



JEPPIAAR
ENGINEERING COLLEGE

(A CHRISTIAN MINORITY INSTITUTION)

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI – 600119

Curricular Details

Faculty

AY – (2022-2023)


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

<i>Academic Year* -select-</i>	2022-23
<i>Number of Research papers published in Journals*</i>	51
<i>Number of patents granted*</i>	11
<i>Number of papers published in National Conferences*</i>	02
<i>Number of papers published in International Conferences*</i>	29
<i>Number of Books Authored *</i>	03
<i>Number of book chapters authored*</i>	02
<i>Number of new externally funded research projects received *</i>	00
<i>Fund received during this academic year*</i>	Rs.1,78,000

List of Research Articles2022-23

1. Biswas, I.; Senthilathiban, D.S.; Kuduvalli, S.S.; Ramachandran, M.A.; Akshaya, S.; Raman, V.; Damodharan, D.; Anitha, T.S. Unveiling the anti-glioma potential of a marine derivative, Fucoidan: its synergistic cytotoxicity with Temozolomide—an in vitro and in silico experimental study. 2023, 3 Biotech, 13, 12, 397. doi:10.1007/s13205-023-03814-6
2. Kavitha, V.P.; Prabakar, D.; Ranjith, S.; Balambigai, S. Radar optical communication for analysing aerial targets with frequency bandwidth and clutter suppression by boundary element mmwave signal model. 2023, Optical and Quantum Electronics, 55, 13, 1142. doi:10.1007/s11082-023-05397-1
3. Rajagopalan Jayamaruthi, B.V.; Gurusamy, G.; Jayamaruthi, N. Developing a Subsea Valve Automation System Using Fiber Optic Umbilical. 2023, AIP Conference Proceedings, 2946, 1, 30002. doi:10.1063/5.0178934
4. Jebastine, J. Fetal ECG Extraction and QRS Detection Using Advanced Adaptive Filtering-Based Signal Decomposition and Peak Threshold Technique from Abdominal ECG Signals. 2023, Circuits, Systems, and Signal Processing, 42, 10, 6058–6088. doi:10.1007/s00034-023-02386-3

5. Thiruselvam, K.; Ganesan, G.; Dillikannan, D.; Jayabal, R. Influence of thermal barrier coating on performance and emission characteristics of a compression ignition engine fueled with delonix regia seed biodiesel. 2023, *Journal of Cleaner Production*, 420, 138413. doi:10.1016/j.jclepro.2023.138413
6. Subramanian, K.; Paramasivam, S.A.; Dillikannan, D.; Jayabal, R. Effect of pilot fuel injection strategies and EGR on a CRDI diesel engine powered by simmondsia chinensis seed biodiesel-methyl acetate blend. 2023, *Sustainable Energy Technologies and Assessments*, 58, 103345. doi:10.1016/j.seta.2023.103345
7. Thirugnanasambandam, T.; Ravichandran, M. Fatigue, wear, and mechanical behaviour of nano SiC and RHA biomass Si₃N₄-aluminium metal matrix composites: a concept of biomass conversion to energy. 2023, *Biomass Conversion and Biorefinery*, 13, 12, 10947–10956. doi:10.1007/s13399-021-01885-0
8. Sivaprakasam, V.; Kulshrestha, V.; Livingston, G.A.L.; Senthilnathan, S. An Improved Coyote Optimization Algorithm-Based Clustering for Extending Network Lifetime in Wireless Sensor Networks. 2023, *KSII Transactions on Internet and Information Systems*, 17, 7, 1873–1893. doi:10.3837/tiis.2023.07.008
9. Ranjith, S.; Jesu, P.; Chandra Sekar, A. A multi-fusion integrated end-to-end deep kernel CNN based channel estimation for hybrid range UM-MIMO 6G communication systems. 2023, *Applied Acoustics*, 210, 109427. doi:10.1016/j.apacoust.2023.109427
10. Rajesh, K.; Sathiyamoorthi, S.; Sampath, S.; Murugapoopathi, S.; Dillikannan, D. Analysis of performance and emission patterns of novel biofuel feedstock neat coconut fatty acid distillate (CFAD) fuelled single-cylinder diesel engine. 2023, *Heat Transfer*, 52, 5, 3732–3757. doi:10.1002/htj.22849
11. Palol, V.V.; Saravana, S.; Subramanyam, V.; Ganapathy, R.; Chinnadurai, R.K.; Subramanian, B. Effects of Valproic Acid with Different Drugs in Ovarian Cancer Cell Lines: An in vitro Study. 2023, *Biointerface Research in Applied Chemistry*, 13, 3, 279. doi:10.33263/BRIAC133.279
12. Mohan Kumar, M.; Selvam, S.; Jerald, A. Adaptable criteria progress quality management indicators for global software requirements prioritization. 2023, *AIP Conference Proceedings*, 2581, 70002. doi:10.1063/5.0126197
13. Thirugnanasambandam, T.; Ravichandran, M.; Varatharajulu, M.; Maridurai, T. The experimental investigation of springback and roughness parameters in the three-point forming process using terpolymer punch. 2023, *Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture*, 237, 1014–1023. doi:10.1177/09544054221112144
14. De Pours, M.V.; Dillikannan, D.; Kaliyaperumal, G.; Thanikodi, S.; Aÿbulut, Å.; Hoang, A.T.; Mahmoud, Z.; Saboor, S.; C, C.A.; Afzal, A. Collective influence and optimization of 1-hexanol, fuel injection timing, and EGR to control toxic emissions from a light-duty agricultural diesel engine fueled with diesel/waste cooking oil methyl ester blends. 2023, *Process Safety and Environmental Protection*, 172, 738–752. doi:10.1016/j.psep.2023.02.054
15. Duraimurugan, S.; Jesu, P. Retraction Note: Maximizing quality of multimedia streaming services in heterogeneous wireless networks using optimal multi-server technique (Cluster Computing, 2019, 22, S5, 12883–12895). 2023, *Cluster Computing*, 26, 193. doi:10.1007/s10586-022-03938-z

16. Nalla, N.; Yuvarajan, Y.; Ruby, R.; Sivasaravanan, S.; Thanikaivel Murugan, D. Detailed analysis on sterculia foetida kernel oil as renewable fuel in compression ignition engine. 2023, *Biomass Conversion and Biorefinery*, 13, 4, 2959–2970. doi:10.1007/s13399-021-01328-w
17. Sudhagar, S.; Jerald Rodriguez, A.R. Poor and rich dolphin optimization algorithm with modified deep fuzzy clustering for COVID-19 patient analysis. 2023, *Concurrency and Computation: Practice and Experience*, 35, 2, e7456. doi:10.1002/cpe.7456
18. Ramya Sree, K.N.; Jotheeswaran, G.; Chitradevi, D. Predicting Fetal Health: A Machine Learning Approach using Random Forest Algorithm. 2023. doi:10.1109/ICAIHI57871.2023.10489589
19. Balachandran, G.; Krishna, R.V.; Ranjith, S.; Venkata Siva Prasad, C.H. Evolutionary Hybrid Algorithms to Pioneer Localization in Wireless Sensor Networks. 2023. doi:10.1109/ICSES60034.2023.10465542
20. Venkata Siva Prasad, C.H.; Ranjith, S.; Krishna, R.V.; Balachandran, G. Enhancing Wireless Sensor Network Security using Modified ECC Algorithm. 2023. doi:10.1109/ICSES60034.2023.10465384
21. Rajendran, N.; Prem Kumar, R.; Kavitha, T.; Jayakumar, T.; Nanammal, V. Delay-tolerant Load Balancing Routing Model for RSU-Assisted Distributed Vehicular Adhoc Networks. 2023. doi:10.1109/ICSES60034.2023.10465528
22. Krishna, R.V.; Balachandran, G.; Siva Prasad Ch, V.; Ranjith, S. Nature-Inspired Algorithms to perform Localization and Security in Wireless Sensor Networks. 2023. doi:10.1109/ICSES60034.2023.10465305
23. Rajesh, G.; Kalaivani, K.P.; Hemalatha, D.; Prabhu, V.; Siva Rama Lingham, N. Identification of Fake and Spam Users on Social Networking Platforms. 2023. doi:10.1109/ICCEBS58601.2023.10449109
24. Siva Rama Lingham, N.; R, R.; Dhandayuthabani, G.; Sindhia, M.M.J.; Krishnasaivignesh, M. Responsive Portfolio Website Using React. 2023. doi:10.1109/INCOFT60753.2023.10425667
25. Priyadarshini, K.; Krishnamoorthy, P.; Ganapathy, N.; Karthikeyan, K.; Uma Maheswari, S.; Peddaveni, R. Artificial Intelligence Assisted Improved Design to Predict Brain Tumor on Earlier Stages using Deep Learning Principle. 2023. doi:10.1109/AICERA/ICIS59538.2023.10420011
26. Ahammed, M.T.; Ghosh, S.; Rahman, M.A.; Chandra, P.; Shuvo, A.I.; Balaji, P. Meta-transfer Learning for Contextual Emotion Detection in Face Affirmation. 2023, *Communications in Computer and Information Science*, 1822, CCIS, 107–121. doi:10.1007/978-3-031-37303-9_9
27. Ranjith, S.; Jayarin, J.; Chandra Sekar, A. Hybrid Deep Learning Approach for 6G MIMO Channel Estimation and Interference Alignment HetNet Environments. 2023, *Traitement du Signal*, 40, 5, 1951–1960. doi:10.18280/ts.400514
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29. Murugan, K.; Felicia, A.; Gomathy, B.; Saravanakumar, P.T.; Ramesh, S.M.; Sakthivel, E. A Credit Card Fraud Identification Technique Using Support Vector Machine. 2023. doi:10.1109/ICAISC58445.2023.10199684

30. Thahira Parveen, S.; Parthiban, S.; Raja, P.; Parthiban, M.; Gopal, G. Molecular Detection and Differentiation of Mycoplasma Species in Swine Lung Tissues. 2023, *Exploratory Animal and Medical Research*, 13, 1, 98–104. doi:10.52635/eamr/13.1.98-104
31. Jagan, G.C.; Remya, V.; Ranjith, S.; Balachandran, G. An Approach of Image Feature Extraction Using Obtuse-Angled Triangle Segmentation Using Mathematical Analysis for Enhanced Video Stabilization. 2023. doi:10.1109/ICONSTEM56934.2023.10142385
32. Jebastine, J.; Nanammal, V. Reversible - SAL Based Energy Efficient Design of CLA for DSP Application. 2023. doi:10.1109/ICONSTEM56934.2023.10142833
33. Durgarani, M.; Gokilavani, R. An Analysis on Increasing Awareness of Kabaddi Post Introduction of Pro-Kabaddi League. 2023. doi:10.1109/ICONSTEM56934.2023.10142905
34. Ranjith, S.; Jesu, P.; Chandra Sekar, A. Effective Hybrid Precoder Logic with mm Wave Massive MIMO using Novel Deep Learning Scheme. 2023. doi:10.1109/ICONSTEM56934.2023.10142733
35. Nanammal, V.; Jebastine, J.; Balajivasan, R.J. Voting Machine for Blind and Amyotrophic Lateral Sclerosis People. 2023. doi:10.1109/ICONSTEM56934.2023.10142738
36. Shermila, P.; Nishitha, J.; Shoba, L.K. Brain Tumour Detection from MRI Images Using Deep CNN. 2023. doi:10.1109/ICONSTEM56934.2023.10142928
37. Anitha, C.; Gracelin Sheeba, R.; Ranjith, S.; Balachandran, G. Remodeling Arrangement of Embedded Benzene Structure Using OBAP & QBAP Algorithm to Design Mesh for Medical Application. 2023. doi:10.1109/ICONSTEM56934.2023.10142852
38. Santhiya, A.; Sakthivel, E.; Gracelin Sheeba, R.; Keerthika, A. Security Based Object Detector Using YOLO Algorithm in Neural Networks. 2023. doi:10.1109/ICONSTEM56934.2023.10142307
39. Chenthil, T.R.; Arun Vijayakumar, B.; Ranjith, S.; Balachandran, G. Labeled Image Segmentation and Retrieval for Fast Images Processing Using K-NN Algorithm. 2023. doi:10.1109/ICONSTEM56934.2023.10142880
40. Gopi, E.; Mj, B. An Investor's Opinion about Equity Market. 2023. doi:10.1109/ICONSTEM56934.2023.10142460
41. Akila, R.; Sasikala, R. Awareness and Satisfaction towards Commercial Banking & Services in Chengalpattu Region Tamilnadu. 2023. doi:10.1109/ICONSTEM56934.2023.10142842
42. Sudhagar, S.; ArokiaRanjit, J. An IoT and Fuzzy aware e-Healthcare system using feature optimization tuned T-CNN with high dimensional data. 2023, *Journal of Intelligent and Fuzzy Systems*, 44, 3, 5137–5150. doi:10.3233/JIFS-220629
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45. Nirmalraj, S.; Antony, A.S.M.; Srideviponmalar, P.; Oliver, A.S.; Jayasakthi Velmurugan, K.J.; Elanangai, V.; Nagarajan, G. Permutation feature importance-based fusion techniques for diabetes prediction. 2023, *Soft Computing*, 16. doi:10.1007/s00500-023-08041-y
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52. Kasirajan, L.; Valiyaparambth, R.; Kamaraj, K.; Ajith, G.; Joise, J.; Kubandiran, A.; Velu, J. Full-Length Cloning, Expression and Functional Characterization of Phenylalanine Ammonia Lyase (PAL) Involved in Lignification of Secondary Cell