Symbiosis Institute of Computer Studies and Research
2024 Research Publications

S.N	Name of Authors(All authors in the same sequence as on paper)	Title of the Article	Source title (Name of Journal/Conference Proceedings/Book)	Publisher Name	Document Type
1	Balamurugan Balusamy, Rajesh Kumar Dhanaraj, Tamizharasi Seetharaman , Vandana Sharma , Achyut Shankar, Wattana Viriyasitavat	Design control and management of intelligent and autonomous nanorobots with artificial intelligence for Prevention and monitoring of blood related diseases	Engineering Applications of Artificial Intelligence	Elsevier	Journal
2	L. Godlin Atlas, K.P. Arjun. Sampath Kumar , Rajesh Kumar Dhanaraj , Anand Nayyar	Deep learning enabled hemorrhage detection in retina with DPFE and splat segmentation in fundus images	Biomedical Signal Processing and Control	Elsevier	Journal
3	Deshpande M.M.; Bafna, Prafulla B.	Development and Evaluation of Extended Text Pre-processing Techniques for Hindi Document Clustering.	International Journal of Intelligent Systems and Applications in Engineerin	Ismail Saritas	Journal
6	Rajashree Jain,Minal Abhyankar, MVV Prasad Kantipudi, Rajanikanth Aluvalu, Mahesh S. Raisinghani,	Measurement of Student Engagement in a Generic and Online Learning Management System-Based Environment	International Journal of Online Pedagogy and Course Design	IGI Global	Journal
7	Vibhute, A.D., Kale, K.V., Gaikwad, S.V.	Machine learning-enabled soil classification for precision agriculture: a study on spectral analysis and soil	Applied Geomatics	Springer Science and Business Media Deutschland GmbH	Journal

		property determination			
8	2. Almahadin, G., Subburaj, M., Hiari, M., Sathasivam Singaram, S., Kolla, B. P., Dadheech, P., Vibhute A. D., & Sengan, S.	Enhancing Video Anomaly Detection Using Spatio-Temporal Autoencoders and Convolutional LSTM Networks	SN Computer Science	Springer Nature	Journal
9	1. Vibhute, A. D., Khan, M., Kanade, A., Patil, C. H., Gaikwad, S. V., Patel, K. K., & Saini, J. R.	An LSTM-based novel near-real-time multiclass network intrusion detection system for complex cloud environments	Concurrency and Computation: Practice and Experience	John Wiley and Sons Ltd	Journal
13	S Balaji,S Jeevanandham,Mani Deepak Choudhry,M Sundarrajan,Rajesh Kumar Dhanaraj	Data Aggregation through Hybrid Optimal Probability in Wireless Sensor Networks	EAI Endorsed Transactions on Scalable Information Systems	EAI	Journal
15	Ruby Chanda, Vanishree Pabalkkar, Sarika Sharma	Attitude and behavioral intention for using metaverse in education: learner's perspective	Journal of Applied Research in Higher Education	Emerald	Journal
16	Balasubramaniam S, Arishma M, Satheesh Kumar K, Rajesh Kumar Dhanaraj	A Comprehensive Exploration of Artificial Intelligence Methods for COVID-19 Diagnosis	EAI Endorsed Transactions on Pervasive Health and Technology	EAI	Journal
20	Kanani P., Saini J.R., Sankhe D., Patil D., Pandya G., Nanade A, Shah B.	Assessing AODV Protocol Suitability for Collision Avoidance Systems	International Journal of Intelligent Systems and Applications in Engineering	IJISAE Publications	Journal

21	Saini J.R., Roy S.	Preparation of Rich Lists of Research Gaps in the Specific Sentiment Analysis Tasks of Code-mixed Indian Languages	SN Computer Science	Springer	Journal
23	Sathya Krishnamoorthi · Rajesh Kumar Dhanaraj · SK Hafizul Islam	CCM-PRNG: Pseudo-random bit generator based on cross-over chaotic map and its application in image encryption	Multimedia Tools and Applications	Springer	Journal
24	Md. Akkas Ali, Anupam Kumar Sharma , Rajesh Kumar Dhanaraj	Heterogeneous features and deep learning networks fusion-based pest detection, prevention and controlling system using IoT and pest sound analytics in a vast agriculture system	Computers and Electrical Engineering	Elsevier	Journal
27	Dr. Shilpa Bhaskar Mujumdar, Dr. Haridas Acharya, Dr. Shailaja Shirwaikar and Dr. Prafulla Bharat Bafna	Assessing impact of problembased learning using data mining to extract learning patterns	Journal of Applied Research in Higher Education	Emerald	Journal
28	Balasubramaniam S, Seifedine Kadry, Rajesh Kumar Dhanaraj, Satheesh Kumar K & Chinnadurai Manthiramoorthy	Res-Unet based blood vessel segmentation and cardio vascular disease prediction using chronological chef-based optimization algorithm based deep residual network from retinal fundus images	Multimedia Tools and Applications	Springer	Journal

35	Rajesh Kumar Dhanaraj, Anamika Singh & Anand Nayyar	Matyas–Meyer Oseas based device profiling for anomaly detection via deep reinforcement learning (MMODPAD-DRL) in zero trust security network	Computing	Springer	Journal
36	K. P. Arjun, K. Sampath Kumar, Rajesh Kumar Dhanaraj , Vinayakumar Ravi	Optimizing time prediction and error classification in early melanoma detection using a hybrid RCNN-LSTM model	Microscopy Research and Technique	Wiley	Journal
42	1) Shilpa Bhaskar Mujumdar *, 2) Haridas Acharya, 3) Shailaja Shirwaikar, 4) Prafulla Bharat Bafna	Assessing impact of problem-based learning using data mining to extract learning patterns	Journal of applied research and higher education	Emerald	Journal
45	Jabde, M.K., Patil, C.H., Vibhute, A.D., Mali, S.	A Comprehensive Literature Review on Air-written Online Handwritten Recognition	International Journal of Computing and Digital Systems	University of Bahrain	Journal
48	Md. Akkas Ali, Rajesh Kumar Dhanaraj Seifedine Kadry	AI-enabled IoT-based pest prevention and controlling system using sound analytics in large agricultural field	Computers and Electronics in Agriculture	Elsevier	Journal
50	Ashu Taneja; Shalli Rani; Rajesh Kumar Dhanaraj; Lewis Nkenyereye	GCIRM : Towards Green Communication With Intelligent Resource Management Scheme for Radio Access Networks	IEEE Transactions on Green Communications and Networking	IEEE	Journal

59	Atiya Khan, Chandrashekhar H. Patil, Amol D. Vibhute and Shankar Mali	Mapping Crop Types At a 10 m Scale Using Sentinel-2 Data and Machine Learning Methods	International Journal of Computing and Digital Systems	University of Bahrain	Journal
60	Nabila Sehito, Yang Shouyi,Lewis Nkenyereye,Rajesh Kumar Dhanaraj	Optimizing User Association, Power Control and Beamforming for 6G Multi-IRS Multi-UAV NOMA Communications in Smart Cities	IEEE Transactions on Consumer Electronics	IEEE	Journal
61	S. Aanjan Kumar, Monoj Kumar Muchahari, S. Poonkuntran, L. Sathish Kumar, Rajesh Kumar Dhanaraj P. Karthikeyan	Application of hybrid capsule network model for malaria parasite detection on microscopic blood smear images	Multimedia Tools and Applications	Springer	Journal
67	Sarika Sharma, Shreya Virani	Moderating effects of gender, entrepreneurship education, and parent's profession on start-up intentions: a theory of planned behaviour-based approach	International Journal of Business and Globalisation	Inderscience	Journal
72	Sarika Sharma and Sonica Rautela	Moonlighting intentions from IT professional's perspective: Mediating role of organizational commitment	Journal of environment, workplace and employment	Inderscience Publishing	Journal
73	Sarika Sharma, Sonica Rautela	Employee Moonlighting: A research Agenda	Journal of Management Development	Emerald	Journal

75	Amutha Prabakar Muniyandi; Balamurugan Balusamy; Rajesh Kumar Dhanaraj Lewis Nkenyereye	Privacy Preserved Reinforcement Learning Model Using Generative AI for Personalized E-Learning	IEEE Transactions on Consumer Electronics	IEEE	Journal
80	Puneet Kumar, Bhoopesh Singh Bhati, Rajesh Kumar Dhanaraj, Celestine Iwendi, Balamurugan Balusamy, Nitesh Singh Bhati, and Prerana Rai	Feature subset selection using heuristic and metaheuristic approaches for diabetes prediction on a binary encoded dataset	International Journal of Modeling, Simulation, and Scientific Computing	World Scientific Publishing Co Pte Ltd	Journal
4	1. Ali, Md. A., Dhanaraj, R. K., Sharma, A. K., Balusamy, B., V, G., & Grover, V	Multi-Module Deep Learning and IoT-Based Pest Detection System Using Sound Analytics in Large Agricultural Field	International Conference on Electrical, Electronics, Communication and Computers (ELEXCOM)	IEEE	Conference
5	2. Singh, A., Dhanaraj, R. K., Sharma, A. K., Balusamy, B., Sharma, G., & Agrawal, S	Q-Learning Based Network Access Policy Management for Zero Trust Security in IIoT	2023 International Conference on Electrical, Electronics, Communication and Computers (ELEXCOM).	IEEE	Conference
10	Kanwalpreet Kour; Jhansi Bharathi Madavarapu; Mudita; Deepali Gupta; Rajesh Kumar Dhanaraj; Shilpa Saini	Design of Sensor Based Walnut Cracking Device and By-Product Classification via K-Means	6th International Conference on Contemporary Computing and Informatics (IC3I)	IEEE	Conference
11	Y Barve, Jatinderkumar R. Saini, R Rathod, Hema Gaikwad	multimodal misinformation detection: an exhaustive review	7th International Conference On Computing, Communication, Control And Automation (ICCUBEA)	IEEE	Conference

12	Anuja Bokhare, Aishwarya Kulkarni and Madhuri Rao	An Empirical Investigation of the Sales-Promotion Relationship: Modeling Factors through Linear Regression Analysis	6th International Conference on Contemporary Computing and Informatics	IEEE	Conference
14	Tanishka Hemant Chopra and Prathamesh Vijay Lahande	Performance Evaluation of Service Broker Policies in Cloud Computing Environment Using Round Robin	International Conference on Soft Computing and its Engineering Applications	Springer, Cham	Conference
17	Audichya M., Saini J.R.	Ensemble Incremental Model for Misinformation Detection in Healthcare	7th International Conference On Computing, Communication, Control And Automation (ICCUBEA-2023), Pune, India	IEEE	Conference
18	Roy S., Saini J.R.	A Review of Challenges in Aspect Based Sentiment Analysis Sub-tasks in Resource-scarce Indian Languages	7th International Conference On Computing, Communication, Control And Automation (ICCUBEA-2023), Pune, India	ieee	Conference
19	Audichya M., Saini J.R.	ChatGPT for Creative Writing and Natural Language Generation in Poetry and Prose	ChatGPT for Creative Writing and Natural Language Generation in Poetry and Prose	3rd International Conference on Advanced Computing Technologies and Applications (ICACTA-2023), Mumbai, India	Conference

22	Shrikant Mapari	A Neural Network-Based Framework to Recognize the Handwritten Chemical Expression	ISBM 2023: Proceedings of World Conference on Information Systems for Business Management	Springer Publication	Conference
29	Ashima Arya; Rajesh Kumar Dhanaraj; Sapna Juneja; Shilpa	Navigating the Metaverse: Trends and Opportunities in 2023	Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)	IEEE	Conference
30	Malathy Sathyamoorthy; Rajesh Kumar Dhanaraj; C N Vanitha; Lalitha Krishnasamy	Augmented Reality Based Medical Education	Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)	IEEE	Conference
31	Milind Talele; Rajashree Jain; Priti Kulkarni	Review of Face Emotion Recognition Using Feature Extraction Techniques	2023 Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)	IEEE	Conference
32	Aditya Tuteja; Ananya U A; Merlin Saja Samuel; Rajashree Jain	Cost Effective and Customizable Smart Irrigation System Using IoT	2023 IEEE 11th Region 10 Humanitarian Technology Conference (R10-HTC)	IEEE	Conference
33	Anuja Bokhare , P S Metkewar	Identifying Best Goalkeepers Problem is a NP-Hard?.	Information Systems for Business Management	Springer	Conference
34	Anuja Bokhare, Madhuri Rao, M. Pavie Oliver Rohit Rai,Umang Adesara	Modelling Stock Prices Prediction with Long Short Term Memory (LSTM): a Black-Box Approach	International Conference on Artificial Intelligence: Theory and Applications	Springer	Conference
37	Monica Dutta; P S Metkewar; Rajesh Kumar Dhanaraj; Deepali Gupta; Sapna Juneja	Mapping Smart Vertical Farming in Cultivation of Herbaceous Medicinal Plants	International Conference on Advances in Computation, Communication and Information	IEEE	Conference

		using Bibliometric Analysis	Technology (ICAICCIT)		
38	Mudita Uppal; P S Metkewar; Rajesh Kumar Dhanaraj; Kanwalpreet Kour; Deepali Gupta; Shilpa Saini	ESSS: Energy Saver Smart Shoes for Energy Harvesting using Multi-Sensors Technique	International Conference on Advances in Computation, Communication and Information Technology (ICAICCIT)	IEEE	Conference
39	Md. Akkas Ali; Anupam Kumar Sharma; Rajesh Kumar Dhanaraj	A High Accuracy Deep Learning and Iot Network for Pest Detection Using Analysis of The Pest Sound in Large Agriculture Area	International Conference on Advances in Computation, Communication and Information Technology (ICAICCIT)	IEEE	Conference
40	P S Metkewar; N Uma; Rajesh Kumar Dhanaraj; Balasubramanian Prabhu Kavin; Malathy Sathyamoorthy	Facial Expression Recognition in the Wild using Artificial Rabbits Optimizer based Residual Neural Network	International Conference on Advances in Computation, Communication and Information Technology	IEEE	Conference
41	M. Chandraprabha; Rajesh Kumar Dhanaraj	Deep Learning Based Bagged CNN with Whale Optimization Algorithm to Forecast the Productivity of Rice Crop using Soil Nutrients	International Conference on Advances in Computation, Communication and Information Technology	ieee	Conference
43	Milind Talele, Rajashree Jain,Priti Kulkarni	Review of Face Emotion Recognition Using Feature Extraction Techniques	Intelligent Computing and Control for Engineering and Business Systems (ICCEBS), Chennai, India,	IEEE	Conference

44	Khan, A., Patil, C.H., Vibhute, A.D., Mali, S.	A U-Net Based Approach for High-Accuracy Land Use Land Cover Classification in Hyperspectral Remote Sensing	International Conference on Soft Computing and its Engineering Applications, icSoftComp 2023	Springer Science and Business Media Deutschland GmbH	Conference
46	Prakash O., Saini J.R.	A Novel Manned Drone Design with a Legal Perspective	Sardar Patel International Conference on "Industry 4.0 - Nascent Technologies andSustainability for 'Make in India' Initiative" (SPICON-2022), Mumbai, India	AIP Conference Proceedings	Conference
47	Sagar P., Saini J.R.	A Three-Technique Pioneering Study for Unveiling Stopwords in Koshur Language	EEE	A Three-Technique Pioneering Study for Unveiling Stopwords in Koshur Language	Conference
49	Advancing Digital Transformation in Indian Higher Education Institutions	Advancing Digital Transformation in Indian Higher Education Institutions	Intelligent Computing and Control for Engineering and Business Systems (ICCEBS)	Publisher: IEEE	Conference
51	Vaishali A. Kherdekar, Sachin A. Naik	Continuous Speech : A Feature Fusion Method for Recognition of Continuous Speech	2024 Fourth International Conference on Advances in Electrical, Computing, Communication and Sustainable Technologies (ICAECT)	IEEE	Conference

52	T. Abirami, Shrikant Mapari, P. Jayadharshini, Lalitha Krishnasamy, R. Ragavendra Vigneshwaran	Streamlined Deployment and Monitoring of Cloud-Native Applications on AWS with Kubernetes Prometheus Grafana	Conference Proceedings : 2023 International Conference on Advances in Computation, Communication and Information Technology (ICAICCIT)	IEEE Xplore	Conference
53	T. Abirami, Shrikant Mapari,P. Jayadharshini, M. Kavipriya, T. Kavin, V.S. Kanagasubramaniyan	A Machine Learning Techniques for Early Autism Spectrum Disorder Detection Through Comparative Analysis of Feature Engineering and Classification Models	Conference Proceedings: 2023 International Conference on Advances in Computation, Communication and Information Technology (ICAICCIT)	IEEE Xplore	Conference
54	S. Santhiya, Shrikant Mapari, N. Abinaya, P. Jayadharshini, S. Priyanka, Lalitha Krishnasamy	Early Detection of Cervical Cancer using Machine Learning Classifiers for Improved Diagnosis in Underserved Regions	Conference Proceedings:2023 International Conference on Advances in Computation, Communication and Information Technology (ICAICCIT)	IEEE Xplore	Conference
55	Shrikant Mapari, Vivek Veeraiah, Manohar Manchala, S. Dhamodaran, Rohit Anand, SimranDeep Kaur	Challenges in Remote Big Data Transmission in Io'T Environment	Conference Proceedings: 2024 2nd International Conference on Disruptive Technologies (ICDT)	IEEE Xplore	Conference
56	Meenal Jabde, Chandrashekhar Patil , Amol D.Vibhute & Shankar Mali	Offline Handwritten Multilingual Numeral Recognition Using CNN	Intelligent Systems for Smart Cities	Springer, Singapore	Conference

57	Amol D. Vibhute, Vikram Nakum	Deep learning-based network anomaly detection and classification in an imbalanced cloud environment	Procedia Computer Science	Elsevier B.V.	Conference
58	Amol D. Vibhute, Chandrashekhar H Patil, Arjun V Mane, Karbhari V Kale	Towards Detection of Network Anomalies using Machine Learning Algorithms on the NSL-KDD Benchmark Datasets	Procedia Computer Science	Elsevier B. V.	Conference
62	Jatinderkumar R. Saini; Shraddha Vaidya	Identification of Information Calumny using Sarcasm Features	2023 Global Conference on Information Technologies and Communications (GCITC)	IEEE Explore	Conference
65	Bhalekar P., Saini J.R.	Comprehensive Exploration of the Role of Graph Databases like Neo4j in Cyber Security	International Conference on Emerging Smart Computing & Informatics (ESCI-2024), Pune, India	IEEE, USA	Conference
66	Saini J.R., Gaikwad H., Sagar P.	Automated Detection of Similes and Oxymorons in Koshur and Awadhi Poetry: A Hybrid Algorithm Approach	IEEE Gobal Conference on Information Technologies and Communications (GCITC-2023), Bangalore, India	IEEE, USA	Conference
74	Priti Kulkarni; Rajashree Jain	Integrating Computing in High School Curriculum: A Conceptual Approach	2023 IEEE Technology & Engineering Management Conference - Asia Pacific (TEMSCON-ASPAC)	IEEE Xplore	Conference

76	Saini J.R., Vaidya S.	A Novel Stance Labeling Algorithm for Misinformation Detection	2nd International Conference on Advancements in Smart Computing and Information Security (ASCIS-2023), Rajkot, India	CCIS, Springer, UK	Conference
77	Saini J.R., Vaidya S.	Recognizing Hate Speech on Twitter with Feature Combo	5th International Conference on Communication and Intelligent Systems (ICCIS-2023), Jaipur, India	LNNS, Springer, UK	Conference
78	Gaikwad H., Saini J.R.	Data Corpus and Stop Word List for Low-Resource Indo-Aryan Language—Awadhi	8th International Conference on Information and Communication Technology for Competitive Strategies (ICTCS-2023), Jaipur, India	LNNS, Springer, UK	Conference
79	Kulkarni P., Saini J.R.	A Novel Framework to Detect Business Email Compromise through Unconsented Email Autoforwards	2nd International Conference on Advancements in Smart Computing and Information Security (ASCIS-2023), Rajkot, India	CCIS, Springer, UK	Conference
81	Kanubhai K Patel, Nilay M Vaidya, Krishna Kant, Amol Vibhute, Sandeep Gaikwad	Towards a Greener Industry 4.0: Sustainable Manufacturing Strategies for Environmental Impact Reduction Through Innovation and Technology	International Conference on Smart Computing and Communication	Springer Nature Singapore	Conference
82	Amol D Vibhute, Minhaj Khan, Chandrashekhar H Patil, Sandeep V Gaikwad, Arjun V Mane, Kanubhai K Patel	Network anomaly detection and performance evaluation of Convolutional Neural Networks	Procedia Computer Science	Elsevier	Conference

		on UNSW-NB15 dataset			
68	Shreya Virani, Sarika Sharma	Post pandemic technology assisted teaching and learning: A perspective on self-directed learning	Advances in Technological Innovations in Higher Education	Taylor and Francis	Book Chapter
70	Vijaya Choudhary, Paramita Guha , Sunita Mishra , Anamika Singh , Vandana Sharma , Rajesh Kumar Dhanaraj	mart production monitoring using drones in cyber-physical agricultural systems	Agri 4.0 and the Future of Cyber-Physical Agricultural Systems	Elsevier	Book Chapter
71	M. Suguna, D. Prakash , C.U. Om Kumar , M. Revathi , Rajesh Kumar Dhanaraj	AI-based pest detection and recovery model for cyber-physical agricultural systems	Agri 4.0 and the Future of Cyber-Physical Agricultural Systems	elsevier	Book Chapter
83	Milind Talele, Rajashree Jain, Shrikant Mapari	Complex Face Emotion Recognition Using Computer Vision and Machine Learning	Harnessing Artificial Emotional Intelligence for Improved Human-Computer Interactions	IGI Global	Book Chapter
25	K. Sujigarasharma, S. Sharulatha, M. Lawanya Shri, E. Gangadevi, Rajesh Kumar Dhanaraj	Optimizing 3D Bioprinting Using Advanced Deep Learning Techniques A Comparative Study of CNN, RNN, and GAN	Computational Intelligence in Bioprinting	Wiley	Book
26	E. Gangadevi, M. Lawanya Shri, Rajesh Kumar Dhanaraj, Balamurugan	Computational Intelligence in Bioprinting	Computational Intelligence in Bioprinting	Wiley	Book

63	R. Malviya, S. Sundram,Rajesh Kumar Dhanaraj, S. Kadry	Digital Transformation in Healthcare 5.0	degruyter	degruyter.	Book
64	A. Suresh Kumar, Rajesh Kumar Dhanaraj, Yassine Maleh, Daniel Arockiam	Ubiquitous and Transparent Security	Ubiquitous and Transparent Security	CRC	Book
69	Seifedine Kadry Vandana Sharma Rajesh Kumar DhanarajRutvij H. Jhaveri Gandhiya Vendhan	Agri 4.0 and the Future of Cyber-Physical Agricultural Systems	Agri 4.0 and the Future of Cyber-Physical Agricultural Systems	elsevier	Book