Department of Computer Science & Engineering
Department R & D Work
2024

Journal Publication (Scopus)

January to June

1. Sampath Kini K,Karthik Pai BH. Enhanced Content-based Recommendation Method. Grenze International Journal of Engineering and Technology 10, 396-400 (Jan 2024), January, 2024,DOI: 01.GIJET.10.1.60, Indexed in: EBSCO, CROSSREF, ISSN Number: 2395-5295, H-Index: 1

2. Prathwini, Anisha P Rodrigues, P Vijaya, Roshan Fernandes, Tulu Language Text Recognition and Translation: IEEE Access 12, 12734 - 12744 (Jan 2024), January, 2024 ,DOI: 10.1109/ACCESS.2024.3355470, **Indexed in:** Web of Science, Scopus Indexed ,ISSN Number: 2169-3536, , SCI/SCIE, JIF: 3.476, SJR: 0.926, SNIP: 1.422, Cite score: 9, H-Index: 204, **Q1** ,With: PG

3. Puneeth, R. P., & Parthasarathy, G. (2024). Blockchain-Based Framework for Privacy Preservation and Securing EHR with Patient-Centric Access Control. Acta Informatica Pragensia, 13(1), x–x. https://doi.org/10.18267/j.aip.225, February, 2024, DOI: https://doi.org/10.18267/j.aip.225, **Indexed in:** Web of Science, Scopus Indexed, ISSN Number: 1805-4951, JIF: 0.97, SJR: 0.205, SNIP: 0.475, Cite score: 1.2, H-Index: 4, **Q2**

4. Shedthi, B., Shetty, V., Chadaga, R., Bhat, R., Preethi, B., & Kini, K. P. (February 2024), "Implementation of Chatbot that Predicts an Illness Dynamically using Machine Learning Techniques," International Journal of Engineering, 37(2), 312–322, DOI: 10.5829/ije.2024.37.02B.08, Indexed in: Scopus, ISSN: 1025-2495, SJR: 0.135, SNIP: 1.133, CiteScore: 4.2, H-Index: 46, Quartile: **Q2.**

5. Abraham , M. P. ., & Reddy K. R., U. K. . (2024). A Composite Approach in Sentiment Analysis using Random Multimodal Deep Learning. International Journal of Intelligent Systems and Applications in Engineering, 12(16s), 348–358., February, 2024, DOI: https://ijisae.org/index.php/IJISAE/article/view/4831, Indexed in: Scopus Indexed ISSN Number: 2147-6799, H-Index: 9, Q3

6. Murari T., V., K C, R. & M E, R. Selective encryption of video frames using the one-time random key algorithm and permutation techniques for secure transmission over the content delivery network. Multimed Tools Appl (2024). https://doi.org/10.1007/s11042-024-18613-1, March, 2024,DOI: https://doi.org/10.1007/s11042-024-18613-1, Indexed in: Scopus Indexed, ISSN Number: 13807501, 15737721, JIF: 3.6, SJR: 0.72, SNIP: 1.06, Cite score: 5.3, H-Index: 93, **Q1**

7. **Hegde, Sandeep Kumar,** Energy-Efficient Bio-Inspired Hybrid Deep Learning Model for Network Intrusion Detection Based on Intelligent Decision Making. International Journal of Intelligent Systems and Applications in Engineering, 12(16s), 306 –. Retrieved from, March, 2024
   Indexed in: Scopus Indexed
   ISSN Number: 2147-6799, H-Index: 13, Q3

8. **Krishnappa, S.G**., Udaya Kumar Reddy, K.R. Enhancing Histopathology Breast Cancer Detection and Classification with the Deep Ensemble Graph Network. SN COMPUT. SCI. 5, 487 (2024), April, 2024
   DOI: https://doi.org/10.1007/s42979-024-02855-9, Indexed in: Scopus Indexed
   ISSN Number: 2661-8907, JIF: 3.78, SJR: 0.6, SNIP: 1.278, Cite score: 4.3, H-Index: 25, **Q1**

9. Nayak, A.A., Venugopala, P.S. & Ashwini, B. A Systematic Review on Generative Adversarial Network (GAN): Challenges and Future Directions. Arch Computat Methods Eng 31, 4739–4772 (2024). https://doi.org/10.1007/, May, 2024 Indexed in: Web of Science, Scopus Indexed ISSN Number: Electronic ISSN 1886-1784, JIF: 9.7, H-Index: 92,**Q1.**

10. Rajesh, Y. S., Kumar, V. K., & Poojari, A. (June 2024), "A Unified Approach Toward Security Audit and Compliance in Cloud Computing," Journal of The Institution of Engineers (India): Series B, 105(3), 733–750, DOI: 10.1007/s40031-023-00851-0, Indexed in: Scopus, ISSN: 2250-2106, SJR: 0.315, SNIP: 0.637, CiteScore: 3.1, H-Index: 24, Quartile: **Q3.**

11. Shedthi, B. S., Shetty, V., Naik, P., & Prabhu, T. (June 2024), "Materials With the Help of Mechanical Properties for Electrical Vehicle Chassis using Machine Learning Methods," *Journal of Mines, Metals and Fuels*, Volume 72, Issue 6, pp. 621–627, DOI: 10.18311/jmmf/2024/45235, Indexed in: Scopus, ISSN: 0022-2755, SJR: 0.110, SNIP: 0.084, CiteScore: 0.2, H-Index: 13, **Quartile: Q4.**

July to December

12. Ashwin Shenoy M, Thillaiarasu N, and Ashwin Shenoy, "Enhancing Security Through Real-Time Classification of Normal and Abnormal Human Activities: A YOLOv7-SVM Hybrid Approach," IAENG International Journal of Computer Science, vol. 51, no. 8, pp1027-1034, 2024, August, 2024

13. Pradeep Kanchan, D. & Alexander Atmaja, T. A COMPREHENSIVE SURVEY ON VISION BASED HUMAN ACTIVITYRECOGNITION SYSTEMS. https://doi.org/10.6084/m9.figshare.26124541.v1 (2024)., June, 2024 DOI: https://doi.org/10.6084/m9.figshare.26124541.v1, **Indexed in:** Scopus Indexed ISSN Number: 2731-538X, JIF: 6.4, SJR: 1.681, SNIP: 2.721, Cite score: 6.7, H-Index: 11, **Q1**

14. 1.Marathe, Shriram, and Anisha P Rodrigues. "Intelligent Models for Prediction of Compressive Strength of Geopolymer Pervious Concrete Hybridized with Agro-Industrial and Construction-

Demolition Wastes" Studia Geotechnica et Mechanica, vol. 0, no. 0, Sciendo, 2023, https://doi.org/10.2478/sgem-, September, 2024 DOI: https://doi.org/10.2478/sgem-, Indexed in: Web of Science, Scopus Indexed ISSN Number: 0137-6365, , ESCI, JIF: 1.3, SJR: 0.23, SNIP: 0.691, Citescore:1.3,H Index: 17, Q3.

15. .Mrs. Shwetha G KShwetha G K, Jayantkumar A Rathod, Naveen G, Mounesh Arkachari and Pushparani M K, “Blockchain-Based Vaccination Record Tracking System” International Journal of Advanced Computer Science and Applications(IJACSA), 15(8), 2024, August, 2024Indexed in: Scopus Indexed,ISSN Number: 2156-5570, JIF: 0.7, Cite score: 2.3, H-Index: 47, Q3

16. Kumaraswamy J, Praveen PV, Alzahrani HA, Sharma S, Shetty V, **Shedthi BS**. Experimental investigation of heat transfer rate for building roof with corrugated sheets using phase change material (PCM). Case Studies in Thermal Engineering. 2024 Jul 1;59:104508., July, 2024,DOI: https://doi.org/10.1016/j.csite.2024.104508, **Indexed in:** Web of Science, Scopus Indexed,ISSN Number: 2214-157X, , SCI/SCIE, H-Index: 72, **Q1**

17. Marathe, Shriram, and Anisha P Rodrigues. "Intelligent Models for Prediction of Compressive Strength of Geopolymer Pervious Concrete Hybridized with Agro-Industrial and Construction-Demolition Wastes" Studia Geotechnica et Mechanica, vol. 0, no. 0, Sciendo, 2023, https://doi.org/10.2478/sgem-2024-0020, September, 2024,DOI: https://doi.org/10.2478/sgem-2024-0020, Indexed in: Web of Science, Scopus Indexed,ISSN Number: 0137-6365, , ESCI, JIF: 1.3, SJR: 0.23, SNIP: 0.691, Cite score: 1.3, H-Index: 17, **Q3**

18. R.P. Puneeth, G Parthasarathy, A cross-chain-based approach for secure data sharing and interoperability in electronic health records using blockchain technology, Computers and Electrical Engineering, Volume 120, Part A, 2024, 109676, ISSN 0045-7906, https://doi.org/10.1016/j.compeleceng.2024.109676. , October, 2024,DOI: https://doi.org/10.1016/j.compeleceng.2024.109676, **Indexed in:** Web of Science, Scopus Indexed,ISSN Number: 00457906, , SCI/SCIE, JIF: 4.3, SJR: 1.041, SNIP: 1.395, Cite score: 9.2,

19. Anup Sharma, Kiran Kumar V G , Asmita Poojari, Prioritize Threat Alerts Based on False Positives Qualifiers Provided by Multiple AI Models Using Evolutionary Computation and Reinforcement Learning. Journal of the Institution of Engineers, India.Series . B (2024). https://doi.org/10.1007/s40031-024-01175-z, October, 2024,DOI: http://dx.doi.org/10.1007/s40031-024-01175-z, **Indexed in:** Web of Science, Scopus Indexed,ISSN Number: 2250-2106, , SCI/SCIE, H-Index: 24, **Q2**

20. Lobo, S., Srinivas Nekkar, R. B., & Chiplunkar, N. N. (2024). The Role of the National Service Scheme in Fostering Social Skills Among Engineering Graduates. Journal of Engineering Education Transformations, 38(2)., October, 2024,DOI: 10.16920/jeet/2024/v38i2/24189, **Indexing: Web of Science,ISSN: 2349-2473,Q4.**

21. Kanchan, P., Selvakumar, V., Lavanya, P. et al. Integration of IoT & cloud computing in mobile communication to breach limitation. International Journal of Information Technology. (2024). https://doi.org/10.1007/, November, 2024 Scopus Indexed ISSN Number: 25112104, SJR: 0.705, SNIP: 1.348, Cite score: 6, H-Index: 34, Q2.

22. V AC, B SK, Pradeep S, Suraksha P and Lin M (2024) Leveraging compact convolutional transformers for enhanced COVID-19 detection in chest X-rays: a grad-CAM visualization approach. Front. Big Data 7:1489020. doi: 10.3389/fdata.2024.1489020, December, 2024,DOI: 10.3389/fdata.2024.1489020, Indexed in: Web of Science, Scopus Indexed,ISSN Number: 2624909X, , SCI/SCIE, JIF: 2.4, SJR: 0.69, Cite score: 5.2, H-Index: 24, Q2.

23. Younis MW, Saritha, Kallapu B, Hejamadi RM, Jijo J, Ramesh RK, Aslam M, Jilani SF. Exploring the Influence of Tropical Cyclones on Regional Air Quality Using Multimodal Deep Learning Techniques. Sensors (Basel). 2024 Oct 30;24(21):6983. doi: 10.3390/s24216983. PMID: 39517881; PMCID: PMC11548229., December, 2024,DOI: 10.3390/s24216983, **Indexed in:** Web of Science, Scopus Indexed,ISSN Number: 1424-8220, , SCI/SCIE, JIF: 3.4, SJR: 0.764, Cite score: 7.3, H-Index: 245, **Q1.**

24. Nagesh, H.R. ; Poojari, Asmita ; Kumar, V. G. Kiran Design, Implementation and Analysis of HIBRI Cipher on IoT Platforms (2024) Journal of The Institution of Engineers (India): Series B, 105 (6), pp. 1 - 13, DOI: 10.1007/s40031-024-01067-2 , December, 2024,Indexed in: Web of Science, Scopus Indexed,ISSN Number: 22502106, , SCI/SCIE, H-Index: 24, **Q2.**

Conference Papers (International Conference)

January to June

1. S. Prabakar, D. Sathish Kumar.R, A. Sasi, S. P, V. Jawale and P. Dharamvir, "Blockchain at the Edge: Harnessing Distributed Ledger Technology in Edge and Cloud Computing Environments," 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies, Pune, India, 2024, pp. 1-6, doi: 10.1109/TQCEBT59414.2024.10545175. keywords: {Cloud computing;Privacy;Quantum computing;Navigation;Scalability;Supply chains;Smart contracts;Blockchain Integration;Edge Computing;Cloud Technologies;Decentralization;Distributed Ledger Technology}, , March, 2024,Conference type: International, Indexed in Scopus,Publishing type: **IEEE Xplore** Published by: 2024 International Conference on Trends in Quantum Computing and Emerging Business Technologies CHRIST (Deemed to be University), Pune Lavasa Campus, India. **Mar** 22-23, 2024 DOI: 10.1109/TQCEBT59414.2024.10545175.

2. Ghate, D. D., Pallavi, K. N., & Poojari, A. (2024, January). Enhancing Arecanut Farming Profits through Technological Advancements: A CNN-based Approach for Efficient Grading and Sorting. In 2024 5th International Conference on Mobile Computing and Sustainable Informatics (ICMCSI) (pp. 441-445). IEEE., **January,** 2024,Conference type: International,Indexed in Scopus,Publishing type: **Journal** Published by: IEEE DOI: 10.1109/ICMCSI61536.2024.00069,With: PG.

3. **S. Karegoudra** and V. R. K, "Hand Gestures and Machine Learning: A Novel Path to Number Prediction," 2023 International Conference on Recent Advances in Science and Engineering Technology (ICRASET), B G NAGARA, India, 2023, pp. 1-6, doi: 10.1109/ICRASET59632.2023.10419929., November, 2023,Conference type: International, Indexed in Scopus,Publishing type: **Journal** Published by: IEEE Xplore pp 1-6,Published in Journal on:08 **February** 2024,DOI: 10.1109/ICRASET59632.2023.10419929.

4. P. Kumar, A. Pathani, Z. Alsalami, K. K. Dixit, S. Venkatesh and **K. R. Raghunandan**, "Quantum Based Macorpgraphy System Implementations for Attacks in Data Maintenance," 2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), Greater Noida, India, 2024, pp. 1311-1315, doi: 10.1109/ICACITE60783.2024.10617069., **May,** 2024,Conference type: International, Indexed in Scopus,Published by: IEEE pp 1311-1315,DOI: 10.1109/ICACITE60783.2024.10617069.

<u>July to December</u>

1. Hemashree H C; Santhosh T; Anusha Anchan; Manasa G R.Design and Implementation of Autonomous Fire Fighting Robot.2024 Second International Conference on Advances in Information Technology (ICAIT) 2024.10.1109/ICAIT61638.2024.106903726, July, 2024,Conference type: International, Indexed in Scopus,Publishing type: **IEEE xplorer** Published by: IEEE Published in Journal on:-,DOI: 10.1109/ICAIT61638.2024.10690372.

2. Gadagkar, A.V., Santhosh, S., Begum, S. and Shenoy, A., 2024, July. Emotion Recognition and Music Recommendation System based on Facial Expression. In 2024 Second International Conference on Advances in Information Technology (ICAIT) (Vol. 1, pp. 1-6). IEEE., July, 2024,Conference type: International, Indexed in Scopus,Publishing type: **IEEE Xplore** Published by: IEEE Xplore DOI: 10.1109/ICAIT61638.2024.10690441.

3. S. K. A. S, K. C. Nackathaya, D. Poojary, G. Bhandary and A. Acharya, "Automated Vehicle Damage Detection and Repair Cost Estimation Using Deep Learning," 2024 2nd International Conference on Sustainable Computing and Smart Systems (ICSCSS), Coimbatore, India, 2024, pp. 1480-1484, doi: 10.1109/ICSCSS60660.2024.10625107., August, 2024 Conference type: International, Indexed in Scopus Publishing type: **IEEE Xplore** DOI: 10.1109/ICSCSS60660.2024.10625107 With: UG

4. Bhagavatham, N.K., Al-Farouni, M., Kumar, K.S., Sundaram, S.M. and Puneeth, R.P., 2024, May. Intrusion Detection System Using Improved Gloden Jackal optimization for Security and Privacy in Internet of Things. In 2024 Second International Conference on Data Science and Information System (ICDSIS) (pp. 1-5). IEEE., May, 2024,Conference type: International,

Indexed in Scopus, Publishing type: **IEEE Xplore** Published by: IEEE Published in Journal on:**Aug**-2024, DOI: 10.1109/ICDSIS61070.2024.10594615.

5. Gadagkar, A.V. and Begum, S., 2024, August. PropeTrust: Enhancing Land Registration with Ethereum Blockchain and Smart Contracts. In 2024 International Conference on Intelligent Algorithms for Computational Intelligence Systems (IACIS) (pp. 1-6). IEEE., August, 2024,Conference type: International, Indexed in Scopus,Publishing type: **IEEE Xplore** Published by: IEEE Xplore DOI: 10.1109/IACIS61494.2024.10721690.

6. A. C. V., M. S. Sannidhan, A. Soumya, S. Jyothi, and B. C. Arjun, "Enhancing automotive safety through advanced human action recognition techniques," in CEUR Workshop Proceedings, vol. 3748, pp. 13–24, 2024. [Online]. Available: http://ceur-ws.org/Vol-3748, August, 2024,Conference type: International, Indexed in Scopus,Publishing type: **Journal** Published by: CEUR-WS Vol - 3748 Issue - 3748 pp 13-24,Published in Journal on:Proceedings of the 6th International Symposium on Advanced Technologies and Applications in the Internet of Things Kusatsu, Shiga, Japan, August 19-22, 2024.,DOI: Vol-3748 urn:nbn:de:0074-3748-1.
7. Prithviraj, Prasad, M., Choudhury, T., Kotecha, K., Jain, D., Davanageri, A.M. (2024). A Novel Framework of Smart Security System Based on Machine Learning Techniques. In: Kahraman, C., Cevik Onar, S., Cebi, S., Oztaysi, B., Tolga, A.C., Ucal Sari, I. (eds) Intelligent and Fuzzy Systems. INFUS 2024. Lecture Notes in Networks and Systems, vol 1090. Springer, Cham. , August, 2024,Conference type: International, Indexed in Scopus,Publishing type: **Book Series** Published by: Springer Book Series,Lecture Notes in Networks and Systems ((LNNS,volume 1090)) Vol - vol 1090 Issue - INFUS 2024 pp 133–144,Published in Journal on:28 AUG 2024,DOI: https://doi.org/10.1007/978-3-031-67192-0_18.

8. Prasad, M.S.G., Prithviraj, Choudhury, T., Kotecha, K., Jain, D., Yeole, A.N. (2024). Automatic Facial Expression Recognition Using Deep Learning. In: Kahraman, C., Cevik Onar, S., Cebi, S., Oztaysi, B., Tolga, A.C., Ucal Sari, I. (eds) Intelligent and Fuzzy Systems. INFUS 2024. Lecture Notes in Networks and Systems, vol 1088., August, 2024,Conference type: International, Indexed in Scopus,Publishing type: **Book Series** Published by: Springer Book Series, Lecture Notes in Networks and Systems ((LNNS,volume 1088)) Vol - vol 1088 Issue - INFUS 2024 pp 414–426,Published in Journal on:01 September 2024,DOI: https://doi.org/10.1007/978-3-031-70018-7_47.

9. H. Kumar, H. M. Al-Jawahry, M. Manohar, K. Karthika, M. Victor and A. D. Shetty, "Real-time Traffic Prediction in 5G Networks Using LSTM Networks," 2024 IEEE International Conference on Communication, Computing and Signal Processing (IICCCS), ASANSOL, India, 2024, pp. 1-5, doi: 10.1109/IICCCS61609.2024.10763791. , September, 2024,Conference type: International, Indexed in Scopus,DOI: 10.1109/IICCCS61609.2024.10763791.

10. H. Kumar, H. M. Al-Jawahry, M. Manohar, K. Karthika, M. Victor and A. D. Shetty, "Real-time Traffic Prediction in 5G Networks Using LSTM Networks," 2024 IEEE International Conference on Communication, Computing and Signal Processing (IICCCS), ASANSOL, India, 2024, pp. 1-5, doi: 10.1109/IICCCS61609.2024.10763791. , September, 2024 Conference type: International, Indexed in Scopus DOI: 10.1109/IICCCS61609.2024.10763791

11. S. Sunil Kumar Aithal and Rajashree, "Multi-Privacy Level Encryption Technique For Secure Cloud-Based Data Repositories," 2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS), Chikkaballapur, India, **june 2024,** pp. 1-6, doi: 10.1109/ICKECS61492.2024.Conference type: International, Indexed in Scopus Publishing type: IEEE Xplore Published by: IEEE Xplore DOI: 10.1109/ICKECS61492.2024.

12. Shashank Shetty, Dhanyashree, D. Dharmendra, Sanjay Bankapur and Prabhu Prasad. B. M, "HydroStack: A Hybrid Meta-Ensemble Machine Learning Framework for Accurate Annual Rainfall Prediction", 2024 8th IEEE International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC), Kirtipur, Nepal, 2024, pp. 1926-1934, doi: 10.1109/I-SMAC61858.2024.10714739., October, 2024,Conference type: International, Indexed in Scopus,Publishing type: **Conference proceedings published in IEEE Xplore** Published by: IEEE pp 1926-1934,Published in Journal on:October 2024,DOI: 10.1109/I-SMAC61858.2024.10714739,Received Rs. 10500 from Institute,External collaborating/funding organization: NAWith: UG.

13. Hegde Sandeep Kumar, Rajalaxmi Hegde, "Early Prediction of Thyroid Cancer using Hybrid Combination of Swarm Optimization and Meta Classifier based Machine Learning Algorithm." 2024 Second International Conference on Intelligent Cyber Physical Systems and Internet of Things (ICoICI). IEEE, 2024., October 2024 Conference type: International, Indexed in Scopus. Doi: 10.1109/ICoICI62503.2024.10696686.Received Rs. 9300 from Institute

14. Manasa G R; Anusha Anchan; Santhosh T; Hemashree H C; Surekha Pinnapati; Suvith Suresh Shetty.Diabe.tic Retinopathy Detection from Retina Image Using Machine Learning. 2024 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER)., October, 2024,Conference type: International, Indexed in Scopus,Publishing type: **IEEE xplorer** Published by: IEEE pp 7,DOI: 10.1109/DISCOVER62353.2024.10750625.

15. .A. A. Nayak, V. P S, A. B and P. G, "A Study on AI Applications for Orthodontics and Malocclusion Detection Approaches," 2024 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER), Mangalore, India, 2024, pp. 273-278, doi: 10.1109/DISCOVER62353.2024.10750579. , October, 2024 Conference type: International, Indexed in ScopusDOI:10.1109/DISCOVER62353.2024.10750579Received Rs. 8000 from Institute

16. .M. P. Abraham, K. R. Udaya Kumar Reddy, V. J. Dsouza, U. N. Kundar, V. J. Poojary and V. K. Jat, "Plant Health App: A Tool for Plant Enthusiasts," 2024 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER), Mangalore, India, 2024, pp. 359-364,October, 2024 Conference type: International, Indexed in Scopus Published by: IEEE Explore Vol - pp. 359-364, DOI:10.1109/DISCOVER62353.2024.10750554.Received Rs. 8000 from Institute.

17. V. R K, C. S. Shastry, M. Shodhan S, S. Karegoudra and N. Kumar, "Design and Development of a Device to Measure Tissue Strength in Experimental Animals," 2024 IEEE International Conference on Distributed Computing, VLSI, Electrical Circuits and Robotics (DISCOVER), Mangalore, India, 2024, pp. 328-332, doi: 10.1109/DISCOVER62353.2024.10750604., October, 2024,Conference type: International, Indexed in Scopus,Publishing type: **Journal** Published by: IEEE Explore pp 328 - 332,Published in Journal on:19 November 2024,DOI: 10.1109/DISCOVER62353.2024.10750604,With: UG.

18. Kanchan, J., Ananya, H. N., Anoksha, N. A., & Hegde, S. (2024, November). Deep Learning Model for Detecting the Presence of Neurological Conditions in MRI and CT Scans. In 2024 2nd International Conference on Recent Advances in Information Technology for Sustainable Development (ICRAIS) (pp. 148-153). IEEE., November, 2024,Conference type: International, Indexed in Scopus,Publishing type: **IEEE** pp 148-163,DOI: 10.1109/ICRAIS62903.2024.10811695,Received Rs. 8850 from Institute,External collaborating/funding organization: nilWith: UG.

19. V. Veeraiah, A. D. Shetty, T. K. O, S. P, S. Tripathi and F. Mohammad, "Remote Patient Monitoring Innovations Using IoT for Improved Healthcare Outcomes," 2024 4th International Conference on Technological Advancements in Computational Sciences (ICTACS), Tashkent, Uzbekistan, 2024, pp. 1849-1855, doi: 10.1109/ICTACS62700.2024.10841021. , November, 2024 Conference type: International, Indexed in Scopus DOI: 10.1109/ICTACS62700.2024.10841021.

20. G. K. Shwetha, P. S. Shetty, S. N. Baliga, J. K. A. Rathod and C. Divya, "Transforming Education with Innovative Virtual Learning Environments," 2024 International Conference on Recent Advances in Science and Engineering Technology (ICRASET), B G Nagara,Mandya, India, 2024, pp. 1-6, doi: 10.1109/ICRASET63057.2024.10894905., November, 2024,Conference type: International, Indexed in Scopus,Publishing type: **Journal** Published by: IEEE DOI: https://doi.org/10.1109/ICRASET63057.2024.10894905.

21. V. Veeraiah, A. D. Shetty, T. K. O, S. P, S. Tripathi and F. Mohammad, "Remote Patient Monitoring Innovations Using IoT for Improved Healthcare Outcomes," 2024 4th International Conference on Technological Advancements in Computational Sciences (ICTACS), Tashkent, Uzbekistan, 2024, pp. 1849-1855, doi: 10.1109/ICTACS62700.2024.10841021. , November, 2024,Conference type: International, Indexed in Scopus,DOI: 10.1109/ICTACS62700.2024.10841021.

22. Poojari A., Kiran Kumar V.G. Design and Implementation of Light Weight Cryptography Using Spartan-6 FPGA (2024) 2nd IEEE International Conference on Recent Advances in Information Technology for Sustainable Development, ICRAIS 2024 - Proceedings, pp. 36 - 41, DOI: 10.1109/ICRAIS62903.2024.10811729 , December, 2024,Conference type: International, Indexed in Scopus,Publishing type: **Book Series** Received Rs. 8500 from Institute.

23. Manjunatha A S , Dr. Venkatramana Bhat P , Dr.Ramakrishna M, Matti Nidhi Prabhu " Robust Sensor Networks: Applying AI for Fault Identification in Challenging Operational Contexts " Proceedings of the International Conference on IoT Based Control Networks and Intelligent

Systems (ICICNIS-2024) IEEE Xplore Part Number: CFP242B2-ART: ISB979-8-3315-1809-7, December, 2024,Conference type: International, Indexed in Scopus, pp 1026-1032,DOI: DOI: 10.1109/ICICNIS64247.2024.10823256,

Book/Book Chapter Publication

January to June (3)

1. **Shedthi, Shabar**i, and Vidyasagar Shetty. "Role of machine learning in sentiment analysis: trends, challenges, and future directions." In Computational Intelligence Methods for Sentiment Analysis in Natural Language Processing Applications, pp. 1-21. Morgan Kaufmann, 2024., February, 2024.

2. Hegde, SandeepKumar and Rajalaxmi Hegde. "Cloud Robotics and Automation: A Comprehensive Study on Techniques, Taxonomy, Applications, and Research Issues."Shaping the Future of Automation With Cloud-Enhanced Robotics (2024): 65-77., April, 2024, 10.4018/979-8-3693-1914-7.,ch004,Scopus Indexed.

3. **Pai, G.**, Sharmila Kumari, M. (**Mar** 2024). Deriving Rectangular Regions Bounding Box from Overlapped Image Segments Using Labeled Intersecting Points. In: Kumar, S., K., B., Kim, J.H., Bansal, J.C. (eds) Fourth Congress on Intelligent Systems. CIS 2023. Lecture Notes in Networks and Systems, vol 868. Springer, Singapore. https://doi.org/10.1007/978-981-99-9037-5_27

July to December

1. Hegde, Sandeep Kumar, and Rajalaxmi Hegde. "Smart Traffic Monitoring and Control Using Drone Swarms Technology in Urban Areas." Drone Applications for Industry 5.0. IGI Global, 2024. 204-217., July, 2024, 10.4018/979-8-3693-2093-8.

2. Raghunandan, K. R., et al. "Design and Modelling of an Automated Driving Inspector Powered by Arduino and Raspberry Pi." Modeling and Optimization of Signals Using Machine Learning Techniques (2024): 295-311., August, 2024,

3. Empowering Small and Medium Enterprises Through Smart Technology and Talent Management Richa Bhalla, Shwetha G. K., Sherif Mohamed Abdelaal Ismail ,Padmavathy , Nageswara Rao Gudipudi ,Sampath Boopathi , September, 2024, 10.4018/979-8-3693-5498-8.ch013

4. Hegde Sandeep Kumar, Rajalaxmi Hegde, and Monica R. Mundada. "A Novel Ensembled Deep Machine Learning Framework for the Prediction of Chronic Disease." Artificial Intelligence Transformations for Healthcare Applications: Medical Diagnosis, Treatment, and Patient Care. IGI Global, 2024. 258-273., October, 2024, DOI:10.4018/979-8-3693-7462-7.ch012.ScopusIndexed.

5. Kanchan, P., Pushparaj Shetty, D., Attea, B.A. (2024). Quantum Optimizer Using MOEAD for WSN's. In: Thirunavukkarasu, I., Kumar, R. (eds) Control and Information Sciences. CISCON 2023. Lecture Notes in Electrical Engineering, vol 1236. Springer, Singapore. https://doi.org/10.1007/978-, October, 2024.Scopus Indexed.

6. Ankitha, K., Kanchan, J., Kunder, H., Shetty, S. S., Ganaraj, K., & Hegde, M. (2025). Fusing New Age Technologies with Marketing Management: Navigating the Digital Frontier. Artificial Intelligence-Enabled Businesses: How to Develop Strategies for Innovation, 95-103., December, 2024, 10.1002/9781394234028.ch6

Department of Computer Science & Engineering
Department R & D Work
2024

Patent Applied/Received

January to June

1. **Patent Owners Name:** Nitte(Deemed to Be University) & Dr. Raghunandan K R
   Inventors Names: Dr. Raghunandan K R, Suvith Kumar, Prathik K Acharya, Adarsh JJ shetty, Amith J Soorenji (With UG Students)
   Title: A System and Method For Kannada-Tulu Translation
   Collaborator: Research
   Institute/Organization Name: NMAM Institute Of Technology(Nitte DU)
   Status: Published
   Application Date: Mon Jan 29 2024 00:00:00 GMT+0530 (India Standard Time)
   Patent Application Number: 202441005619
   Type: National
   Commercialized, Received financial support from institute
   February, 2024

2. Shashank Shetty
   Inventors Names: Shashank Shetty, Sowmya Shree H S, Shwetha, G. Bavani, , J.Biju H N, P.Deivendran
   Title: SEMANTIC MULTILINEAR COMPONENT ANALYSIS FEATURE EXTRACTION BASED DISTRIBUTED DENIAL-OF-SERVICE (DDOS) ATTACTS DETECTION IN SOFTWARE DEFINED NETWORKS
   Collaborator: Research
   Institute/Organization Name: NMAM Institute of Technology, Nitte
   Status: Filed
   Application Date: Fri Mar 22 2024 00:00:00 GMT+0530 (India Standard Time)
   Patent Application Number: 202441022602 A
   Type: National
   March, 2024

3. Ms. Ankitha A Nayak
   Patent Owners Name: Ankitha A Nayak
   Inventors Names: Ankitha A Nayak, Dr. Venugopala P S
   Title: A MULTIMODAL WATERMARKED DATASET GENERATION SYSTEM
   Collaborator: Research

Institute/Organization Name: NITTE (Deemed to be University) NMAM Institute of Technology
Status: Published
Application Date: Tue Apr 02 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441027320 A
Type: International
April, 2024

4. Ms. Ankitha A Nayak
Patent Owners Name: Dr. M S Ravi
Inventors Names: Ankitha A Nayak, Dr. Venugopala P S, Dr. Ashwini B, Dr. Nicy Thomas
Title: AUTOMATED DIGITAL METHOD FOR MEASURING THE AXIAL INCLINATION OF TEETH USING ORTHOPANTOMOGRAM
Collaborator: Research
Institute/Organization Name: NITTE (DEEMED TO BE UNIVERSITY), NMAM Institute of Technology
Status: Published
Application Date: Wed May 29 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441041665 A
Type: International
June, 2024

5. **Faculty Name:** Dr. Aravinda C V
Patent Owners Name: Dr.Aravinda C V
Inventors Names: Dr.Aravinda C V,AISHWARYA SHETTY,SOUMYA ASWATH,DR SHASHANK SHETTY,DR SANNIDHAN M.S
Title: COMPREHENSIVE SMART CANE WITH ADVANCED NAVIGATIONAL AID SYSTEM AND METHOD THEREOF
Collaborator: Research
Institute/Organization Name: N.M.A.M.I.T NITTE
Status: Published
Application Date: Fri Jul 19 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: NU_90
Date of Patent Adoption: Fri Jul 26 2024 00:00:00 GMT+0530 (India Standard Time)
Type: National
Received financial support from institute
July, 2024

6. **Faculty Name:** Mrs. Savitha Shetty
Patent Owners Name: SAVITHA SHETTY
Inventors Names: SAVITHA SHETTY ,DR. SARIKA HEGDE,SARITHA SHETTY
Title: A METHOD FOR THE ENTITY EXTRACTION FROM THE CLINICAL DOCUMENTS
Collaborator: None
Institute/Organization Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Status: Published

Application Date: Mon Jul 29 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441057377 A
Type: National
Received financial support from institute
August, 2024

7. **Faculty Name:** Mrs. Savitha Shetty
Patent Owners Name: SAVITHA SHETTY
Inventors Names: SAVITHA SHETTY,DR. SARIKA HEGDE ,SARITHA SHETTY
Title: A METHOD FOR ATTAINING STRUCTURED DATA FROM UNSTRUCTURED HOMEOPATHIC CASE SHEET DOCUMENTS
Collaborator: None
Institute/Organization Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Status: Published
Application Date: Fri Aug 16 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441062054 A
Type: National
Received financial support from institute
August, 2024

8. **Faculty Name:** Mrs. Savitha Shetty
Patent Owners Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Inventors Names: SARITHA SHETTY ,DR. SARIKA HEGDE ,SAVITHA SHETTY
Title: A HEALTHCARE DIALOGUE SYSTEM FOR KANNADA LANGUAGE
Collaborator: None
Institute/Organization Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Status: Published
Application Date: Fri Aug 16 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441062065 A
Type: National
Received financial support from institute
August, 2024

9. **Faculty Name:** Mrs. Savitha Shetty
Patent Owners Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Inventors Names: SAVITHA SHETTY ,SARITHA SHETTY ,JOSHVA RODGRIGUES ,GURURAJ ,JITESH D SANIL ,HRITHIKA ,JOYSON AUSTIN DMELLO (With UG Students)
Title: SOLAR-POWERED HYDROPONIC SYSTEM USING DUAL-AXIS SOLAR TRACKER
Collaborator: None
Institute/Organization Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE

Status: Published
Application Date: Thu Aug 08 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441059835 A
Type: National
Received financial support from institute
August, 2024

10. **Faculty Name:** Mrs. Savitha Shetty
Patent Owners Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY)
Inventors Names: SAVITHA SHETTY ,SARITHA SHETTY ,DR. SAVITHA G. ,SAMIPTHI DINESH NAYAK ,SHARANYA SHETTY (With UG Students)
Title: DEEP LEARNING - BASED SIGN LANGUAGE RECOGNITION AND TRANSLATION SYSTEM
Collaborator: None
Institute/Organization Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY)
Status: Published
Application Date: Mon Jul 29 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441057277 A
Type: National
Received financial support from institute
August, 2024

11. **Faculty Name:** Mrs. Savitha Shetty
Patent Owners Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Inventors Names: SARITHA SHETTY ,SAVITHA SHETTY ,SEEJAN PADMANABHA POOJARI ,SHAILESH U ACHARYA ,GURU PRASAD M S ,DR. RANJAN KUMAR H S ,DR. SAROJADEVI H ,DR. GOVINDARAJ P JOYSTON MENEZES ,DEEPTHI SHETTY (With UG Students)
Title: METHOD FOR ANALYSING PUBLIC SENTIMENT ON YOUTUBE COMMENTS
Collaborator: None
Institute/Organization Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Status: Published
Application Date: Thu Aug 29 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441065225 A
Type: National
Received financial support from institute
August, 2024

12. **Faculty Name:** Mrs. Joylin Priya Pinto
Patent Owners Name: Joylin Priya Pinto
Inventors Names: Joylin Priya Pinto
Title: METHOD FOR AUTOMATED FEATURE ENGINEERING IN MACHINE LEARNING PIPELINES

Collaborator: Research
Institute/Organization Name: NMAM Institute of Technology (NITTE Deemed to be University)
Status: Published
Application Date: Fri Aug 16 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441062119 A
Type: National
August, 2024

13. **Faculty Name:** Mrs. Joylin Priya Pinto
Patent Owners Name: Joylin Priya Pinto
Inventors Names: Joylin Priya Pinto
Title: METHOD FOR AUTOMATED FEATURE ENGINEERING IN MACHINE LEARNING PIPELINES
Collaborator: Research
Institute/Organization Name: NMAM Institute of Technology (NITTE Deemed to be University)
Status: Published
Application Date: Fri Aug 16 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441062119 A
Type: National
August, 2024

14. **Faculty Name:** Mrs. Savitha Shetty
Patent Owners Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Inventors Names: SAVITHA SHETTY ,SARITHA SHETTY ,SHRISKANDA P BHAT ,SHISHIR SHETTY ,DR. RANJAN KUMAR H S ,DR. GANESH PAI ,JOYSTON MENEZES ,GURU PRASAD M S,DR. SAROJADEVI H ,DEEPTHI SHETTY (With UG Students)
Title: AN AUTOMATED EXTRACTION AND SUMMARIZATION SYSTEM
Collaborator: None
Institute/Organization Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Status: Published
Application Date: Thu Aug 29 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441065150 A
Type: National
Received financial support from institute
September, 2024

15. **Faculty Name:** Mrs. Savitha Shetty
Patent Owners Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Inventors Names: SARITHA SHETTY ,SAVITHA SHETTY ,SHARWIN LESTON MENDONCA ,SHUBHANG RAO ,DR. RANJAN KUMAR H S,DR. GANESH PAI

,OYSTON MENEZES ,DR. GOVINDARAJ P,GURU PRASAD M S ,DR. SAROJADEVI H (With UG Students)
Title: AN E-COMMERCE PRODUCT COMPARISON SYSTEM
Collaborator: VIVEKANANDA COLLEGE OF ENGINEERING AND TECHNOLOGY, PUTTUR, NMIT, BANGALORE,
Institute/Organization Name: NMAM INSTITUTE OF TECHNOLOGY, NITTE (DEEMED TO BE UNIVERSITY), NITTE
Status: Published
Application Date: Thu Aug 29 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441065313 A
Type: National
Received financial support from institute
September, 2024

16. Ms. Ankitha A Nayak
Patent Owners Name: Ankitha A Nayak
Inventors Names: Ankitha A Nayak, Dr Ashwini B
Title: A METHOD FOR AUTOMATED ANNOTATION FOR ORTHOPANTOMOGRAM (OPG) RADIOGRAPHS
Collaborator: Research
Institute/Organization Name: NITTE(Deemed to be University) NMAM Institute of Technology
Status: Published
Application Date: Tue Aug 06 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441059301 A
Type: International
August, 2024

17. **Faculty Name:** Dr. Aravinda C V
Patent Owners Name: NITTE
Inventors Names: ARAVINDA C.V,MENG LIN,SUDEEPA K B,MINU P ABRAHAM,,GURU PRASAD
Title: PREDICTIVE ANALYSIS SYSTEM FOR IOT-DRIVEN PRECISION RAINFALL ESTIMATION AND IRRIGATION CONTROL
Collaborator: Research
Institute/Organization Name: NMAMIT,NITTE
Status: Published
Application Date: Tue Jul 23 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: NU_92
Date of Patent Adoption: Fri Aug 02 2024 00:00:00 GMT+0530 (India Standard Time)
Type: National
Received financial support from institute
August, 2024

18. Ms. Ankitha A Nayak
Patent Owners Name: Ankitha A Nayak
Inventors Names: Ankitha A Nayak, Shashank Shetty

Title: MULTIMODAL SELF-LEARNING TEXT PROMPT GENERATOR FRAMEWORK
Collaborator: Research
Institute/Organization Name: NITTE(Deemed to be University), NMAM Institute of Technology
Status: Published
Application Date: Mon Sep 09 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441067946 A
Type: International
September, 2024

19. **Faculty Name:** Dr. Pradeep Kanchan
Patent Owners Name: Dr Pradeep Kanchan
Inventors Names: Dr. Tarkeshwari Verma, Dr Basanta Kumar Bhuyan, Dr. Bhavanishankar Ravindra,Sharma Surbhi Sunilbhai
Title: GRAVITATIONAL WAVE SENSOR NETWORKING DEVICE
Collaborator: Research
Institute/Organization Name: NMAM Institute of Technology, Nitte (Deemed to be University)
Status: Published
Application Date: Fri Aug 23 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 428040-001
Type: National
October, 2024

20. **Faculty Name:** Ms. Jayapadmini Kanchan
Patent Owners Name: Avisha V Shetty
Inventors Names: Dhanya, Dr.Sarika Hegde, Jayapadmini Kanchan (With UG Students)
Title: EDUCATIONAL GAMING SYSTEM AND A METHOD THEREOF
Collaborator: None
Institute/Organization Name: NMAMIT, Nitte(Deemed to be University)
Status: Published
Application Date: Fri Oct 25 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441081504 A
Type: National
November, 2024

21. **Faculty Name:** Dr. Aravinda C V
Patent Owners Name: NITTE
Inventors Names: ARAVINDA C V,MENG LIN,SHASHANK SHETTY,ASHWIN SHENOY,PAWAN HEGDE,AKHILRAJ V GADGKAR
Title: MEDICINE RECOGNITION AND DISPENSING SUPPORT SYSTEM
Collaborator: Research
Institute/Organization Name: NITTE
Status: Published
Application Date: Fri Nov 29 2024 00:00:00 GMT+0530 (India Standard Time)

Patent Application Number: NU_277
Type: National
Received financial support from institute
November, 2024

22. **Faculty Name:** Dr. Shashank Shetty
Patent Owners Name: NITTE (DEEMED TO BE UNIVERSITY)
Inventors Names: ARAVINDA C V, MENG LIN, SHASHANK SHETTY, ASHWIN SHENOY, PAWAN HEGDE, AKHILRAJ V GADGKAR
Title: MEDICINE RECOGNITION AND DISPENSING SUPPORT SYSTEM
Collaborator: Research
Institute/Organization Name: NITTE (DEEMED TO BE UNIVERSITY)
Status: Filed
Application Date: Fri Nov 29 2024 00:00:00 GMT+0530 (India Standard Time)
Patent Application Number: 202441093424 A
Type: National
December, 2024