



MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

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Department of Computer Applications Faculty Publications Details for the Academic Year 2024-2025

S.No	Title of the Paper	Name of the Authors	Name of the Journal / Conference	Month & Year	DOI / Website Link	Indexing	Publication Type
1.	An Efficient Speech Synthesizer: A Hybrid Monotonic Architecture for Text-to-Speech via VAE & LPC-Net with Independent Sentence Length	Naveen Kumar Nallabala , Balamurugan Souprayan, Maruthamuthu Ramasamy , Seshu Kumar Penumarti & Nuthan Chandu Navuluri	Circuits Syst Signal Process	March 2025	https://doi.org/10.1007/s00034-025-03045-5	SCIE	Journal
2.	Optimized Memory Allocation in Edge-PLCs Using Deep Q-Networks and Bidirectional LSTM with Quantum Genetic Algorithm	N. Naveen Kumar ^a , S. Saravana ^b , S. Balamurugan ^c , P. Seshu Kumar ^a , S. Suresh ^d	e-Prime - Advances in Electrical Engineering, Electronics and Energy	December, 2024	https://doi.org/10.1016/j.prime.2024.100762	SCIE	Journal
3.	A Robust Method for Malware Analysis Using Stacking Classifiers and Dendrogram Visualization	N. Naveen Kumar , S. Balamurugan , R. Maruthamuthu , P. P. Devi & P. Seshu Kumar	International Journal of Information Technology	July 2024	https://doi.org/10.1007/s41870-024-01982-z	Scopus	Journal



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4.	Stacked Bi-LSTM for Advanced Toxicity Detection in Comment Classification	N. Naveen Kumar; Prabhakaran Abraham; Syed Ibrahim Kaliba; Diniesh VC; Maruthamuthu R; Balamurugan	IEEE ICAIET 2024	October, 2024	https://doi.org/10.1109/IICAET62352.2024.10729970	Scopus	Conference
5.	An Efficient Approach on Image Encryption Steganography Based on 2D SWT with Chaotic Techniques	N. Naveen Kumar, R. Viswanathan, P. Seshu Kumar	IEEE ICSCSA 2024	September, 2024	https://doi.org/10.1109/ICSCSA64454.2024.00083	Scopus	Conference
6.	An Efficient Speech Synthesizer: A Hybrid Monotonic Architecture for Text-to-Speech via VAE & LPC-Net with Independent Sentence Length	Naveen Kumar Nallabala, Balamurugan Souprayan, Maruthamuthu Ramasamy, Seshu Kumar Penumarti & Nuthan Chandu Navuluri	Circuits, Systems, and Signal Processing	March, 2025	https://doi.org/10.1007/s00034-025-03045-5	SCIE	Journal
7.	A Way to Design Fog Computing Model for 5G Network Using VANET	R. Maruthamuthu; Neeraj Patel; T. Yawanikha; S. Jayasree; Zaid Alsalami; S P V SubbaRao	IEEE ICACITE 2024	May, 2024	https://doi.org/10.1109/ICACITE60783.2024.10617287	Scopus	Conference
8.	Robust Ensembled Model-Based Reinforcement Learning for Better Tomato Yield in Greenhouse	Gandhimathi S Senthilkumaran B Jude Moses Anto	Journal of Machine and Computing	April, 2025	https://doi.org/10.53759/7669/jmc202505090	Scopus	Journal



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		Devakanth J Nithya K V Jayaprakash Chinnadurai					
9.	Decentralization of Cloud Environment Using DES Technique in Medical Image	Roselinkiruba R; S. Deepan; Sharmila L; Poonguzhali S; Jude Moses Anto Devakanth J; J Kavitha	IEEE ICMLAS 2025	March, 2025	https://doi.org/10.1109/ICMLAS64557.2025.10968253	Scopus	Conference
10.	Pixel Similarity-Based Steganography in Bit Planes: An Optimization-Driven Approach	R.RoselinKiruba; J. Jude Moses Anto Devakanth; L.Sharmila; Vasumathy M; M Misba; C.Saranya Jothi	IEEE ICSCSA 2024	March, 2025	https://doi.org/10.1109/ICSCSA64454.2024.00080	Scopus	Conference
11.	Integrating Cloud-Based Data Mining Algorithms for Smart City Infrastructure Management and Decision Support Systems	M. Guru Vimal Kumar; J. Jude Moses Anto Devakanth; D. Selvapandian; Venkatesan R; J. Revathi; R. Aruna	IEEE ICSCSA 2024	Septemb er, 2024	https://doi.org/10.1109/ICSCSA64454.2024.00024	Scopus	Conference
12.	Effective Healthcare Management System for Hepatitis Virus Using PCA-BFF Optimization Algorithm	C.Saranya Jothe; J.Jude Moses Anto Devakanth; B.Lalitha; P. Jeevanasree;	IEEE ICIETDW 2024	March, 2025	https://doi.org/10.1109/ICIETDW61607.2024.10939372	Scopus	Conference



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		R.RoselinKiruba; D.Lissy					
13.	Automated Semantic Segmentation and Diagnosis of Coconut Tree Infection Using Drone Imagery and ML	M Vasumathy; J. Jude Moses Anto Devakanth ; Mythili Thirugnanam; R. RoselinKiruba; R. Hamsaveni; R. Nandhini	IEEE ICISAA 2024	January, 2025	https://doi.org/10.1109/ICISAA62385.2024.10829008	Scopus	Conference
14.	Energy- Combining ML with Battery-Free Sensor Networks Efficient Traffic Monitoring	R. RoselinKiruba , Saranya Jothi C. , M. Vasumathy Koushik C. P. , Jude Moses Anto Devakanth J. , L. Sharmila	IGI Global	2025	https://doi.org/10.4018/979-8-3693-7600-3.ch010	Scopus	Book Chapter
15.	Real-Time Landslide Detection and Early Warning Systems Using Battery-Free WSNs	R. RoselinKiruba , M. Vasumathy , Shrit haranyaa J. P. , Saranya Jothi, Jude Moses Anto Devakanth J. C. L. Sharmila	IGI Global	2024	https://doi.org/10.4018/979-8-3693-7600-3.ch012	Scopus	Book Chapter
16.	Efficient Video Anomaly Detection Using One-Class Support Vector Machine	Srinivasan J ; Vidyadevi G Biradar; Muhamed	IEEE ICDCECE 2025	June 2025	https://doi.org/10.1109/ICDCECE65353.2025.11034919	Scopus	Conference



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		Fallahhusein; Hari Suresh Babu Gummadi; R. Kavitha					
17.	Traffic Classification Using CNN– LSTM Based on Multimedia Communication System	Srinivasan Jagannathan; Montater MuhsnHasan; Panjagari Kavitha; K. S. Vigneshwaran; Neethu C Francis	IEEE ICICACS 2025	April, 2025	https://doi.org/10.1109/ICICACS65178.2025.10967843	Scopus	Conference
18.	Smart Home Automation with IoT Sensor Systems for Energy Conservation Using Zigbee and Wi- Fi	Srinivasan Jagannathan; V. Deepa; B. Sakthi Karthi Durai; M. Sundar Rajan; J. Jeya A Celin; Sasikala Dhamodaran	IEEE ICESC 2024	October, 2024	https://doi.org/10.1109/ICESC60852.2024.10690054	Scopus	Conference
19.	Robust Fingerprint Minutiae Extraction and Matching Using FC- DCNN and Improved SIFT	Saif O. Husain; R.Archana Reddy; Piyush Kumar Pareek; Srinivasan Jagannathan; M. Jyothi	IEEE ICDSNS 2024	October, 2024	https://doi.org/10.1109/ICDSNS62112.2024.10691043	Scopus	Conference
20.	Evolutionary Intelligence: A Hybrid Neural Framework for Dynamic System Innovation	Puneet Sharma; J Sulthan Ali Khan; K. Radhika; Jayendra Gopal Thatipudi; K.	IEEE ICEARS 2025	April, 2025	https://doi.org/10.1109/ICEARS64219.2025.10940949	Scopus	Conference



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		Sridevi; Shrikant Upadhyay					
21.	A Novel Methodology to Predict Dental Cavities Based on Intensive Deep Learning Strategy	Kumari Mayko Muni; Manmohan Singh; K. Radhika ; Vijay Bhanudas Gujar; Veeramalai Sankaradass; Ashish Kumar Bulakh	IEEE ICDSAAI 2025	March, 2025	https://doi.org/10.1109/ICDSAAI65575.2025.11011616	Scopus	Conference
22.	AI and ML Approaches for Power Reduction in Automated IoT Devices	Abbas Thajeel Rhaif Alsahlane; Gunita Arun Chandhok; T Saravanan ; D. Sugumaran; Kireet Joshi; N Rajesh	IEEE ACCAI 2024	July, 2024	https://doi.org/10.1109/ACCAI61061.2024.10602214	Scopus	Conference
23.	Intelligent 5G Evolution: AI-Augmented Hybrid Model with Network Slicing and Autonomous Self-Healing for Future-Ready Connectivity	Purushotham Endla; Ramya S Pure; Anita Soni; C. Andal; D. Jagadeeswari; K. Nirmala Devi	IEEE ICEARS 2025	April, 2025	https://doi.org/10.1109/ICEARS64219.2025.10941272	Scopus	Conference
24.	Edge Intelligence Hybrid Framework for Real-Time IoT Applications Using Multi-Stage Adaptive Processing Methods	Sajja Suneel; Rakesh Kumar Yadav; K.Nirmala Devi ; B.Teja Sree; Aarthi R;	IEEE ICMCSI 2025	Febuary, 2025	https://doi.org/10.1109/ICMCSI64620.2025.10883617	Scopus	Conference



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		Shrikant Upadhyay					
25.	Deep Learning-Based Intrusion Detection for IoT Networks	P. Ananthi; K. Nirmaladevi ; Mothika G	IEEE ICUIS 2024	February, 2025	https://doi.org/10.1109/ICUIS64676.2024.10866629	Scopus	Conference
26.	Virtual Assistance for Visually Impaired People Using HCI Logic	M.S Bravishma Panicker; R. Mohandas; Shanmugasundaram Hariharan; K. Nirmala Devi ; M.S.K. Chaitanya; Rashmi Mishra	IEEE ICCES 2024	February, 2025	https://doi.org/10.1109/ICCES63552.2024.10860143	Scopus	Conference
27.	Intrusion Detection Mechanism Using Deep Learning	P. Ananthi; K. Nirmaladevi ; Naveen Kumar S	IEEE ICICNIS 2024	January, 2025	https://doi.org/10.1109/ICICNIS64247.2024.10823331	Scopus	Conference
28.	Blood Cell Classification and Counting in Hematology Through Deep Learning	P. Ananthi; K. Nirmala Devi ; T. E. Ramya; P. Shanmugapriya; T. Aradhya	IEEE ICSES 2024	December, 2024	https://doi.org/10.1109/ICSES63445.2024.10763339	Scopus	Conference
29.	Optimized Intention-Adaptive GNN for Robust Failure Diagnosis of Microservice Systems	N. Naveen Kumar, S. Suresh, S. Balamurugan, P. Seshu Kumar, R. Maruthamuthu, P. P. Devi, Jude Moses Anto Devakanth	Cluster Computing	August, 2025	https://doi.org/10.1016/j.prime.2024.100762	Scopus	Journal



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30.	Temporal and Spatial Data Fusion Integration in B-ANN for Improved Lithofacies Classification and Reservoir Characterization	N. Nirmaladevi ¹ , T. Saravanan ² , B. Senthilkumar ³ , John T. Mesia Dhas ⁴ , K. Sivagami ⁵ , M. Amsa ⁶	Journal of Computational Analysis and Applications	Sep 2024	raduspress.com/article/1118	Scopus	Journal
31.	Optimizing Computation: A Biomimicry Design Spiral Approach to Algorithm Development	Vaishali B. Langote ¹ , Janani R. ² , Acharya S. ³ , M. Sananya ⁴ , N. Sampathwad ⁵ , T. Saravanan ⁶ , P. Vidya ⁷ , A. Vishnu Bala ⁸ , and Saurabh Mitra ⁹	Communications on Applied Nonlinear Analysis	Oct 2024	10.52783/cana.v32.2317	Scopus	Journal
32.	Optimizing support vector regression using grey wolf optimizer for energy efficiency	Mohd Sakib ¹ , Sajid ² , Ahmad Khalid ³ , Anwar ⁴ , and Mohd Saqib .	Cluster Computing	Nov 2024	10.1007/s10586-024-04802-y	SCI	Journal
33.	Enhanced cryptographic framework for data security using optimized ECC	S. Kavitha ¹ , J. Srinivasan ² , P. Priyadarshini ³ , and I. Nasrulla ⁴	IJ on Information & Intelligent Systems	Nov 2024	10.2478/ijssis-2024-0052	SCI	Journal
34.	Proactive Detection of Malicious Webpages Using Hybrid NLP	Athar Ali A. , Rama Devi K.	Journal of Information &	Dec 2024	10.31341/jios.48.2.4	Scopus	Journal



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			Organizational Sciences				
35.	Developing Hybrid Faster RCNN with Improved ABC for Grape Disease Detection	P. Jayapal ¹ , Pranesh Samnathan ² , Karthika ³ , N. Nirmala Devi⁴ , K. R. Sujitha ⁵	SSRG IJECE	Jan 2025	10.14445/23488549/IJECE-V12IPT13	Scopus	Journal
36.	Integrating Spatial Data Fusion and Temporal Data in B ANN for enhanced lithofacies classification and Reservoir characterization	N. Nirmala Devi	Grenze International journal of engineering and technology	Jan 2025	thegrenze.com	Scopus	Journal
37.	Energy Consumption Optimization through ML for Smart Grids – Bibliometric Analysis	Saravanan Thirumayukarasu¹ , Kavitha K. ² , Sandeep T. T. ³ , Shankaray P. ⁴ , Madhavi R. ⁵ , Dilina L. ⁶	IJ of Procurement Management	Apr 2025	10.1504/IJPM.2025.1069830	Scopus	Journal
38.	Shortest Path Orbit Prediction for Resilient LEO Satellite Networks	Mrs. Roopa Prasad	IJCSIM Applications	Mar 2025	10.70917/ijcsim-2025-0021	Scopus	Journal
39.	Decision on Optimized Intention-Adaptive GNN for Failure Diagnosis in Microservices	Dr. Maruthamuthu, Dr. N. Naveen Kumar	Cluster Computing	Apr 2025	—	Scopus	Journal
40.	The contribution of Active Cooling Impact on Perovskite PV Cells	Muntather Almassri,	E3S Web of Conferences	Sep 2024	10.1051/e3sconf/20245405013	Scopus	Conference



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	performance and its impact on the power production	Ahmed Abbas Hameed, Hussein Dr. Maruthamuthu					
41.	Experimental and numerical validation of the Energy-Saving Performance of Phase Change Floor	Pha Phaneendra Babu Bobba ¹ , S. Subburam ² , R. Vivek ³ , R. Maruthamuthu⁴ , N. Karthikeyan ⁵ , Sundaram ² , R. Maruthamuthu ⁶ , Zaïd A. Alhaj Abdullah ⁷ , Alkhafaji ⁸ , P. Srividya Devi ⁹ , R. Senthil Kumar ¹⁰	E3S Web of Conferences	Sep 2024	10.1051/e3sconf/2024541017	Scopus	Conference
42.	Predication and Comparative Analysis of the Stress Level of human using the ML algorithms	C. Sivaraj¹ , J. Angel ² , D. Hemamalini ³ , Vikram Neerugatti ⁴ , Narayan Panchal ⁵ , T. R. Manesh ⁶	ICTACS 2025	Jan 2025	10.1109/ICTACS62700.2024.10840636	Scopus	Conference
43.	A Virtual Assistance for Visually Impaired People to Recognize	M. S. B. Panicker, R. Mohandas,	ICCES 2024	Feb 2025	10.1109/ICCES63552.2024.10860143	Scopus	Conference



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	Fabric Pattern and Color using Human Computer Interaction Logic	S. Haripriya, K. Nirmala Devi , M. S. K. Chaitanya, R. Roselin Kiruba					
44.	Foundations of Data Science	Dr. Nirmaladevi, Dr. Radhika	Scientific Int. Publishing	Mar 2025	ISBN 978-93-6674- 413-1	Scopus	Book
45.	Quantitative Analysis for LMS Using Mathematical Modeling by Artificial Intelligence	Kiruba R., Roselin L., Sharmila M., Misba J., Kavitha, J. Jude Moses Anto Devakanth	De Gruyter Brill (Book Chapter)	Apr 2025	10.1515/9783111436 180-017	Scopus	Book Chapter
46.	IoT and Blockchain Based Electronic Health Record Device and Information Management	Dr. K. Nirmala Devi	Intellectual Property India	Jul 2024	202411052288	-	Patent (Published)
47.	AI and Image Processing Based Stroke Disease Prediction Device	Dr. J. Jude Moses Anto	Intellectual Property India	Feb 2025	440953-001	-	Patent (Granted)
48.	Smart Voice Assisted Computer Device For Visually Impaired	Mrs. Suganya Selvam	Intellectual Property India	Oct 2024	6396815	-	Patent (Granted)