



JEPPIAAR
ENGINEERING COLLEGE

(A CHRISTIAN MINORITY INSTITUTION)

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI – 600119

Curricular Details

Faculty

AY – (2021-2022)


PRINCIPAL
JEPPIAAR ENGINEERING COLLEGE
JEPPIAAR NAGAR,
RAJIV GANDHI SALAI,
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Faculty Achievement Curricular

<i>Academic Year* -select-</i>	2021-22
<i>Number of Research papers published in Journals*</i>	43
<i>Number of patents granted*</i>	16
<i>Number of papers published in National Conferences*</i>	01
<i>Number of papers published in International Conferences*</i>	11
<i>Number of Books Authored *</i>	02
<i>Number of book chapters authored*</i>	01
<i>Number of new externally funded research projects received *</i>	01
<i>Fund received during this academic year*</i>	Rs.4,42,767

List of Journal Articles Published 2021-22

1. Nithisha, J.; Jesu, P. "A Secured Storage and Communication System for Cloud Using ECC, Polynomial Congruence and DSA," *Wireless Personal Communications*, vol. 126, no. 2, pp. 949–974, 2022, doi: 10.1007/s11277-022-09778-9.
2. Senthilathiban, D.S.; Kuduvalli, S.S.; Angeline Praveena, E.; Thangavel, S.; Anitha, T.S. "Integration of synthetic and natural derivatives revives the therapeutic potential of temozolomide against glioma- an in vitro and in vivo perspective," *Life Sciences*, vol. 301, p. 120609, 2022, doi: 10.1016/j.lfs.2022.120609.
3. Jayabal, R.; S, S.; Dillikannan, D.; Yuvarajan, Y.; Thangavelu, L.; Mukilarasan, M.; Kaliyaperumal, G.; De Pours, M.V. "Multi-objective optimization of performance and emission characteristics of a CRDI diesel engine fueled with sapota methyl ester/diesel blends," *Energy*, vol. 250, p. 123709, 2022, doi: 10.1016/j.energy.2022.123709.
4. Parthiban, S.; Sowndhraya, R.K.V.; Raja, P.; Parthiban, M.; Ramesh, A.; Gopal, G.; Senthilkumar, K.; Balasubramanyam, D.; Hemalatha, S.; Bharathi, R.; Ravishankar, C.; Parveen, S.T. "Molecular detection of porcine parvovirus 1-associated

- reproductive failure in southern India,” *Tropical Animal Health and Production*, vol. 54, no. 3, pp. 195–210, 2022, doi: 10.1007/s11250-022-03194-8.
5. Vidhya, A.; Mohan Kumar, M. “Fusion-based advanced encryption algorithm for enhancing the security of Big Data in Cloud,” *Concurrent Engineering Research and Applications*, vol. 30, no. 2, pp. 171–180, 2022, doi: 10.1177/1063293X221089086.
 6. Lakshmi, C.; Jesu, P. “Design and Implementation of the Reconfigurable Area and Power-Efficient Steganography for Medical Information’s in MIMO-OFDM Channel Coding,” *Wireless Personal Communications*, vol. 124, no. 3, pp. 2271–2298, 2022, doi: 10.1007/s11277-022-09464-w.
 7. Karthik, K.; Padmanaban, P.; Senthil Kumar, P.S.; Venkatachalam, J.; Periyasamy, S.; Saravanan, R. “Functionalization of MXene-based nanomaterials for the treatment of micropollutants in aquatic system: A review,” *Environmental Pollution*, vol. 301, p. 119034, 2022, doi: 10.1016/j.envpol.2022.119034.
 8. Palanisamy, T.; Sadayan, G.; Pathinetampadiyan, N. “Neural network–based leaf classification using machine learning,” *Concurrency and Computation: Practice and Experience*, vol. 34, no. 8, e5366, 2022, doi: 10.1002/cpe.5366.
 9. Venkatesh, J.; Titus, A.; Ramadoss, R.; Anitha, C.; Chirraakesavareddy; Ranjith, S. “A novel material fabrication to detect breast cancer using deep novel classification mechanism,” *AIP Conference Proceedings*, vol. 2405, p. 50014, 2022, doi: 10.1063/5.0079523.
 10. Chembian, W.T.; Hemanand, D.; Thomas Paul Roy, A.T.P.; Deepakfranklin, P.D.; Krishna Kumari, G.K.; Kumar, N.C.S.; Hemanth, S.V.; Soundari, A.G. “A High-Performance Infrastructure for Remote Sensing Data Applications Using HPC Paradigms,” *International Journal of Electrical and Electronics Research*, vol. 10, no. 2, pp. 394–398, 2022, doi: 10.37391/IJEER.100255.
 11. Chenthil, T.R.; Jesu, P. “An Energy-Aware Multilayer Clustering-Based Butterfly Optimization Routing for Underwater Wireless Sensor Networks,” *Wireless Personal Communications*, vol. 122, no. 4, pp. 3105–3125, 2022, doi: 10.1007/s11277-021-09042-6.
 12. Akila, R.; Sasikala, R. “Sexual harassment at workplace faced by women employees in private organization special reference to Tamilnadu and Pondicherry regions - India,” *AIP Conference Proceedings*, vol. 2385, p. 110001, 2022, doi: 10.1063/5.0070713.
 13. Remya, V.; Kanthimathi, M.; Jagan, G.C. “Heptagonal Fractal Antenna with Slit for Improved Efficiency,” 2022, doi: 10.1109/ICPECTS56089.2022.10047146.
 14. Chitra, P.; Thiripuram, A.; Balapriya, R.; Sivakumar, N.; Ramakrishnan, R.; Rosy Salomi Victoria, D.R.S. “A Fast and Robust Regression Model for Keyframes Extraction,” 2022, doi: 10.1109/ICPECTS56089.2022.10046701.

15. Latha, K.; Kavitha, D.; Hemavathi, S.; Jayasakthi Velmurugan, K.J.; Neathi, R. "Image Forgery Detection Using Machine Learning," 2022, doi: 10.1109/ICPECTS56089.2022.10046422.
16. Dudhane, T.M.; Chenthil, T.R.; Priya, P.; Jothibas, M. "Sign Language Recognition System using Convolutional Neural Network," 2022, doi: 10.1109/ICATIECE56365.2022.10046883.
17. Krishnaswamy, R.; Titus, A.; Gengalakshmi, G.; Subramanian, S.; Manikandan, J. "Deep Learning Features Restoration and Regional Longitudinal Fitting of Computed Tomography Images using Convolution Neural Network," 2022, pp. 1000–1004, doi: 10.1109/I-SMAC55078.2022.9987413.
18. Jagadesh, T.; Remya, V.; Arul, S.; Ramesh, S.; Pradeep, K.K.; Jothibas, M.; Jayaprahas, J. "Certain Investigations on Channel Utilization in MIMO System Based on Antenna Selection," 2022, doi: 10.1109/MysuruCon55714.2022.9972434.
19. Silva Deena, J.; Ahammed, M.T.; Boppana, U.M.; Afroj, M.; Ghosh, S.; Hossain, S.; Balaji, P. "Real-time based Violence Detection from CCTV Camera using Machine Learning Method," vol. 41, 2022, doi: 10.1109/I4Tech55392.2022.9952805.
20. Duraisamy, M.; Govindaraj, R.; Mohan, N.; Kamalakannan, A.; Bindal, S.; Titus, A. "Performance Evaluation of Deep Learning based Mandarin Fruit Sorting System with Industrial Camera," 2022, pp. 1238–1243, doi: 10.1109/ICOSEC54921.2022.9951937.
21. Chandra, P.; Ahammed, M.T.; Ghosh, S.; Emon, R.H.; Billah, M.; Ahamad, M.I.; Balaji, P. "Contextual Emotion Detection in Text using Deep Learning and Big Data," 2022, vol. 37, doi: 10.1109/ICCSEA54677.2022.9936154.
22. Venkatesh, S.; John de Britto, C.; Subhashini, P.; Somasundaram, K. "Image Enhancement and Implementation of CLAHE Algorithm and Bilinear Interpolation," *Cybernetics and Systems*, vol. 24, 2022, doi: 10.1080/01969722.2022.2147128.
23. Ramesh Kumar, A.; Ramesh Babu, M.; Pravina, P. "Application of Self-Adaptive Biogeography Based Optimization to Economic Load Dispatch Problems," 2022, doi: 10.1109/ICSES55317.2022.9914090.
24. Ranjith, S.; Jesu, P. "Improved Localization Algorithm Using Hybrid Firefly Genetic Algorithm in Wireless Sensor Network," 2022, vol. 6, doi: 10.1109/ICSES55317.2022.9914368.
25. Vidhya, A.; Mohan Kumar, M. "An Enhanced Reversible Data Hiding Algorithm to Maintain Privacy of Multimedia in Cloud," 2022, doi: 10.1109/ICSES55317.2022.9914297.
26. Sabitha, R.; Titus, A.; Balachandran, G.; Ravichandran, M.; Mohanavel, V. "An efficient object segmentation system based on U-Net for real-time satellite image," 2022, doi: 10.1109/ICSES55317.2022.9914264.

27. Balachandran, G.; Diwakaran, S.; Mohanavel, V.; Sabitha, R.; Nanammal, V. "Several Adaptable Robot engagements planning with blending Conflict and plan resolution," 2022, doi: 10.1109/ICSES55317.2022.9914295.
28. Shamitha, C.; Radhika, S.; Malathy, K.; Ranjith, S.; Sasirekha, N. "An intelligent IoT Enabled Traffic queue handling System Using Machine Learning Algorithm," 2022, vol. 8, doi: 10.1109/ICSES55317.2022.9914294.
29. Paul, C.; Ranjith, S.; Vijayashanthi, R.S.; Benazir Begam, R.B.; Sabitha, R. "A multidimensional time series data on wireless network to improve the detection performance of unsupervised learning algorithms," 2022, doi: 10.1109/ICSES55317.2022.9914254.
30. Venkatesh, J.; Titus, A.; Arthi, B.; Jebastine, J.; Shaik, S.; Sakthivel, E. "Empirical Analysis of Hybrid Machine Learning based Earlier Stage Covid Disease Prediction using Lung CT Images," 2022, doi: 10.1109/ICSES55317.2022.9914302.
31. Ahammed, M.T.; Boppana, U.M.; Kondapalli, R.; Mohana, D.; Balaji, P.; Zardar, M.A. "Survey on Wireless Fidelity (Wi-Fi) Based Indoor Location Technology for Mobile Devices," 2022, pp. 1465–1470, doi: 10.1109/ICICICT54557.2022.9917746.
32. C, C.G.; Boppana, U.M.; Kondapalli, R.; Ahammed, M.T.; Gallardo, C.G.S.; Balaji, P.; Afroj, M. "Design of IoT Based Indoor Air Purifier," 2022, pp. 1534–1539, doi: 10.1109/ICICICT54557.2022.9917953.
33. Pauline, T.; Sangeetha, P.; Janardhanan, G.; Ashok, V. "Experimental & analytical behaviour and performance of structural joints retrofitted with woven wire mesh concreting under reversed cyclic loading," *European Journal of Environmental and Civil Engineering*, vol. 26, no. 16, pp. 8561–8583, 2022, doi: 10.1080/19648189.2022.2112623.
34. Subramanian, K.; Paramasivam, S.A.; Dillikannan, D.; Muthu, M.; Prasanna Raj Yadav, P.R. "Prediction of thermal performance and exhaust emissions of a diesel engine fuelled with Simmondsia Chinensis oil methyl ester using ANN," *International Journal of Ambient Energy*, vol. 43, no. 1, pp. 8722–8735, 2022, doi: 10.1080/01430750.2022.2103184.
35. Rajalakshmi, S.; Jagan, G.C.; Padmapriya; Asha, S.; Kondala Kameswara Rao, N.; Shrivastava, R. "Development of RFID Tag Antenna with Graphene Material Using Deep Learning," *Journal of Physics: Conference Series*, vol. 2272, no. 1, p. 012012, 2022, doi: 10.1088/1742-6596/2272/1/012012.
36. Sreelakshmy, R.; Titus, A.; Sasirekha, N.; Logashanmugam, E.; Benazir Begam, R.B.; Ramkumar, G.; Raju, R. "An Automated Deep Learning Model for the Cerebellum Segmentation from Fetal Brain Images," *BioMed Research International*, 2022, p. 8342767, doi: 10.1155/2022/8342767.
37. Jagan, G.C.; Jesu, P. "Analysis on Positioning of Base Station and CHs for Improving Energy Efficiency in WSNs," 2022, pp. 313–316, doi: 10.1109/ICDCS54290.2022.9780746.

38. Shoba, L.K.; Mohan Kumar, M. "An Ophthalmic Evaluation of Central Serous Chorioretinopathy," *Computer Systems Science and Engineering*, vol. 44, no. 1, pp. 613–628, 2022, doi: 10.32604/csse.2023.024449.
39. Chenthil, T.R.; Jesu, P. "Energy-Aware QoS Based Cluster Routing With Aggregation Management Algorithm in Underwater Wireless Sensor Network," 2022, vol. 4, doi: 10.1109/IC3IOT53935.2022.9768014.
40. Nisat, T.; Ahammed, M.T.; Balaji, P.; Islam, M.H.; Akter, S.; Hossain, M.A.A.; Hasan, A.R. "Big Data Analysis for E-Trading Flower Shop Management System," 2022, vol. 27, doi: 10.1109/IC3IOT53935.2022.9767906.
41. Ahammed, M.T.; Gloria, A.; Silva Deena, J.; Oion, M.S.R.; Ghosh, S.; Balaji, P.; Nisat, T. "Sentiment Analysis using a Machine Learning Approach in Python," 2022, vol. 20, doi: 10.1109/IC3IOT53935.2022.9768004.
42. Jagan, G.C.; Jesu, P. "Modern Resource Conservation Strategies to Develop Multifaceted Applications of Wireless Sensor Networks: A Review," 2022, vol. 2, doi: 10.1109/IC3IOT53935.2022.9767912.
43. Chenthil, T.R.; Jesu, P. "Energy Efficient Clustering Based Depth Coordination Routing Protocol For Underwater Wireless Sensor Networks," 2022, pp. 370–375, doi: 10.1109/WiSPNET54241.2022.9767124.
44. Arthy, M.; Brindha, J.; Sabareeshwari, S.; Gnanasekar, A.K.; Nanammal, V.; Raju, R.; Al-Obaid, S.; Almoallim, H.S.; Selva, A. "Detection of Ag⁺ by Synthesizing Fluorescent Copper Nanoparticles through Ultrasensitive Free Label Approach," *Journal of Nanomaterials*, 2022, p. 8642134, doi: 10.1155/2022/8642134.
45. Vennila, C.; Titus, A.; Sudha, T.S.; Sreenivasulu, U.; Reddy, N.P.R.; Jamal, K.; Lakshmaiah, D.; Jagadeesh, P.; Belay, A. "Forecasting Solar Energy Production Using Machine Learning," *International Journal of Photoenergy*, 2022, p. 7797488, doi: 10.1155/2022/7797488.
46. Mukilarasan, M.; Karthikeyan, R.; Sathiyamoorthi, S.; Dillikannan, D.; Jayabal, R.; Sampath, S.; Kaliyaperumal, G. "Influence of baffles in heat transfer fluid characteristics using CFD evaluation," *International Journal of Ambient Energy*, vol. 43, no. 1, pp. 7088–7100, 2022, doi: 10.1080/01430750.2022.2063175.
47. Stanley, S.A.; Elango, A.; Kumar Radhakrishnan, A.; Chittrarasam, S.; Ravi, S.V.; Radhakrishnan, C.; Joe, S. "In-vitro Assessment of Antiviral Activity of the Herbo Mineral Capsule, Fema SakthiTM, against Human Coronavirus (HCoV) on VERO Cells," *Journal of Communicable Diseases*, 2022, pp. 120–123, doi: 10.24321/0019.5138.