



**Gokaraju Rangaraju Institute of Engineering and Technology**

**(Autonomous)**

**Department of Data Science**

**Publication Details of Faculty Members (Data Science)**

**Academic Year: 2024-25**

**1. Journal Publications (SCI / SCIE / ESCI Indexed)**

- [1] Prakasini Satapathy, Abhay M. Gaidhane, Nasir Vadia, Soumya V. Menon, Kattela Chennakesavulu, Rajashree Panigrahi, Sanjit Sah, Ambana Yappalparvi, **S. Govinda Rao**, Khang Wen Goh, Rachana Mehta, Muhammed Shabil, Mahendra Singh, Edward Mawejje, Ganesh Bushi, “Association of estimated glomerular filtration rate with proliferative diabetic retinopathy: a systematic review and meta-analysis”, International Urology and Nephrology, Springer, pp. 1-13, 2025, DOI: <https://doi.org/10.1007/s11255-025-04547-6>.
- [2] P.U. Poornima, K. Dhineshkumar, Chunduri Kiran Kumar, S. Sumana, **M.V. Rama Sundari**, P. Sivaraman, Mohammed Shuaib, A. Rajaram, “Optimising rooftop photovoltaic adoption in urban landscapes: A system dynamics approach for sustainable energy transitions”, Biomedical Signal Processing and Control, Elsevier, vol. 100, articleId:107071, pp. 1-11, 2024, DOI :<https://doi.org/10.1016/j.bspc.2024.107071>
- [3] A. Karthik, S. Shiek Aalam, M. Sivakumar, **M.V. Rama Sundari**, J. Dafni Rose, Muniyandy Elangovan, A. Rajaram, “Improving brain tumor treatment with better imaging and real-time therapy using quantum dots,” Biomedical Signal Processing and Control, Elsevier, vol. 95, article Id: 106286, pp. 1-13, 2024, DOI: <https://doi.org/10.1016/j.bspc.2024.106286>
- [4] Sanjeeva Polepaka, **R. P. Ram Kumar**, Deepthi Palakurthy, Vanam Manasa, Akuthota Saritha, Saurav Dixit, Abhishek Chhetri & Myasar Mundher Adnan, “Optimized convolutional neural network using grasshopper optimization technique for enhanced heart

disease prediction”, Cogent Engineering, vol. 11, no. 1, article Id: 2423847, pp. 1-13, 2024, DOI: <https://doi.org/10.1080/23311916.2024.2423847>

- [5] **R. P. Ram Kumar** , Sanjeeva Polepaka, Vanam Manasa, Deepthi Palakurthy, Errabelli Annapoorna, Navdeep Dhaliwal, Himanshu Dhall and Laith H. Alzubaidi, “Investigations on cardiovascular diseases and predicting using machine learning algorithms”, Cogent Engineering, Vol. 11, No. 1, Article id: 2386381, pp. 1-13, 2024, <https://doi.org/10.1080/23311916.2024.2386381>
- [6] **R. P. Ram Kumar**, S. Raju, Errabelli Annapoorna, Manu Hajari, Kadali, Hareesa, Nikolai Ivanovich Vatin, Abhishek Joshi & Kassem AL-Attabi, Enhanced heart disease prediction through hybrid CNN-TLBO-GA optimization: a comparative study with conventional CNN and optimized CNN using FPO algorithm, Cogent Engineering, Vol. 11, No. 1, Article Id: 2384657, 2024, <https://doi.org/10.1080/23311916.2024.2384657>.

## 2. Journal Publications (Scopus Indexed)

- [1] Kumar Puttaswamy Gowda, Dr. Rabins Porwal, Cindhe Ramesh, Shashank Shekhar Tiwari, Dr. Kriti Srivastava, Dr. R. Rambabu, **Dr S Govinda Rao**, “Transformers in Sentiment Analysis: A Paradigm Shift in Deep Learning Research”, Journal of Information Systems Engineering and Management, vol. 10, no. 5, ISSN: 2468-4376, pp. 262-280, 2025, DOI: <https://doi.org/10.52783/jisem.v10i5s.612>
- [2] Vijay Kumar Tiwari, Dr.Gaganjot Kaur, Dr.B.Naveen kumar, Priyanka Srivastava, Indrajeet kumar, **Dr S Govinda Rao**, Nargis Parveen, Dr. Raghav Mehra, “Enhancing Cloud and IoT Security Using Deep Learning-Based Intrusion Detection Systems with Blockchain and Federated Learning”, Journal of Information Systems Engineering and Management, vol. 10, no. 25, ISSN: 2468-4376, pp. 324-340, 2025, DOI: <https://doi.org/10.52783/jisem.v10i25s.4019>.
- [3] Katta Trinadha Ravi Kumar, P Suresh Varma, **M V Rama Sundari**, “Novel Technique for Prediction of Weather Forecasting Using Machine Learning,” Journal of Theoretical and Applied Information Technology, vol. 102, no. 8, pp. 3657-3663, 2024, <https://jatit.org/volumes/Vol102No8/36Vol102No8.pdf>
- [4] K. M. Veerabhadraswamy, M. D. Siva Ranjani, Warish Patel, **M. V. Rama Sundari**, Kshitij Naikade, Ruhi Bakhare, L. Anbarasu, R. Premanand, A. Rajaram, “Use of

Blockchain for Iot Applications, Platforms, Systems, And Frameworks”, Journal of Environmental Protection and Ecology, vol. 25, no. 5, pp. 1361-1370, 2024

### 3. Publication in Conference Proceedings (Scopus Indexed)

- [1] Chinnem Rama Mohan, **Rashi Saxena**, K T Thilagham, Phani Kumar Solleti, S. Sivasubramanian, Dharamvir, “Blockchain-Based Solutions for Enhancing Data Integrity and Security”, 2024 7th International Conference on Contemporary Computing and Informatics (IC3I), Greater Noida, India, pp. 1416-1420, 2024, DOI: 10.1109/IC3I61595.2024.10828945
- [2] Priyanka K, Chikka Harshini, Srinivas Aluvala, Haider Mohammed Abbas, and **Ramaswamy Padmanathan Ram Kumar**, “Chaotic Water Wave Optimization and Support Vector Machine of Role-Based Access Control Policies in Enterprise IAM,” in Proceedings of the 2024 International Conference on Distributed Systems, Computer Networks and Cybersecurity (ICDSCNC), Bengaluru, India, 20–21 Sept. 2024, Article No. 10939257, IEEE, pp. 1–6, 2025. DOI: <https://doi.org/10.1109/ICDSCNC62492.2024.10939257>
- [3] E. G. Satish, Komuravelly Sudheer Kumar, Myasar M. Adnan, Krithika M, and **Mandapati Venkata Rama Sundari**, “Cloud-Native Hybrid Deep Learning Pipeline for Network Traffic Classification using Convolutional Recurrent Neural Network,” in Proceedings of the 2024 International Conference on Distributed Systems, Computer Networks and Cybersecurity (ICDSCNC), Bengaluru, India, 20–21 Sept. 2024, IEEE, Article No. 10939140, pp. 1–6, 2025. DOI: <https://doi.org/10.1109/ICDSCNC62492.2024.10939140>
- [4] Hassan Mohamed Ali, P. Niranjana Reddy, **S. Govinda Rao**, Krishna Kant Dixit, G. B. Santhi, and Srinivasa Reddy Kurukuntla, “Developing an Efficient Image Encryption Algorithm for Secure Data Transmission in Healthcare Systems,” in *Proceedings of the 2024 International Conference on IoT, Communication and Automation Technology (ICICAT)*, Gorakhpur, India, 23–24 Nov. 2024, IEEE, Article No. 10923224, pp. 1–6, 2025. DOI: <https://doi.org/10.1109/ICICAT62666.2024.10923224>
- [5] B. Vasantha, Komuravelly Sudheer Kumar, Saif O. Husain, Naveen I. G., and **Kasapogu Kalpana**, “Dynamic Radial Movement Optimization for Throughput Maximization in

- Energy Harvesting Cognitive Radio Network,” in *Proceedings of the 2024 International Conference on Distributed Systems, Computer Networks and Cybersecurity (ICDSCNC)*, Bengaluru, India, 20–21 Sept. 2024, IEEE, Article No. 10939792, pp. 1–6, 2025. DOI: <https://doi.org/10.1109/ICDSCNC62492.2024.10939792>
- [6] Laith H. Alzubaidi, **Lahari Mekala**, S. Senthil Kumar, Rakesh Kumar, C. Gouri Sainath, and S. B. Prakalya, “Multi-Agent Systems for Distributed Control in IoT-Enabled Smart Manufacturing,” in *Proceedings of the 2024 International Conference on IoT, Communication and Automation Technology (ICICAT)*, Gorakhpur, India, 23–24 Nov. 2024, IEEE, Article No. 10923025, pp. 1–6, 2025. DOI: <https://doi.org/10.1109/ICICAT62666.2024.10923025>
- [7] Ammar H. Shnain, **P. Sruthi**, S. Subburam, Rohit Agarwal, M. Naga Kavya Kalyani, and Mohammad Jeelani, “Privacy-Preserving Data Aggregation in IoT Networks Using Homomorphic Encryption,” in *Proceedings of the 2024 International Conference on IoT, Communication and Automation Technology (ICICAT)*, Gorakhpur, India, 23–24 Nov. 2024, IEEE, Article No. 10923462, pp. 1–6, 2025. DOI: <https://doi.org/10.1109/ICICAT62666.2024.10923462>
- [8] **P. Sruthi**, Krishna Kant Dixit, Bantu Mahesh, R. Padmavathy, Muntather Almusawi, and Niranjnamurthy M, “Improving organizational decision-making using random forests and big data analytics,” in *Proc. 2024 Int. Conf. on IoT, Commun. and Autom. Technol. (ICICAT)*, Gorakhpur, India, Nov. 2024, pp. 1–6, DOI: [10.1109/ICICAT62666.2024.10923149](https://doi.org/10.1109/ICICAT62666.2024.10923149).
- [9] A. R. Sivakumaran, Ammar H. Shnain, Jayapal Lande, Anupama Sindgi, and **Patlolla Sruthi**, “Sentiment analysis in social media using bidirectional long short term memory with focus loss function,” in *Proc. 2024 Int. Conf. on Distributed Systems, Computer Networks and Cybersecurity (ICDSCNC)*, Bengaluru, India, Sept. 2024, pp. 1–6, DOI: [10.1109/ICDSCNC62492.2024.10939609](https://doi.org/10.1109/ICDSCNC62492.2024.10939609).
- [10] Gotlur Karuna, **Ram Kumar Ramaswamy Padmanathan**, Sanjeeva Polepaka, Manasa Vanam, Siva Shankar Subramanian, Gaurav Singh Negi, and Lalit Bhalla, “An enhanced framework for detecting the histopathology cancer using machine learning technique,” In the proceeding of *AIP Conference Proceedings*, Article No. 080006, Vol. 3157, pp. 1–6, 2025, DOI: <https://doi.org/10.1063/5.0261563>.

- [11] Gotlur Karuna, Errabelli Annapoorna, Sanjeeva Polepaka, **Ram Kumar Ramaswamy Padmanathan**, Dharani Chandra Prakash, Ashish Pathani, and Gaurav Pushkarna, “Deep learning-based auto generated image captions,” In the proceeding of *AIP Conference Proceedings*, Article No. 030004, Vol. 3157, pp. 1–6, 2025, DOI: <https://doi.org/10.1063/5.0261627>.
- [12] **Ram Kumar Ramaswamy Padmanathan**, Dukkupati Likithasree, Sabbineni Keerthika, Rudra Meghana, Suresh Kumar Badhagouni, Devendra Singh, and Archana Sehgal, “Data harvesting in the digital age: Unraveling the power of web scraping for analysis,” In the proceeding of *AIP Conference Proceedings*, Article No. 070008, Vol. 3157, pp. 1–6, 2025, DOI: <https://doi.org/10.1063/5.0261703>.
- [13] Madugula Anjaneyulu, **Ram Kumar Ramaswamy Padmanathan**, Sanjeeva Polapeka, Arelli Madhavi, Swapna Rani Kura, Yashwant Singh Bisht, and Vishal Sharma, “Voice based email system,” In the proceeding of *AIP Conference Proceedings*, Article No. 070024, Vol. 3157, pp. 1–6, 2025, DOI: <https://doi.org/10.1063/5.0261614>.
- [14] Manasa Manchala, Anusha Thalla, Shirisha Uradi, Saikiran Reddypullamgari, Nookaraju Yella, **Kasapogu Kalpana**, and Vaibhav Mittal, “Swetcha – A women safety application and IoT based device,” In the proceeding of *AIP Conference Proceedings*, Article No. 070023, Vol. 3157, pp. 1–6, 2025, DOI: <https://doi.org/10.1063/5.0261643>.
- [15] **Kasapogu Kalpana**, Ediga Poornima, Patlolla Sruthi, Cheekati Srilatha, Sowjanya Ramisetty, Manish Ghalwan, and Namita Kaur, “A novel approach for detection of diabetes patients using machine learning techniques,” In the proceeding of *AIP Conference Proceedings*, Article No. 080003, Vol. 3157, pp. 1–6, 2025, DOI: <https://doi.org/10.1063/5.0261699>.
- [16] **Patlolla Sruthi**, Ediga Poornima, Cheekati Srilatha, Kasapogu Kalpana, Sowjanya Ramisetty, Manish Ghalwan, and Namita Kaur, “Material design and development for innovative manufacturing techniques,” in *Proceedings of AIP Conference Proceedings*, Article No. 080001, vol. 3157, pp. 1–6, 2025. DOI: <https://doi.org/10.1063/5.0261592>
- [17] Manish Kumar, Vivek John, Shivam Saraswat, Shaik Noormohammad Shareef, and **Patlolla Sruthi**, “Effective operation management: Strategies for efficiency in manufacturing,” in *Proceedings of AIP Conference Proceedings*, Article No. 110014, vol. 3157, pp. 1–6, 2025. DOI: <https://doi.org/10.1063/5.0271513>

#### **4. Book Chapter Publications (Scopus Indexed)**

- [1] **Rashi Saxena**, Simmi Madaan, S. Neelima, Uma Reddy, Navdeep Singh, Vipul Vikas Masal, “Application of Blockchain Technologies for Use of Cryptocurrency in Fees Payment Portal”, Taylor & Francis, pp. 6, 2025, DOI: <https://doi.org/10.1201/9781003596721>
- [2] ChetanThakar, **Rasi Saxena**, Modin Himabindu, C. Rakesh, Amit Dutt, Joshuva Arockia Dhanraj, “Distributed Ledger Technology in 6G Management Strategies for Threat Mitigation”, IGI-Global, pp. 1-17, 2025, DOI: <http://doi.org/10.4018/979-8-3693-2931-3.ch010>

#### **Patent Publications**

- [1] Dr. A. Venu Gopal Reddy, Dr. M. Richard Robert Raa, Dr.S.Sasi Kumar, Ms.S.Archana Devi, Dr.Somali Gupta, Dr.S.Meera, Ms. W. Angel, Gurumeet chandramohan Wadhawa, Dr Deepak Subhash Dixit, Dr Saravanan V, Dhivya A, **R. P. Ram Kumar**, “Improving EFL Students’ Impromptu Speaking Performance and Learning Engagement in Higher Education with Machine Learning”, Application No. 202541034981A, published on 09.05.2025.
- [2] Akanksha Srivastav, Pratheep Kumar, Lakshmi Chandrakanth Kasireddy, **Rashi Saxena**, Abhishek Sharma, “Computer Device for Machine Learning Model Interpretability”, Certificate of Registration for UK design, Design Number: 6420124, 13.06.2025.