

NEW HORIZON COLLEGE OF ENGINEERING
Department of Electrical and Electronics Engineering
Research Publications for the Academic Year 2025-26

SI No	Faculty Name	Paper Title	Month Year	Journal / Conference Title	Volume	Issue	Page start	Page end	Source (Scopus / WoS)	Publication Type (Journal / Conference)	DOI
1	Arangarajan Vinayagam	A hyperband optimized Bi-LSTM model for electric demand forecasting in diversified power systems	March, 2026	Results in Engineering	29	-	1	20	Scopus	Journal	https://doi.org/10.1016/j.rineng.2026.109891
2	Meenakshi Sundaram P	Interpretable Predictive Analytics for Early Cardiovascular Health Assessment	April, 2026	International Journal of Drug Delivery Technology	16	4	317	325	Scopus	Journal	10.25258/ijddt.16.4.33
3	Meenakshi Sundaram P	Optimized Hybrid Approach for Assessing Pollution Severity in Polymer Insulators Using Random Forest and Fuzzy Logic	May, 2026	Automation and Remote Control	86	9	375	387	Scopus	Journal	10.1134/S0005117925600971
4	Arangarajan Vinayagam	An extensive analysis of machine learning algorithms for the identification and differentiation of high impedance faults in various power network topologies	June, 2026	Results in Engineering	30	-	1	17	Scopus	Journal	https://doi.org/10.1016/j.rineng.2026.110421
5	Arangarajan Vinayagam	High impedance fault discrimination in microgrid power system using stacking ensemble approach	March, 2026	International Journal of Applied Power Engineering (IJAPE)	15	1	98	109	Scopus	Journal	10.11591/ijape.v15.i1
6	Dr. B. Gunapriya	Managing the Power in Smart Grid Management Hybrid Model with MRA in Electric Vehicle System	December, 2025	AVE Trends in Intelligent Energy Letters	1	2	100	114	Scopus	Journal	0.64091/ATIEL.2025.000189
7	Dr. Sujoy Das	Adaptive load sifting strategy for short-term hydrothermal energy scheduling using crayfish optimization algorithm	January, 2026	Electrical Engineering	108	2	1	24	Scopus	Journal	https://doi.org/10.1007/s00202-026-03518-z
8	Mrs. Soumya K.V	High sensitivity terahertz metasurface biosensor integrating plasmonic coupling and machine learning for wearable diabetes monitoring	January, 2026	Sensing and Bio-Sensing Research	51	-	1	15	Scopus	Journal	https://doi.org/10.1016/j.sbsr.2026.100968
9	Dr. Vinoth Kumar K	Advanced modeling techniques for solar radiation estimation: enhancing renewable energy integration in power grids	January, 2026	Electrical Engineering	108	1	1	10	Scopus	Journal	https://doi.org/10.1007/s00202-025-03508-7
10	Dr. Gunapriya B	Design and Implementation of Wireless Charger for EV With High Alignment Tolerance: Gannet Optimization Algorithm	December, 2025	Optimal Control Applications and Methods	-	-	1	16	Scopus	Journal	https://doi.org/10.1002/oca.70070
11	Anitha A	Performance evaluation of dynamic voltage restorer using bidirectional impedance converter with UCAP		International Journal of Power Electronics and Drive System (IJPEDS)	17	1	465	475	Scopus	Journal	http://doi.org/10.11591/ijpeds.v17.i1.pp465-475
12	Dr. Mohan Das R	Predictions of solar power using ensemble machine learning techniques	December, 2025	International Journal of Power Electronics and Drive System (IJPEDS)	16	4	2868	2878	Scopus	Journal	http://doi.org/10.11591/ijpeds.v16.i4.pp2868-2878
13	Dr. Karthika M.	Otsu and kapur entropy based optimal multilevel image thresholding using jaya and stochastic fractal search algorithms for enhanced image segmentation	December, 2025	Technical Institute Bijeljina, Archives for Technical Sciences	34	4	698	716	Scopus	Journal	https://doi.org/10.70102/afts.2025.1834.698
14	D. Satish Kumar	Deep learning enabled real time parking monitoring using YOLOv7 for intelligent and secure critical infrastructure	December, 2025	Discover Computing	28	-	1	18	Scopus	Journal	https://doi.org/10.1007/s10791-025-09789-7
15	Dr. Karthika M	Energy Efficient Battery-less wearable Antenna Integrated with RF Energy harvesting Modules for Long-term Health Monitoring in IoT Healthcare Ecosystems	November, 2025	National journal of Antennas and Propagation	7	3	198	203	Scopus	Journal	https://doi.org/10.31838/NJAP/07.03.25
16	Arangarajan Vinayagam	High impedance fault discrimination in microgrid power system using stacking ensemble approach	October, 2025	International Journal of Applied Power Engineering (IJAPE)	15	1	98	109	Scopus	Journal	http://doi.org/10.11591/ijape.v15.i1.pp98-109
17	Mrs. Surat Pyari Atti	Signal detection in optical orthogonal time space modulation for efficient VLC application	October, 2025	Journal of Optical Communications	-	-	1	8	Scopus	Journal	https://doi.org/10.1515/joc-2025-0381

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18	Dr. Arangarajan Vinayagam	State of Health Aware Adaptive Scheduling of Battery Energy Storage System Charging and Discharging in Rural Microgrids Using Long Short-Term Memory and Convolutional Neural Networks	October, 2025	Energies	18	-	1	5	Scopus	Journal	https://doi.org/10.3390/en18215641
19	Dr. Mohan Das R	Modelling and optimization of hybrid renewable energy system using SBLA-MAT algorithm	September, 2025	International Journal of Power Electronics and Drive System (IJPEDS)	16	3	1897	1913	Scopus	Journal	10.11591/ijpeds.v16i3.pp1897-1913
20	Dr. B. Gunapriya	Cost-efficient energy management between electric vehicle charging stations and distribution systems using intelligent scheduling	September, 2025	Energy	339	-	1	13	Scopus	Journal	https://doi.org/10.1016/j.energy.2025.138687
21	Dr. B. Gunapriya	Hybrid Power Management Strategy Using SFO-Based Improved Sand Cat Swarm Optimization for Effective Fuel Economy in HEV Application	June, 2025	AVE Trends in Intelligent Applied Sciences	1	2	76	95	Scopus	Journal	https://doi.org/10.64091/ATIAS.2025.000178
22	Dr. Arangarajan Vinayagam	Drilling performance, open-hole tensile properties, and ANN-based prediction of PALF/banana hybrid composites	August, 2025	Journal of Reinforced Plastics and Composites	-	-	1	23	Scopus	Journal	https://doi.org/10.1177/0731684425136845
23	Dr. Agalya V	Spatio-Temporal Graph Neural Network for Intelligent EV Battery Fault Detection and Diagnostics	July, 2026	6th International Conference on Intelligent Technologies (CONIT)	6	-	1	4	Scopus	Conference	10.1109/CONIT69683.2026.11620606
24	Kavitha Chenna Reddy	Graph Neural Network Approaches for Fault Prediction in Solar Bi-Hybrid Electric Vehicles: A Systematic Review	July, 2026	2026 International Conference on Emerging Trends in Mobile Computing and Sustainable Informatics (ICEMCSI)	-	-	-	-	Scopus	Conference	10.1109/ICEMCSI67638.2026.11603003
25	Veena MH	Verification Framework for Posit Arithmetic in High-Accuracy Applications	July, 2026	2026 International Conference on Emerging Trends in Mobile Computing and Sustainable Informatics (ICEMCSI)	-	-	1	5	Scopus	Conference	10.1109/ICEMCSI67638.2026.11603185
26	Anitha A	Wireless Electric Vehicle Charging System and Slot Booking System	May, 2026	2026 International Conference on Machine Learning and Autonomous Systems (ICMLAS)	-	-	1882	1887	Scopus	Conference	10.1109/ICMLAS67792.2026.11483764
27	Dr. Sujitha S	Intelligent Data Acquisition System and Monitoring System for Real-Time Fault Detection in Electric Motors	March, 2026	12th National Power Electronics Conference (NPEC)	12	-	1	4	Scopus	Conference	10.1109/NPEC66512.2025.11450236
28	Satish Kumar D	Development of an Inductive Power Transfer-Based wireless EV Charger	May, 2026	2026 International Conference on Emerging Systems and Intelligent Computing (ESIC)	-	-	922	926	Scopus	Conference	10.1109/ESIC68176.2026.11495731
29	Dr. Sujitha S	Carbon Foot Print Measurement Using a Mobile App Integrated with IOT Technology	April, 2026	Proceedings of the 6th International Conference on Data Science, Machine Learning and Applications	2	-	452	457	Scopus	Conference	https://doi.org/10.1007/978-981-95-5835-3_71
30	Dr. Sujitha S	Leveraging Sensor Networks for Dynamic Real Time Autonomous Distance Tracking for Human Following Robotics	April, 2026	Proceedings of the 6th International Conference on Data Science, Machine Learning and Applications	2	-	956	961	Scopus	Conference	https://doi.org/10.1007/978-981-95-5835-3_141

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Department of Electrical and Electronics Engineering
Research Publications for the Academic Year 2025-26

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31	Dr. Sujitha S	Low – Cost GPS-Enabled Rural Bus Transport Optimization with Solar-Powered Smart Stops	April, 2026	Proceedings of the 6th International Conference on Data Science, Machine Learning and Applications	2	-	447	451	Scopus	Conference	https://doi.org/10.1007/978-981-95-5835-3_70
32	Kavitha Chenna Reddy	Hand Gesture-Based Control System for Home Automation Using Arduino and APDS-9960 Sensor	April, 2026	Proceedings of the 6th International Conference on Data Science, Machine Learning and Applications	6	-	-	354	Scopus	Conference	https://doi.org/10.1007/978-981-95-5835-3_55
33	Kavitha Chenna Reddy	Smart Home Automation using APK for real-time Control and AI-Enabled Expansion Possibilities	April, 2026	Proceedings of the 6th International Conference on Data Science, Machine Learning and Applications	6	-	744	751	Scopus	Conference	https://doi.org/10.1007/978-981-95-5835-3_109
34	Surat Pyari Atti	ZeroEdge: Ambient Energy Harvesting Framework for Powerless IoT in Sustainable Smart Ecosystems	March, 2026	Proceedings of the 6th International Conference on Data Science, Machine Learning and Applications	5	-	529	535	Scopus	Conference	10.1109/ICCCES62661.2026.11436498
35	Dr. Sujitha S	Real-Time Router for Intelligent Electric Vehicle Communication	March, 2026	Proceedings of 5th International Conference on Communication, Computing and Electronics Systems, ICCCES 2026	5	-	462	466	Scopus	Conference	10.1109/ICCCES62661.2026.11437148
36	Vinod Kumar S	Smart Solar Wind EV Charging with V2H Integration and Energy Management	March, 2026	Proceedings of 5th International Conference on Communication, Computing and Electronics Systems, ICCCES 2026	5	-	268	275	Scopus	Conference	10.1109/ICCCES62661.2026.11437114
37	Dr. Gunapriya B	ZeroRush: Iot-Based Motorbike Monitoring with Helmet Detection and Eco-Safe Driving Score Using Adaptive Penalty Scoring Method	March, 2026	2nd Asian Conference on Intelligent Technologies (ACOIT)	2	-	-	-	Scopus	Conference	10.1109/ACOIT66109.2025.11436427
38	Dr. Sujoy Das	Optimizing Short-Term Hydrothermal Dispatch: A Robust Solution via Artificial Protozoa Optimizer	Febuary, 2026	2nd International Conference on Green Industrial Electronics and Sustainable Technologies (GIEST)	2	-	1	5	Scopus	Conference	10.1109/GIEST66547.2025.11387152
39	Sangeetha CN	IoT-Embedded Intelligent Waste Monitoring System	Febuary, 2026	International Conference on Data Science, Machine Learning and Applications	1	-	165	171	Scopus	Conference	https://doi.org/10.1007/978-981-95-5831-5_18
40	Sangeetha CN	Green Power Integration: Solar Inverter Hardware for Residential EV Charging	Febuary, 2026	10th International Conference on Communication and Electronics Systems (ICCES-2025)	10	-	387	389	Scopus	Conference	10.1109/ICCES67310.2025.11336908
41	Soumya KV	Advanced Telemetry-Controlled Quadcopter System for Wireless Surveillance and Control in High-Risk Environments	Febuary, 2026	2025 International Conference on Communication and Smart Devices (ICCoSD)	-	-	1	4	Scopus	Conference	10.1109/ICCoSD66074.2025.11348178
42	Sunil SK	AI based EV Charging Station Scheduling for Smart Energy Systems	January, 2026	6th International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS)	6	-	1	5	Scopus	Conference	10.1109/ICICNIS66685.2025.11315683

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Research Publications for the Academic Year 2025-26

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43	Dr. Sujitha S	Smart Handleber with Integrated Auto Finger Sensor for Biometric Authentication and Rider Safety	January, 2026	International Conference on Intelligent Computing, Information and Control Systems (ICOIICS-2025)	-	-	104	109	Scopus	Conference	10.1109/ICOIICS67115.2025.11390439
44	Dr. Sujitha S	HYPER RAIL: Partial Vacuum-Powered Railway with Dynamic Demand Response Solar Energy Management	October, 2025	Proceedings of the 2nd International Conference on Electronic Circuits and Signaling Technologies (ICECST-2025)	2	-	630	633	Scopus	Conference	10.1109/ICECST66106.2025.11307515
45	Dr. Mohan Das R	Spy-Bots-Autonomous Wheeled Robots for Multiple Applications	December, 2025	IEEE International Conference on Electronics, Computing and Communication Technologies (CONECCT)	-	-	1	6	Scopus	Conference	10.1109/CONECCT65861.2025.11306824
46	Dr. Karthika M	Deep Learning based Facial Emotion Detection with CNN and FER Models	December, 2025	7th International Conference on Innovative Data Communication Technologies and Application (ICIDCA-2025)	7	-	457	462	Scopus	Conference	10.1109/ICIDCA66325.2025.11280307
47	Karthika M	A Survey on Fire Alarm Systems: Technological Advancements and Challenges	October, 2025	International Conference on Smart Trends for Information Technology and Computer Communications	-	-	321	329	Scopus	Conference	10.1007/978-981-96-7508-1_29
48	Dr. Sujitha S	HYPER RAIL: Partial Vacuum-Powered Railway	October, 2025	Procesedings of the 9th International Conference on I-SMAC-2025	9	-	899	904	Scopus	Conference	10.1109/I-SMAC65734.2025.11597631
49	Surat Pyari Atti	Energy-Efficient Beamforming for 6G mmWave Networks Using Deep Swarm Intelligence	October, 2025	4th International Conference on Innovative Mechanisms for Industry Applications (ICIMIA)	4	-	720	726	Scopus	Conference	10.1109/ICIMIA67127.2025.11200559
50	Satish Kumar D	Grid connected Single Stage PV system by UsingSuper Twisting Sliding Mode Controllers	September, 2025	2025 International Conference on Computing Technologies & Data Communication (ICCTDC)	-	-	1	6	Scopus	Conference	10.1109/ICCTDC64446.2025.11158998
51	Dr. Sujoy Das	Application of Crayfish Optimization Algorithm for Addressing Combined Heat and Power Dispatch Problem	September, 2025	7th International Conference on Energy, Power and Environment (ICEPE)	7	-	1	6	Scopus	Conference	10.1109/ICEPE65965.2025.11139726
52	Anitha Nair	Smart Fuse - A GSM and Bluetooth Enabled Safety System	August, 2025	2025 11th International Conference onElectrical Energy Systems (ICEES)	11	-	381	384	Scopus	Conference	10.1109/ICEES67011.2025.11213158
53	Anitha Nair	Solar Cell-Based Energy Management System For Real-time Control and Optimization Of Electricity	August, 2025	2025 11th International Conference on Electrical Energy Systems (ICEES)	11	-	361	365	Scopus	Conference	10.1109/ICEES67011.2025.11212959
54	Anitha Nair	Speed Regulation using MRAC based FOPID Controller In Current-Controlled DC Motor based on Integral Time Absolute Error Reduction	August, 2025	2025 11th International Conference on Electrical Energy Systems (ICEES)	11	-	366	370	Scopus	Conference	10.1109/ICEES67011.2025.11213207
55	Dr. Vinoth Kumar K	IoT and Smart Sensor based Waste Management System for Smart Cities	June, 2025	International Conference on Emerging Technologies in Engineering Applications (ICETEA)	-	-	1	6	Scopus	Conference	10.1109/ICETEA64585.2025.11099953

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Research Publications for the Academic Year 2025-26

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56	Dr. Vinoth Kumar K	A review Investigation on Current Trends in Smart Unsighted Cane IoT Technology	June, 2025	5th International Conference on Pervasive Computing and Social Networking (ICPCSN)	5	-	1	4	Scopus	Conference	10.1109/ICPCSN65854.2025.11035715
57	Dr. Vinoth Kumar K	High performance Computing Models in Electric Vehicles using Artificial Intelligence	April, 2025	International Conference on Inventive Computation Technologies (ICICT)	-	-	1513	1516	Scopus	Conference	10.1109/ICICT64420.2025.11005038
58	Mohan Das R, Raj V.H., Muthukumaran C.; Thirumalraj A.; G. Sundaramoorthy	Securing Ovarian Cancer Detection Using Efficient Net Model and Patient Data Privacy Based on Lightweight Encryption	April, 2026	AI, Cybersecurity, and Next-Generation Mobility in Smart Cities	-	-	171	198	Scopus	Book Chapter	DOI: 10.4018/979-8-3373-8133-6.ch007