

Department of Computer Applications

Faculty Publications

Academic Year 2025-2026

S.No	Name of the authors(as per publication)	Title of the paper	Journal name	Journal Article/ Conference publication	Indexed (Scopus/ SCI/SCI E/SSCI)	DOI/URL	Month & Year	Impact factor of the Journal	Journal Quartile (Q1/Q2/ Q3/Q4)
1.	Ramesh Kumar Ramaswamy, Aruna Rajendiran, J. Jude Moses Anto Devakanth , Santhosh Kumar, Balan	SCSNsingle bondNet: Siamese convolutional spiking neural network for childhood medulloblastoma detection using microscopic images	Knowledge-Based Systems	Journal Article (Q1)	SCI	https://doi.org/10.1016/j.knosys.2026.115357	Mar-26	8	Q1
2.	S. V. S. Ganga Devi , S. Mahima, N. Syed Siraj, Ahmed Mohammed, Muzaffar Hussain, Sajithunisa Hussain, Gomathi Krishnasamy	An enhanced neural network model with hybrid sunflower and Grey Wolf Optimization for outlier detection.	International Journal of System Assurance Engineering and Management	Journal article	SCIE	https://doi.org/10.1007/s13198-026-03341-6	May-26	1.5	Q2

3.	N. Naveen Kumar , Balamurugan, Souprayan, M. Kirankumar, M. Srujan Kumar Reddy, Seshu Kumar Penumarthi and S. Suresh	QuantumResist: Integrating Shor's algorithm, lattice- based cryptography, and quantum error correction for enhanced secure communication in post-quantum cryptography	The Journal of Supercomputin g	Journal article	SCIE	https://doi.org/10.1007/s11227-025-07837-z	Sep-25	3.5	Q2
4.	R. Maruthamuthu , S. Balamurugan, N. Naveen Kumar , Devi.P. P.K. Dinesh Kumar	Enhanced water quality index prediction using dual-key convolutional transformer autoencoder with poplar optimization	Franklin Open	Journal article	SCIE	https://doi.org/10.1016/j.fraope.2025.100370	Dec-25	3.7	Q2
5.	N. Naveen Kumar , S. Suresh , S. Balamurugan, P. Seshu Kumar , R. Maruthamuthu , P. P. Devi & Jude Moses Anto Devakanth	Optimized intention-adaptive graph neural network for robust failure diagnosis of microservice systems using multimodal data	Cluster Computing	Journal article	SCIE	https://doi.org/10.1007/s10586-025-05305-0	Aug-25	5.5	Q1

6.	Seshu Kumar P, Viswanathan R, Naveen Kumar Nallabala	Siamese DenseNet: Unveiling interpretable insights in Alzheimer's disease detection through structural MRI with explainable artificial intelligence	Computers & Electrical Engineering	Journal article	SCIE	https://doi.org/10.1016/j.compeleceng.2025.110734	January 2026	5.5	Q1
7.	Jude Moses Anto Devakanth, J, RoselinKiruba, R, Arul Suresh, D, Naveen Kumar, N, Saranya Jothi, C, & Balamurugan, S	Enhanced mayfly optimization algorithms with pixel-based learning color space data hiding using a CNN– LSTM network	IETE Journal of Research	Journal article	SCIE	https://doi.org/10.1080/03772063.2025.2531959	Jul-25	1.3	Q3

8.	S. Thanga Prasath, M. M. Asha, B. Nagarajan, Rajkumar Yesuraj, K. Prathapchandran & Y. Sreeraman	A synthetic oversampling- based customized ResNet51- Conv1D framework for early colorectal cancer prediction using structured clinical data from the PLCO screening trial	BMC Medical Informatics and Decision Making	Journal article	SCIE	https://doi.org/10.1186/s12911-026-03470-9	Apr-26	5.5	Q1
9.	K. Nirmala Devi , Poonam Saini, R. Krishnamoorthy, V. Daya Sagar Ketaraju, Abu Salim, and Shams Tabrez Siddiqui	MetaXAI Adaptive Learning Model for High- Dimensional Data Interpretation and Complex Algorithmic Decision-Making Processes	International Journal on Artificial Intelligence Tools	Journal article	SCIE	https://doi.org/10.1142/S0218213026400130	Mar-26	1	Q3
10.	Sajithunisa Hussain, S. Jacophine Susmi, Remya P. George, A. Althaf Ali , Nazia Ahmad & Rubina Liyakat Khan	Enhancing routing efficiency in urban VANETs through intelligent optimization techniques	International Journal of System Assurance Engineering and Management	Journal article	SCIE	https://doi.org/10.1007/s13198-026-03323-8	May-26	1.5	Q2

11.	Rama Devi K, Ramachandran P, Althaf Ali A, Umamaheswari S & Jayabrabu Ramakrishnan	Synergizing IoT and machine learning for diabetic foot ulcer detection and management	International Journal of System Assurance Engineering and Management	Journal article	SCIE	https://doi.org/10.1007/s13198-025-02890-6	Jul-25	1.5	Q2
12.	Ravindran Kannan, M. Malini, S. Suganya, Y. Lakshmi Prasanna, Karthik Prabhu Durairaj & Tamil Selvi Sakthivel	Energy-efficient modular power management in smart grids using DRL-XGBoost- driven multilevel converters	Electrical Engineering	Journal article	SCIE	https://doi.org/10.1007/s00202-026-03531-2	01-03-26	2.7	Q2
13.	Saranya Jothi C., R. RoselinKiruba, Vasumathy & Jude Moses Anto Devakanth J.	A hybrid machine learning framework for early hepatitis detection using enhanced feature selection and ensemble classification	International Journal of Information Technology (Singapore)	Journal Article	Scopus	https://doi.org/10.1007/s41870-025-03031-9	Jan-26	–	Q1

14.	N. Nithya, A.Althaf Ali, S. Parvathi, P.Mohamed Sajid	A DEEP LEARNING FRAMEWORK FOR REAL- TIME STRESS DETECTION USING FACIAL EXPRESSIONS	Kufa Journal of Engineering	Journal Article	Scopus	https://doi.org/10.30572/2018/KJE/170239	Apr-26	—	Q3
15.	K. Parthiban, Sheeba Santhosh, M. Vanitha Lakshmi, K. Roopa, & A V Prabu.	Quantum Machine Learning for Secure Key Generation in Wireless Communication: Addressing Limitations of Classical Cryptographic Protocols	National Journal of Antennas and Propagation (NJAP)	Journal Article	Scopus	https://doi.org/10.31838/NJAP/07.01.24	Jul-26	—	—
16.	Venkataramanan V, Srinivasan J, Ramadevi K, Dillibabu M	Hierarchical Clustering and Dimensionality Reduction for SARS-CoV-2 Genome Analysis Across Highly Affected	Informatica	Journal Article	Scopus	https://doi.org/10.31449/inf.v49i13.7856	Nov-25	—	Q3

17.	R. Roselinkiruba , M. Vasumathy , J. Jude Moses Anto Devakanth J , Saranya Jothi C and L. Sharmila	Generative AI in Text and Multi- Language Adaptation Processing for Digital Media	IGI Global	Book Chapter	Scopus	10.4018/979- 8-3373- 1504- 1.ch010	Sep-25	—	—
18.	R. RoselinKiruba, M. Vasumathy, J. P. Shritharanyaa , C. Saranya Jothi , L. Sharmila and J. Jude Moses Anto Devakanth	Metaheuristic Algorithms and Optimizing Neural Networks for Biomedical Image Processing	IGI Global	Book Chapter	Scopus	10.4018/979- 8-3373- 0523- 3.ch015	Aug-25	—	—
19.	S. Suganya , Mohd Sakib and M. Malini	Mitigating Adversarial Attacks in Industrial Cybersecurity Through NLP Strategies for E- Commerce	IGI GLOBAL	Book Chapter	SCOPUS	https://doi.org/10.4018/979-8-3373-7503-8.ch003	20/10/2025	—	—

20.	Prathapchandran Kannimuthu and S. Sweetlin Devamanohari	Security, Privacy, and Trust in AI-IoT Integrated Smart Systems	AI in Advanced Systems, Robotics, and Healthcare	Book Chapter	Scopus	10.4018/979-8-3373-7062-0.ch001	Jan-26	—	—
21.	S.V.S. Ganga Devi , V.Sudeep Kumar, V.Rajesh kumar Reddy	Enhancing Cyber Physicall System Security with NFT based Asset Digitization and Authentication	IEEE Explore	Conference Proceedings	Scopus	DOI: 10.1109/ICK ECS65700.2 025.1103534 7	Apr-25	—	—
22.	S.V.S. Ganga Devi , Reddy Prasad Reddy B, Seenu C	Next generation Inventory Management : Block chain-Infused GAN forecasting with ECDH Security layer	IEEE Explore	Conference Proceedings	Scopus	DOI: 10.1109/ICO ACT63339.2 025.1100508 5	May-25	—	—
23.	R. Roselin Kiruba, S. Anitha, C. P. Koushik, G. Dharani Devi, N. Naveen Kumar & L. Sharmila	Robust Data Hiding in Moving Object Videos Using Generalized Error Modification Detection (GEMD	Lecture Notes in Networks and Systems	Conference Proceedings	Scopus	https://doi.org/10.1007/978-981-96-5214-3_19	Aug-25	—	Q4

24.	S. Thanga Prasath; K. Prathapchandran , B. Nagarajan, P. Shyam Prasad	A Hybrid Machine Learning Approach with Explainable AI for Colorectal Cancer Risk Prediction from Dietary and Lifestyle Data	IEEE Explore	Conference Proceedings	Scopus	10.1109/IC- AIDA68291. 2026.115644 81	Jun-26	—	—
25.	Sumithra M, G Sweety Prasanna kiruba, Srinivasan J , M. Aishwarya, S. Sathya; K. Geetha	Large Language Model AI Text Generation Detection based on Transformer Deep Fast Quantum Convolutional Neural Networks	IEEE <i>Xplore</i>	Conference Proceedings	Scopus	DOI: 10.1109/ICI RCA65293.2 025.1108950 9	Jul-25	—	—
26.	K.Nirmala Devi , Shangara Narayane N P, A. Anuradha, Chetna Devkar, R. Kalpana, Shilpa Jain	Foundation Model- Augmented Split Federated Learning with Graph Transformer- Based Digital Twin for Self- Healing Industrial IoT Systems	IEEE Explore	Conference Proceedings	SCOPUS	10.1109/ICC RTEE68719. 2026.115665 16	Jun-26	—	—

27.	K. Prathapchandran, S. Thanga Prasath, K. Radhika, K. Nirmala Devi, T. Saravanan, P. Sathya	BTFISO-WSN: A Blockchain-Integrated Fish Swarm Optimization-Driven Trust Model for Secure Routing in Wireless Sensor Networks	IEEE Explore	Conference Proceedings	Scopus	10.1109/IC-AIDA68291.2026.11564490	Jun-26	—	—
28.	S. Varshini, T. S. Sanjai, K.Nirmala Devi, P. Ananthi	Comparison of Deep Learning and Machine Learning Techniques for Detecting Epileptic Seizure using EEG Signals	IEEE Explore	Conference Proceedings	Scopus	10.1109/ICA CRS67045.2025.11324348	Jan-25	—	—
29.	Kavitha, J. Jude Moses Anto Devakanth, K. Vasundhara, K. Nivethika, P. Revathi and S. Sowmyayani,	Particle Matter Prediction using Dual Attention Bidirectional Long Short-Term Memory	IEEE Xplore	Conference Proceedings	Scopus	https://doi.org/10.1109/ICSCSS64956.2025.11500948	May-26	—	—



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30.	J. Jude Moses Anto Devakanth , R. Lotus, M. L. J. Kavitha, S. Maheswari and S. Sowmyayani	Understanding Learning Behavior in Higher Education using Deep Learning	IEEE Xplore	Conference Proceedings	Scopus	https://doi.org/10.1109/InCoWoCo68239.2025.11407225	Mar-26	—	—
31.	J. Jude Moses Anto Devakanth , R. R. R. Immanuel, S. Poonguzhali, R. Gayathri, S. Maheswari and S. Sowmyayani,	Automatic Health Monitoring From Multi-View Images of Cattles Using Fuzzy Logic	IEEE Xplore	Conference Proceedings	Scopus	https://doi.org/10.1109/14Tech64670.2025.11277561	Dec-25	—	—
32.	S. R. Lingham N, D. B. Fedrick, B. S. Vel P, R. Aruna, S. N. Basha and J. Jude Moses Anto Devakanth	Exploring Smart Room Automation: An IoT-Based Vision-Driven Zonal Control Approach for Energy Efficiency	IEEE Xplore	Conference Proceedings	Scopus	https://doi.org/10.1109/ICIRCA65293.2025.11089644	Jul-25	—	—
33.	J. Jude Moses Anto Devakanth , C. P. Koushik, K. Dhureshavar, P. A and S. L	Context Aware Approach for Server Scheduling Process in Machine Learning	IEEE Xplore	Conference Proceedings	Scopus	https://doi.org/10.1109/ICCSAI64074.2025.11064053	Jul-25	—	—

34.	Jude Moses Anto Devakanth, J., Kavitha, J., Sharmila, L., Roselinkiruba, R., Misba, M., Velmurugan, V.	Wireless Cellular Communications for Efficient Resource Allocation	Springer Nature	Conference Proceedings	Scopus	https://doi.org/10.1007/978-981-96-5223-5_18	Jul-25	—	—
35.	Kodeeswari. K, Suganya. S, S. Sasirekha, M Jaithoon Bibi, K. Hazeena, S. S. Ananthan	Enhancing Rice Bacterial Leaf Blight Detection Accuracy Through RCAMNET	IEEE Xplore	Conference Proceedings	SCOPUS	https://doi.org/10.1109/ICCCES62661.2026.11436602	Jan-26	—	—
36.	A. Punitha, M. Malini, Suganya S, Ankit R, C. Karthikeyan, Naveen Nandal	Hybrid Knowledge Graph and Reinforcement Learning Framework for Proactive Plant Disease Monitoring in Smart Agriculture	IEEE Xplore	Conference Proceedings	SCOPUS	https://doi.org/10.1109/IC-ICNS68863.2026.11537846	Mar-26	—	—
37.	N. Nirmala devi, P. Pallavi, P. Pavithra, A. Raviteja, and K. Tharun Kumar	Secure Medical Data in Internet of Medical Things (IoMT)	Computer Vision and Robotics, Springer Nature	Conference Proceedings	Scopus	https://doi.org/10.1007/978-3-032-14038-8_27	Feb-26	—	—

38.	N. Nirmala Devi, R. Dhivya, C. Nithya Praba & S. K. A. Yasmine	CFGANC: Cloud Fusion using Generative Adversarial Network Classification of Optical and SAR Images	Communication and Intelligence Systems, Springer Nature	Conference Proceedings	Scopus	DOI https://doi.org/10.1007/978-981-96-5723-0_36	Oct-25	—	—
39.	N. Nirmala Devi, R. Vigneswari, M. Swathi, V. Amala & V. S. Cherisha	Enhancing Air Quality Prediction Using Machine Learning Algorithms	Springer Nature	Conference Proceedings	Scopus	https://doi.org/10.1007/978-3-032-05548-4_15	Oct-25	—	—
40.	Narmada devi M, Kudumu Kavitha, S. Govindaraj, G Uganya, Rubaid Ashfaq & M. Ramamurthy	Mechanical performance and moisture resistance of alkali-treated Crotalaria juncea fiber-reinforced polyester composites for prosthetic sockets	Springer Nature Link	Conference Proceedings	Scopus	https://doi.org/10.1007/s10751-026-02487-w	April & 2026	—	—



41.	Kudumu Kavitha ; Neeharika Reddy Gadikota; Hemanth Kumar; Manipati Keerthika; Yogiswar Reddy Valasa; K H Range Gowd	Adaptive Explainable AI Framework for Personalized Risk Assessment and Early Disease Prediction	IEEE Explore	Conference Proceedings	Scopus	https://doi.org/10.1109/IC-2026.11564111	June & 2026	—	—
42.	Kudumu Kavitha ; Shaik Maheer; Shaik Nishar Basha; Mallepalle Sravani; Kotha Sravani; Thallapaka Sreevidya	A Multimodal Transformer Architecture for Early Detection of Diabetes Using Clinical, Wearable, and Demographic Data	IEEE Explore	Conference Proceedings	Scopus	https://doi.org/10.1109/IC-2026.11564489	June & 2026	—	—
43.	Dr.K.Nirmala Devi Renu Kumari Dr. Divya Sharma A.Subashini Bhakti Pushkar Patil Dr. Pavithra G Vaishnavi S Ali Akbar E T	Smart Intelliegent Iot-Based Farming System For Crop Health Monitoring And Soil Health Management And Prevention Causes	Patent - 202541070562	Published	-	-	-	-	-



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44.	Prof. Sachin Jadhav Dr. Prashant Kumar Dr. Gazala Pathan Yogita Sahadu Dahibhate Dr.Ranjana Sharma Taruna Chopra Dr.Nitin Ashok Dawande. Dr.K.Nirmala Devi	AI Based Cloud Security Detecting Device	Design Patent - 494766-001	Filed	-	-	-	-	-
45.	Dr. R. Shobana Dr. M. Suriakala Dr. N. Nirmala devi Unnamalai K V. Ramya	Electric Vehicle Charging Station	Design 450379-001	Granted	-	-	-	-	-
46.	Kudumu Kavitha Tumusiime Jacob Nagasuma Channarayapatna Venugopal Osire Pascal Dr. Rani Venkata Satya Praveen Ravi Teja Aida Gurumeet	AI-Powered Drug Resistance Monitoring device for Chemotherapy	6504413 - UK Design Patent Granted	Published	-	-	-	-	-



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	Chandramohan Wadhawa Venu Pantangi Sakthidevi Ramalingajothy Dr. Shyamkant Shridhar Munje								
47.	Manas Kumar Yogi Ch Manikanta Kalyan KVV Subba Rao P. Seshu Kumar	Device for real time personalized recommendations during travel and exploration	442133-001 - Design	Granted	-	-	-	-	-