli, Sumangala S	Opportunities, Challenges, and Benefits of 5G-IoT toward Sustainable Development of Green Smart Cities (SD-GSC)	10.01 AM	10.15 AM
7	859	Aadhithya A, Aadharsh; Kumar S, Sachin*; Rejathalal, Vinith; V G, Sujadevi Dr; Poornachandran, Prabhakaran; K.P, Soman	Finding Network Motifs: A comparative study between ILP and Symmetric Rank-One NMF	10.16 AM	10.30 AM

**Time : 1:30 AM- 4.00 PM TRACK A2: Computational Intelligence / Antennas & Propagation / Control&Systems / Computer Networks/ Power Electronics / WSN****HALL NAME : CSE Seminar Hall****Session coordinator : Prof. Shridar Chinni****Session Chair : Dr. S H Angadi**

Sr.No.	Paper ID	Corresponding Author Name	# Paper Title	Start time	End Time
1	1349	M, Vamshi Krishna*; N, Usha Rani; Nidamanuri, Rama Rao	Impact of Dimensionality Reduction Techniques on Classification of Hyperspectral Images	1.30 AM	1.45 AM
2	1530	Dhanush, C*; B M, Chaya; Srikar, Inti Sai; Parvatalu, Akula Pavan ; Gowda R, Chirag	Optical Design and Modeling of Micro Light emitting diodes for display applications	1.45 AM	2.00 PM
3	1651	Gorre, Srinivas Rao*; Janapati, Ravichander; Ch, Rajendra Prasad	Improved P300-Based BCI using EEG Scalogram Images and Deep Neural Networks	2.00 PM	2.15 PM
4	1662	Bhat, Pushkar; Pai, Manohara*; Pai, Radhika	Anomaly detection using Federated Learning: A Performance Based Parameter Aggregation Approach	2.15 PM	2.30 PM
5	1684	Shenoy, Karthik K*; Pai, Manohara; Pai,	Siamese Network Based Anomaly Detection	2.30 PM	2.45 PM

		Radhika	Framework for Robust Federated Learning.		
6	1697	Kamath, Shreays; Pai, Manohara*; Vignesh, Shankar ; G, Darshan	Revolutionizing Cloud Infrastructure Management: Streamlined Provisioning and Monitoring with Automated Tools and User- Friendly Frontend Interface	2.45 PM	3.00 PM
7	1704	Aadhithya A, Aadharsh*; Edpuganti, Anirudh; Kumar S, Sachin; Mohan, Neethu; K.P, Soman	DMD-CGR: Dynamic Mode Decomposition- based Novel Features for DNA sequence classification	3.00 PM	3.15 PM
8	1718	Sajan, Auchithya*; M, Dhanya	Performance Assessment of Various Machine Learning Classification Methods for Classifying the Landcover Using Landsat 8 OLI	3.15 PM	3.30 PM

# Design and Analysis of Microstrip Wideband Filter

Ranjan Kumar Mahapatra<sup>1</sup>, Yajunath Kaliyath<sup>2</sup>, N S V Shetty<sup>3</sup>,  
Gnane Swarnadh Satapathi<sup>1</sup>, Manjukiran B<sup>1</sup>, Pradeep Kumar<sup>1</sup>, Akshith N Shetty<sup>1</sup>,  
Rajalaxmi Srichandan<sup>4</sup>, B Shivalal Patro<sup>4</sup>, Anupama Senapati<sup>4</sup>

<sup>1</sup>Department of ECE, A J Institute of Engineering & Technology, Mangaluru, 575006, India

<sup>2</sup>Department of ECE, NIE, Mysuru, karnataka, 570008, India

<sup>3</sup>Department of ECE, NITK, Surathkal, Mangaluru, 575025, India

<sup>4</sup>School of Electronics Engg, KIIT Deemed to be University, Bhubaneswar, India, 751024

Emails: <sup>1</sup>{mahapatra.ranjankumar, gneswar.24, manjukiranb}@gmail.com

<sup>1</sup>{pradeepkumar03579, akshithnshetty02}@gmail.com,

<sup>2</sup>yajunath@nie.ac.in, <sup>3</sup>shekar\_shet@yahoo.com,

<sup>4</sup>rajalaxmi.srichandan01@gmail.com, <sup>4</sup>bspatro@ieee.org, <sup>4</sup>senapati.anupama@gmail.com,

**Abstract**—This paper deals with the study on conventional wideband bandpass filter (BPF) and the bandpass filter designed using the split ring resonator structure. The proposed design using the SRR consists of 3 SRR on which the filter is mounted. This is designed using the HFSS software. The material with in the dielectric constant of 4.36 and the loss tangent of 0.01 is used for the substrate material. The substrate height is varied with the dimension of 4.9 x 2.9 kept constant. The result observed for the BPF on SRR with increase substrate height has shown better results better return loss characteristics as compared to the other design.

**Index Terms**—Split ring resonator, Bandpass filter(BPF), Meta-materials ,return loss.

## I. INTRODUCTION

When the rejection of an undesirable frequency range is necessary, filters must be used in communication and radar systems. In electromagnetic compatibility (EMC) engineering, filtering is a key strategy for eliminating noise and interference. The four functional subcategories of filters are band stop, band pass, low pass, and high pass. Although there are several groups of analytical techniques that can be utilised to meet a particular set of filter requirements, Butterworth, Chebyshev, Cauer, and Bessel functions: each having advantages and disadvantages that are the ones typically used in the design of RF/microwave filters. For instance, Butterworth filters are ideal in the pass band but have subpar out-of-band attenuation slopes. Chebyshev filters feature sharper attenuation slopes than Butterworth filters, but the ripple within the pass band makes up for it. Elliptic filters offer the sharpest out-of-band attenuation, but they also have unfavourable ripples both inside and outside the pass band.

## II. TRANSMISSION-LINE-TO-MICROSTRIP-LINE FILTER TRANSFORMATION

Microstrip lines are transmission lines (ML). Microstrip lines are often described in terms of dielectric constants,

conductor thicknesses, dielectric material heights, and dissipation factors, sometimes known as loss tangents. The well-known empirical formulae shown below can be used to convert a transmission-line-circuit to a microstrip line. The conductor thickness is assumed to be insignificant in relation to the substrate height in these equations. Maxwell equations must be treated under extremely complex boundary conditions in order to provide analytical solutions for microstrip lines. Because of this, no one has yet appeared. Instead, the characteristic can be determined using a number of sets of empirical formulas (Equations: 1 to 8), including the impedance of a microstrip line  $Z_0$  for a particular substrate thickness (h), relative permittivity  $\epsilon_r$ , strip width (w), and strip thickness (S) (t). one of these sets of formulas is  $\eta_0=377\omega$  the following:

$$Z_0 = \frac{\eta_0}{2\pi\sqrt{\epsilon_{reff}}} \ln \left\{ \frac{8h}{w_e} + 0.25 \frac{w_e}{h} \right\} \text{ for } \frac{w}{h} \leq 1 \quad (1)$$

for  $\frac{w}{h} \geq 1$

$$Z_0 = \frac{\eta_0}{\sqrt{\epsilon_{reff}}} \left\{ \frac{w_e}{h} + 1.393 + 0.667 \ln \left( \frac{w_e}{h} + 1.444 \right) \right\}^{-1} \quad (2)$$

$$\frac{w_e}{h} = \frac{w}{h} + \frac{1.25}{\pi} \frac{t}{h} \left[ 1 + \ln \left( \frac{4\pi w}{t} \right) \right] \text{ for } \frac{w}{h} \leq 1 \quad (3)$$

$$\frac{w_e}{h} = \frac{w}{h} + \frac{1.25}{\pi} \frac{t}{h} \left[ 1 + \ln \left( \frac{2h}{t} \right) \right] \text{ for } \frac{w}{h} \geq 1 \quad (4)$$

$$\epsilon_{reff} = \frac{\epsilon_r + 1}{2} + \frac{\epsilon_r - 1}{2} F \left( \frac{w}{h} \right) - C \quad (5)$$

$$F \left( \frac{w}{h} \right) = \left( 1 + 12 \frac{h}{w} \right)^{-0.5} + 0.04 \left( 1 - \frac{w}{h} \right)^2 \text{ for } \frac{w}{h} \leq 1 \quad (6)$$

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$$F\left(\frac{w}{h}\right) = \left(1 + 12\frac{h}{w}\right)^{-0.5} \text{ for } \frac{w}{h} \geq 1 \quad (7)$$

$$C = \frac{\epsilon_r - 1}{4.6} \frac{\frac{t}{h}}{\sqrt{\frac{w}{h}}} \quad (8)$$

Here,  $\epsilon_{reff}$  is the effective permittivity of the substrate. The microstrip line's conductor length depends on  $\epsilon_{reff}$ , and be calculated from

$$l = \frac{c}{f\sqrt{\epsilon_{reff}}} \quad (9)$$

After all the parameters are known, the characteristic impedance may be calculated using equations 1 through 9. Alternately, these equations can be used to determine the microstrip line's width.

### III. MICROWAVE FILTERS

We'd like to be able to connect the desired frequency characteristics to the filter structure's parameters so that we may build specific filters, [1]. Starting with prototype low-pass filters, the general synthesis of filters is performed. The ideal relationship between the distributed parameters and the corresponding lumped element prototype parameters is shown in [2]. As we'll see, both distributed filters and lumped element filters are capable of realising the various filter passband and stopband configurations. The design of microwave filters is comprehensively detailed in the famous Stanford Research Institute publication[5] Microwave Filters, Impedance Matching Networks and Coupling Structures. The following is a practical example of a bandpass and bandstop filter  $\lambda/4$  stubs connected by  $\lambda/4$  transmission lines.

### IV. ULTRA WIDEBAND COMMUNICATION

In contrast to UWB, conventional radio systems transmit data by varying a sinusoidal wave radio system's power level, frequency, and/or phase. In order to enable a pulse-position or time-modulation, UWB transmissions need a large amount of bandwidth and produce radio energy at specific times. Polarity, amplitude, and/or the usage of orthogonal pulses are additional methods for conveying (modulating) information about UWB signals (pulses). UWB pulses can occasionally be broadcast at very low pulse rates to help with time/position modulation, but they can also be sent at rates as high as the inverse of the UWB pulse bandwidth. In order to demonstrate pulse-UWB systems with channel pulse rates of 1.3 giga-pulses per second and forward error correction encoded data rates of 675 Mbit/s, continuous UWB pulse systems, also known as "C-UWB," have been built. The UWB technology used in this proposed standard and working group for IEEE 802.15.4a, which has suggested UWB as an alternate layer, is pulse-based and employs bursts of pulses.

Examining Shannon's renowned capacity equation may help to better characterise the advantages and potential of UWB.

Shannon's equation is expressed as:

$$C = B \times \log\left(1 + \frac{S}{N}\right) \quad (10)$$

where S is the signal power in watts, N is the noise power likewise in watts, and C is the maximum channel capacity, expressed in bits per second. According to this equation, there are three things we can do to increase the channel's capacity. The bandwidth can be increased with the increase in signal power or decrease the noise.

### VI. WORKFLOW

The Fig. 1 represents the workflow of the proposed work. The proposed workflow includes selection of dimension to

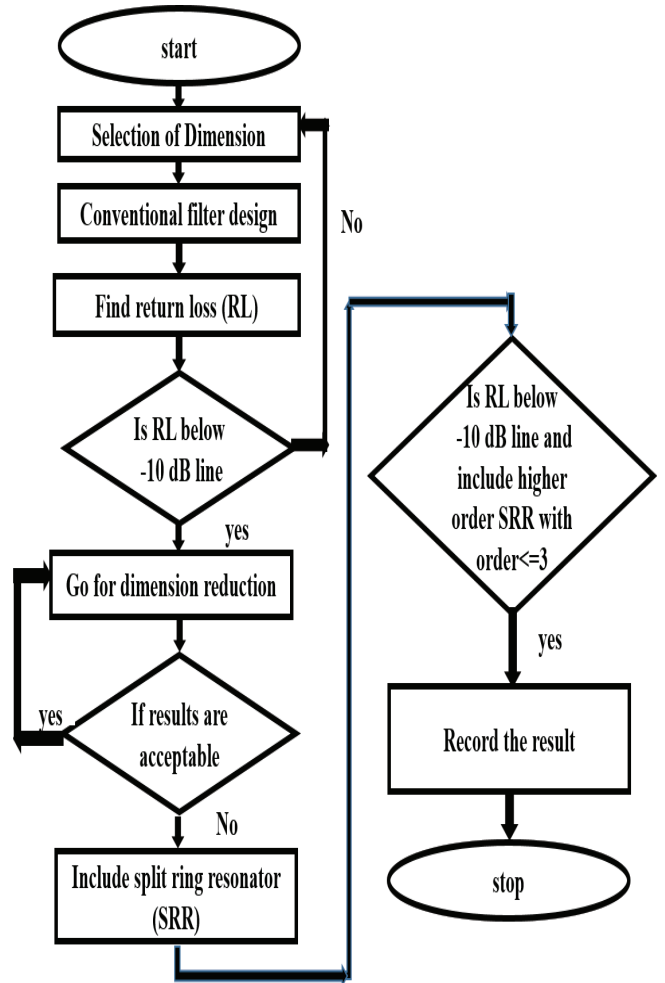


Fig. 1. Workflow

inclusion of SRR with the record of the results obtained.

## VII. METAMATERIALS

Metamaterials are synthetic materials that have been created to have characteristics that may not exist in nature. The properties of metamaterials are typically determined by structure rather than composition. Metamaterials investigates materials with negative refractive index. Because of the distinctive and controllable electromagnetic properties of these structures as well as the small electrical size of their component elements, higher performance and unique functionality are the major areas where metamaterial concepts may have a significant impact. The application of metamaterials in the development of compact microwave filters and diplexers appears to be straightforward because they are naturally frequency-selective structures[6].As a result, the first portion of this chapter’s principal focus is the construction of microwave filters.As filters and diplexers based on one-dimensional (1D) metamaterials require resonant components, the resonant-type technique is favoured (but not the only one). In electromagnetic theory, continuous media with negative parameters—specifically, those with negative magnetic permeability ( $\mu$ ) or dielectric constant ( $\epsilon$ )—have long been recognised. Because most solid-state materials have weak magnetic interactions, media with negative  $m$  are less frequent in nature. Only ferrimagnetic materials with sufficiently strong magnetic interactions and low losses can form regions of negative magnetic permeability.

## VIII. DESIGN OF MICROSTRIP FILTER

### A. Phase 1: Conventional Bandpass Filter

Design Specification: Gap & Width of stubs=0.2mm Substrate value:  $h=1.57\text{mm}$ ,  $\epsilon_r=4.36$ , loss tangent=0.01

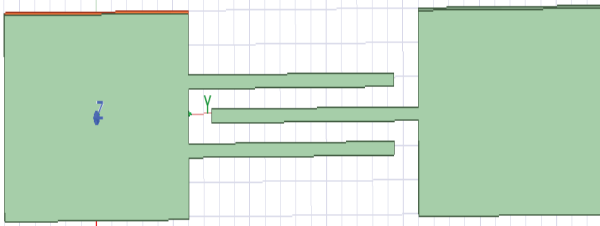


Fig. 2. Conventional Design1

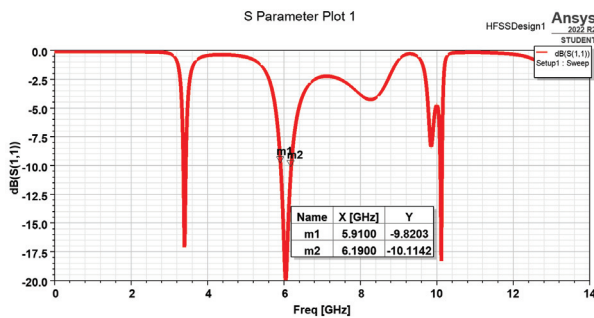


Fig. 3. Conventional Design Return Loss

The Figure. 2 represents the prototype and the Figure. 3 represents the proposed conventional filter return loss characteristics.

### B. Phase 2: Conventional Bandpass Filter (Reduced dimension)

1) Design1: Design Specification: Gap & Width of stubs=0.2mm Substrate value:  $h=1.7\text{mm}$ ,  $\epsilon_r=4.36$ , loss tangent=0.01

The Figure. 4 represents the prototype and the Figure. 5 represents the proposed design1 return loss characteristics.

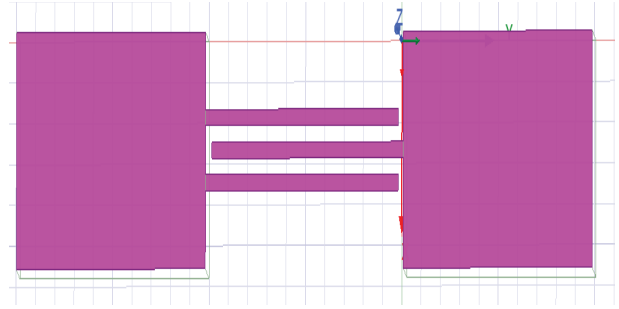


Fig. 4. Design1

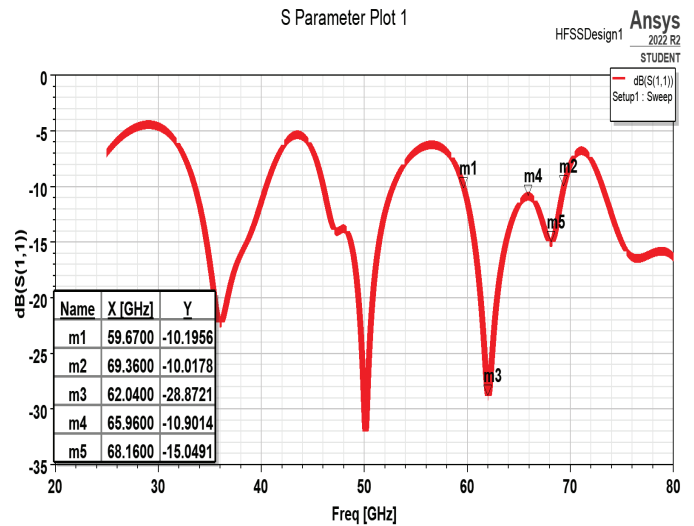


Fig. 5. S11 paramter of the proposed design1

The return loss characteristics (below -10dB line) is observed within the frequency of 59.67 GHz to 69.36 GHz with a bandwidth of 9.69 GHz.

2) Design2: Design Specification: Gap & Width of stubs=0.2mm Substrate value:  $h=1.75\text{mm}$ ,  $\epsilon_r=4.36$ , loss tangent=0.01

The Figure. 6 represents the proposed design2 return loss characteristics.

The return loss characteristics (below -10dB line) is observed within the frequency of 60.40 GHz to 70.19 GHz with a bandwidth of 9.79 GHz.

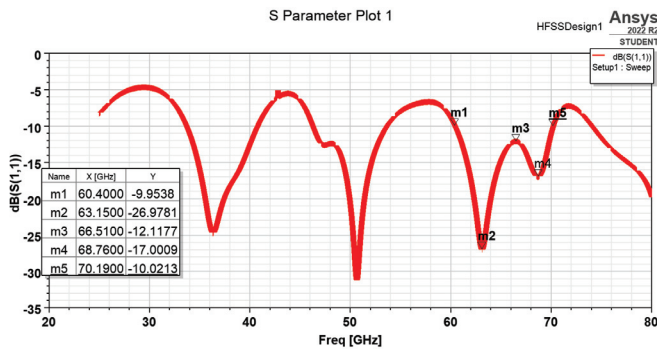


Fig. 6. S11 parameter of the proposed design2

3) Design3: Design Specification: Gap & Width of stubs=0.2mm Substrate value: h=1.8mm, epsilon r=4.36, loss tangent=0.01

The Figure. 7 represents the proposed design3 return loss characteristics.

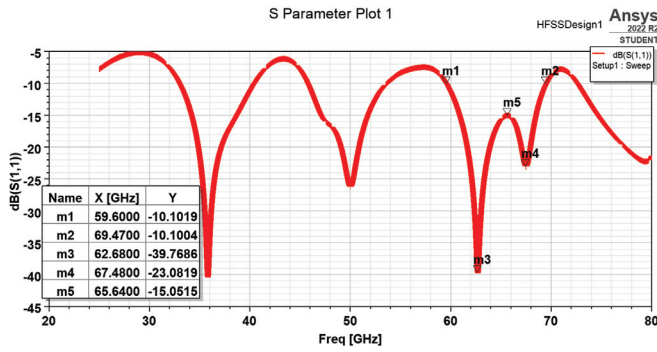


Fig. 7. S11 parameter of the proposed design3

The return loss characteristics (below -10dB line) is observed within the frequency of 59.60 GHz to 69.47 GHz with a bandwidth of 9.87 GHz is observed.

The Figure. 8 represents the proposed designs merged return loss characteristics.

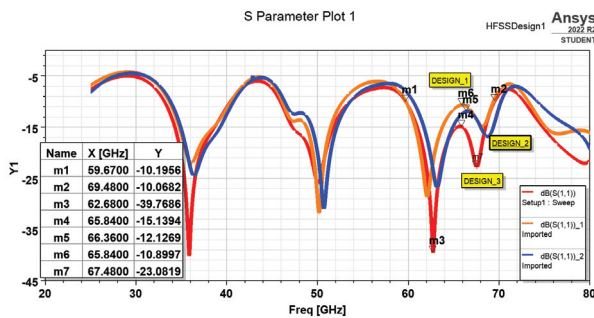


Fig. 8. Merged

### C. Phase 3: Increased substrate Height

To obtain computational results for the UWB filter with SRR metamaterial structure, electromagnetic simulations were performed. The filter's optimum size, return loss curve, and features were ascertained from the computational findings.

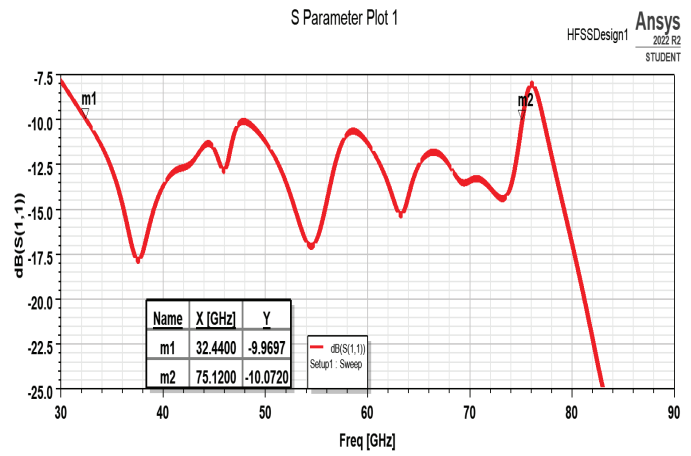


Fig. 9. Increased substrate height

The return loss characteristics is observed below -10 dB line within the frequency of 32.44 GHz to 75.12 GHz with a bandwidth of 42.68 GHz. Disadvantage of this design is that at 48 GHz the response touches the -10 dB line which leads to introduce SRR in the design as is discussed in the Section IX.

### IX. SPLIT RING RESONATOR (SRR)

SRR is an necessary component of microwave metamaterials. These material's peculiar behaviours are caused by their negative values for permeability, permittivity, and index of refraction. Metamaterials are used in order to miniaturize the filter and also multiband operation.

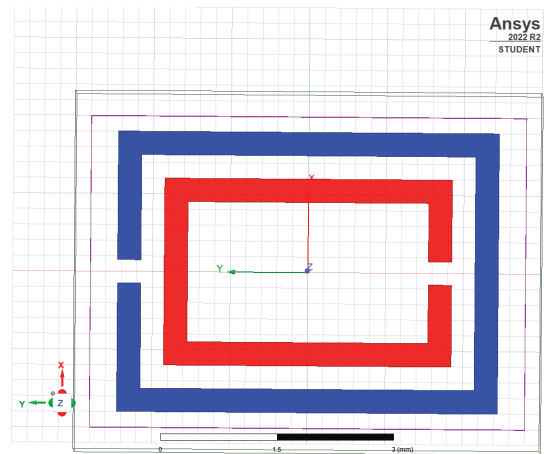


Fig. 10. Single Split Ring Resonator

The Fig. 10, Fig. 11 and Fig. 12 represents the prototype of Single SRR, Multi SRR and Multi SRR with patch.

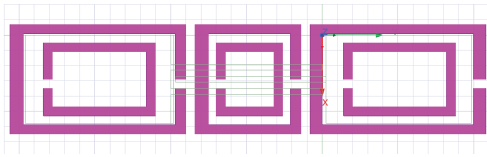


Fig. 11. Multi Split Ring Resonator

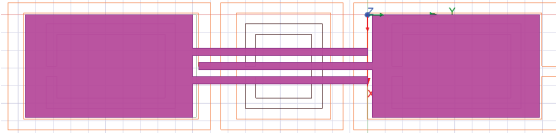


Fig. 12. Multi Split Ring Resonator with patch

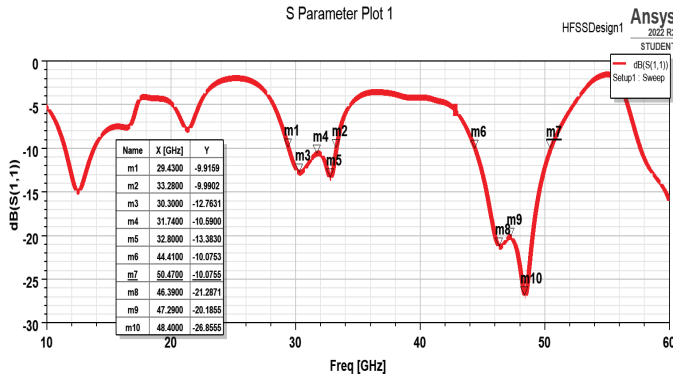


Fig. 13. Return loss characteristic using Multi Split Ring Resonator with patch

The return loss characteristics in Fig. 13 provides below -10 dB line within the frequency of 44.41 GHz to 50.47 GHz with a bandwidth of 6.06 GHz.

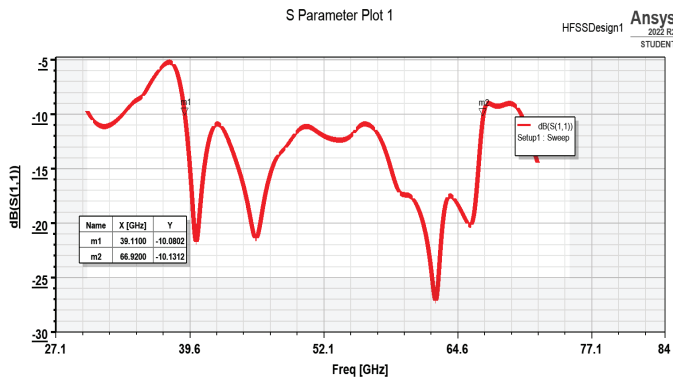


Fig. 14. Return loss characteristic using Split Ring Resonator With increased substrate height

The return loss characteristics in Fig. 14 is observed below -10 dB line within the frequency of 39.11 GHz to 66.92 GHz. We can see the multiple resonating frequency with the better notch value of -27 dB. The bandwidth of 27.81 GHz is

observed.

## X. COMPARISON

The Table I provides the comparison for several author's work.

TABLE I  
COMPARISON OF SEVERAL AUTHOR'S CONTRIBUTIONS AND THEIR RESULTS

SI No	Year	Title of the paper	Tool Used	Return Loss in dB	frequency	Conclusion
1	[3]	A novel defected ground structure broadband filter using complementary split using resonators	HFSS		14.5 GHz	Bw of 3 GHz
2	[4]	Using complimentary split ring resonators to design bandpass wave guide filter	HFSS		11.95 GHz	Bw of 500MHz
3	[5]	Slotline based balanced filter with ultra wide stopband and high selectivity	HFSS	20dB	25 GHz	Bw of 50.6 %
4	[6]	Design of a broadband microstrip bandpass filter	HFSS	20dB	1.45 GHz	Bw of 41.7 %
5	[7]	Microstrip bandpass filter using symmetrical split ring resonators for X band application			11.7 GHz	Bw of 33.8 %
6	[8]	A wide stopband filtering using split ring in different tools	HFSS		2.45 GHz	Bw of 3 %
7	[9]	Substrate integrated defected ground structure for single and dual band bandpass filter with wide stopband and low radiation loss	HFSS	20dB	17.8 GHz	Bw of 16 %
8	[10]	Wideband and wide angle single layered substrate linear to circular polarization metasurface converter	HFSS		32 GHz	Bw of 55 %
9	[11]	Compact triple band super conducting filter based on multi mode stepped impedance split ring resonator		20.64dB	5.5 GHz	Bw of 8.4 %

The Table. II provides the comparison of proposed work with the existing work in published paper with the analysis presented in the Table. II depicts that using SRR with increased substrate height provides better result.

TABLE II  
COMPARISON OF THE DESIGN RESULTS I

SI NO	Filter	Resonant Frequency (GHz)	Return (loss)(dB)	Bandwidth (GHz)
1	[12]	2.45	-32	0.81
2	[13]	2.4	17.542	0.08
3	Proposed Conventional Design I	5.9100 to 6.1900	-20	0.28
4	Proposed design 2a	59.6700 to 69.3600	-28.8721	9.69
5	Proposed design 2b	60.4000 to 70.1900	-26.9781	9.79
6	Proposed design 2c	59.6000 to 69.4700	-39.7686	9.87
7	Proposed design (Increased Substrate height)	32.4400 to 75.1200	-18 to -15	42.68
8	Proposed design using SRR	48.4000	-26.8555	6.06
9	<b>Proposed design using SRR (Increased substrate height)</b>	<b>39.1100 to 66.9200</b>	<b>-22 to -20</b>	<b>27.81</b>

## XI. CONCLUSION

The design of wideband filter on the split ring structure with substrate height of 2.5mm provided better result as compared to the structure with substrate height of 1.75mm. The fabrication of the designed wideband filter with SRR is the future scope of this work.

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