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Area of Interest : Machine Learning, Optimization Algorithms, Internet of Things, Computer Vision, Blockchain

List of Journals Publication:

1. Sweta Bhattacharya, Praveen Kumar Reddy Maddikunta, Quoc-Viet Pham, **Thippa Reddy Gadekallu**, Siva Rama Krishnan S, Chiranjil Lal Chowdhary, Mamoun Alazab, Md. Jalil Piran, "Deep Learning and Medical Image Processing for Coronavirus (COVID-19) Pandemic: A Survey, ", Sustainable Cities and Society, 2020, 102589, ISSN 2210-6707, <https://doi.org/10.1016/j.scs.2020.102589>.
2. Ch, R., Srivastava, G., **Gadekallu, T. R.**, Maddikunta, P. K. R., & Bhattacharya, S. (2020). Security and privacy of UAV data using blockchain technology. Journal of Information Security and Applications, 55, 102670.
3. **Reddy, T.**, Bhattacharya, S., Maddikunta, P. K. R., Hakak, S., Khan, W. Z., Bashir, A. K., ...& Tariq, U. (2020). Antlion re-sampling based deep neural network model for classification of imbalanced multimodal stroke dataset. Multimedia Tools and Applications, 1-25.
4. Deepa, N., Khan, M. Z., Maddikunta, P. K. R., & **Gadekallu, T. R.** (2020). Multiclass Model for Agriculture development using Multivariate Statistical method. IEEE Access.
5. Bhardwaj, A., Shah, S. B. H., Shankar, A., Alazab, M., Kumar, M., & **Gadekallu, T. R.** (2020). Penetration testing framework for smart contract Blockchain. Peer-to-Peer Networking and Applications, 1-16.
6. Rajadurai, S., Alazab, M., Kumar, N., & **Gadekallu, T. R.** (2020). Latency evaluation of SDFGs on heterogeneous processors using timed automata. IEEE Access, 8, 140171-140180.
7. Shrivastava, R., Kumar, P., Tripathi, S., Tiwari, V., Rajput, D. S., **Gadekallu, T. R.**, & Ra, I. H. (2020). A Novel Grid and Place Neuron's Computational Modeling to Learn Spatial Semantics of an Environment. Applied Sciences, 10(15), 5147.
8. Rajput, D. S., Shukla, P., **Reddy, T.**, Kaluri, R., Lakshmana, K., Maddikunta, P. K. R., & Patel, H. A Review on Bitcoin and Currency Encryption: Bitcoin and Blockchain. In Blockchain Applications in IoT Security (pp. 84-98). IGI Global.
9. Maddikunta, P. K. R., Srivastava, G., **Gadekallu, T. R.**, Deepa, N., & Boopathy, P. (2020). Predictive model for battery life in IoT networks. IET Intelligent Transport Systems.

10. Krishnasamy, L., Dhanaraj, R. K., Ganesh Gopal, D., **Reddy Gadekallu, T.**, Aboudaif, M. K., &Abouel Nasr, E. (2020). A Heuristic Angular Clustering Framework for Secured Statistical Data Aggregation in Sensor Networks. *Sensors*, 20(17), 4937.
11. Deepa, N., Prabadevi, B., Maddikunta, P. K., **Gadekallu, T. R.**, Baker, T., Khan, M. A., & Tariq, U. (2020). An AI based intelligent system for healthcare analysis using Ridge Adaline Stochastic Gradient Descent Classifier. *Journal of Supercomputing*.
12. **Gadekallu, T. R.**, Rajput, D. S., Reddy, M. P. K., Lakshmanna, K., Bhattacharya, S., Singh, S., ... &Alazab, M. (2020). A novel PCA–whale optimization-based deep neural network model for classification of tomato plant diseases using GPU. *Journal of Real-Time Image Processing*, 1-14.
13. RM, S. P., Maddikunta, P. K. R., Parimala, M., Koppu, S., **Reddy, T.**, Chowdhary, C. L., &Alazab, M. (2020). An effective feature engineering for DNN using hybrid PCA-GWO for intrusion detection in IoMT architecture. *Computer Communications*.
14. **Reddy, G. T.**, Reddy, M. P. K., Lakshmanna, K., Rajput, D. S., Kaluri, R., & Srivastava, G. (2020). Hybrid genetic algorithm and a fuzzy logic classifier for heart disease diagnosis. *Evolutionary Intelligence*, 13(2), 185-196.
15. Maddikunta, P. K. R., **Gadekallu, T. R.**, Kaluri, R., Srivastava, G., Parizi, R. M., & Khan, M. S. (2020). Green communication in IoT networks using a hybrid optimization algorithm. *Computer Communications*.
16. Maddikunta, P. K. R., **Gadekallu, T. R.**, Al-Ahmari, A., &Abidi, M. H. (2020). Location Based Business Recommendation Using Spatial Demand. *Sustainability*, 12(10), 4124.
17. Alazab, M., Khan, S., Krishnan, S. S. R., Pham, Q. V., Reddy, M. P. K., & **Gadekallu, T. R.** (2020). A Multidirectional LSTM Model for Predicting the Stability of a Smart Grid. *IEEE Access*, 8, 85454-85463.
18. **Gadekallu, T. R.**, Khare, N., Bhattacharya, S., Singh, S., Maddikunta, P. K. R., & Srivastava, G. (2020). Deep neural networks to predict diabetic retinopathy. *J. Ambient Intell. Humaniz. Comput.*
19. RM, S. P., Bhattacharya, S., Maddikunta, P. K. R., Somayaji, S. R. K., Lakshmanna, K., Kaluri, R., ... & **Gadekallu, T. R.** (2020). Load balancing of energy cloud using wind driven and firefly algorithms in internet of everything. *Journal of Parallel and Distributed Computing*.
20. Iwendi, C., Jalil, Z., Javed, A. R., **Reddy, T.**, Kaluri, R., Srivastava, G., & Jo, O. (2020). KeySplitWatermark: Zero Watermarking Algorithm for Software Protection Against Cyber-Attacks. *IEEE Access*, 8, 72650-72660.
21. **Reddy, T.**, RM, S. P., Parimala, M., Chowdhary, C. L., Hakak, S., & Khan, W. Z. (2020). A deep neural networks based model for uninterrupted marine environment monitoring. *Computer Communications*.
22. Patel, H., Singh Rajput, D., **Thippa Reddy, G.**, Iwendi, C., Kashif Bashir, A., & Jo, O. (2020). A review on classification of imbalanced data for wireless sensor networks. *International Journal of Distributed Sensor Networks*, 16(4), 1550147720916404.
23. Numan, M., Subhan, F., Khan, W. Z., Hakak, S., Haider, S., **Reddy, G. T.**, ...&Alazab, M. (2020). A systematic review on clone node detection in static wireless sensor networks. *IEEE Access*, 8, 65450-65461.

24. **Reddy, G. T.**, Reddy, M. P. K., Lakshmanan, K., Kaluri, R., Rajput, D. S., Srivastava, G., & Baker, T. (2020). Analysis of dimensionality reduction techniques on big data. *IEEE Access*, 8, 54776-54788.
25. **Reddy, G. T.**, Bhattacharya, S., Ramakrishnan, S. S., Chowdhary, C. L., Hakak, S., Kaluri, R., & Reddy, M. P. K. (2020, February). An ensemble based machine learning model for diabetic retinopathy classification. In *2020 International Conference on Emerging Trends in Information Technology and Engineering (ic-ETITE)* (pp. 1-6). IEEE.
26. Iwendi, C., Maddikunta, P. K. R., **Gadekallu, T. R.**, Lakshmanan, K., Bashir, A. K., & Piran, M. J. (2020). A metaheuristic optimization approach for energy efficiency in the IoT networks. *Software: Practice and Experience*.
27. **Gadekallu, T. R.**, Khare, N., Bhattacharya, S., Singh, S., Reddy Maddikunta, P. K., Ra, I. H., & Alazab, M. (2020). Early detection of diabetic retinopathy using PCA-firefly based deep learning model. *Electronics*, 9(2), 274.
28. Asghar, M. Z., Subhab, F., Ahmad, H., Khan, W. Z., Hakak, S., **Gadekallu, T. R.**, & Alazab, M. (2020). Senti-eSystem: A Sentiment-based eSystem-using hybridized Fuzzy and Deep Neural Network for Measuring Customer Satisfaction. *Software: Practice and Experience*, SPE2853.
29. Bhattacharya, S., Somayaji, S. R. K., **Gadekallu, T. R.**, Alazab, M., & Maddikunta, P. K. R. (2020). A review on deep learning for future smart cities. *Internet Technology Letters*, e187.
30. Ch, R., **Gadekallu, T. R.**, Abidi, M. H., & Al-Ahmari, A. (2020). Computational System to Classify Cyber Crime Offenses Using Machine Learning. *Sustainability*, 12(10), 4087.
31. Poluru, R. K., Reddy, M. P. K., Kaluri, R., Lakshmanan, K., & **Reddy, G. T.** (2020). AgriBot. In *Architecture and Security Issues in Fog Computing Applications* (pp. 151-157). IGI Global.
32. **Reddy, G. T.**, Kaluri, R., Reddy, P. K., Lakshmanan, K., Koppu, S., & Rajput, D. S. (2019, February). A novel approach for home surveillance system using IoT adaptive security. In *Proceedings of International Conference on Sustainable Computing in Science, Technology and Management (SUSCOM)*, Amity University Rajasthan, Jaipur-India.
33. **Gadekallu, T.**, Kidwai, B., Sharma, S., Pareek, R., & Karnam, S. (2019). Application of data mining techniques in weather forecasting. In *Sentiment Analysis and Knowledge Discovery in Contemporary Business* (pp. 162-174). IGI Global.
34. **Gadekallu, T.**, Soni, A., Sarkar, D., & Kuruva, L. (2019). Application of sentiment analysis in movie reviews. In *Sentiment Analysis and Knowledge Discovery in Contemporary Business* (pp. 77-90). IGI Global.
35. **Reddy, G. T.**, & Khare, N. (2018). Heart disease classification system using optimised fuzzy rule based algorithm. *International Journal of Biomedical Engineering and Technology*, 27(3), 183-202.
36. **Reddy, G. T.**, Srivastava, A., Lakshmanan, K., Kaluri, R., Karnam, S., & Nagaraja, G. (2017). Risk Prediction to Examine Health Status with Real and Synthetic Datasets. *Biomedical and Pharmacology Journal*, 10(4), 1897-1903.
37. Rajput, D. S., Singh, A. P., Agarwal, Y., Reddy, P. K., & **Reddy, G. T.** (2017, November). Feature selection analysis for multimedia event detection. In *Materials Science and Engineering Conference Series* (Vol. 263, No. 4, p. 042004).

38. **Reddy, G. T., & Khare, N.** (2017). An efficient system for heart disease prediction using hybrid OFBAT with rule-based fuzzy logic model. *Journal of Circuits, Systems and Computers*, 26(04), 1750061.
39. **Gadekallu, T. R., & Khare, N.** (2017). Cuckoo search optimized reduction and fuzzy logic classifier for heart disease and diabetes prediction. *International Journal of Fuzzy System Applications (IJFSA)*, 6(2), 25-42.
40. Kumar, M. E., **Reddy, G. T.**, Sudheer, K., Reddy, M. P. K., Kaluri, R., Rajput, D. S., & Lakshmana, K. (2017). Vehicle theft identification and intimation using gsm&iot. In *IOP Conf. Ser. Sci. Eng* (Vol. 263, p. 42062).
41. **Reddy, G. T., & Khare, N.** (2017). Hybrid firefly-bat optimized fuzzy artificial neural network based classifier for diabetes diagnosis. *International Journal of Intelligent Engineering and Systems*, 10(4), 18-27.
42. Lakshmana, K., Kaluri, R., **Reddy, G. T.**, Nagaraja, G., & Subramanian, D. V. (2016). An enhanced algorithm for frequent pattern mining from biological sequences. *International Journal of Pharmacy and Technology*, 8(2), 12776-12784.
43. **Thippa Reddy, G., & Khare, N.** (2016). FFBAT-optimized rule based fuzzy logic classifier for diabetes. In *International Journal of Engineering Research in Africa* (Vol. 24, pp. 137-152). Trans Tech Publications Ltd.
44. Kaluri, R., Lakshmana, K., **Reddy, T.**, Karnam, S., & Koppu, S. (2016). A comparative study on selecting and ranking the test cases in software testing. *ARPN J EngApplSci*, 11, 754-757.
45. **Reddy, G. T.**, Sudheer, K., Rajesh, K., & Lakshmana, K. (2014). Employing data mining on highly secured private clouds for implementing a security-as-a-service framework. *J. Theor. Appl. Inf. Technol*, 59(2), 317-326.
46. Karthik, P., **Reddy, G. T.**, & Vanan, E. K. (2012). Tuning the SQL Query in order to reduce time consumption. *International Journal of Computer Science Issues (IJCSI)*, 9(4), 418. A paper titled, "Framework based on Blockchain enabled Machine learning for IoT-driven Smart cities" is in review in *IEEE IoT Journal*.
47. A paper titled, "Blockchain Meets Edge of Things: Applications, Opportunities, and Challenges" is in review in *IEEE IoT Journal*.
48. A paper titled, "An Ensemble Machine Learning approach through effective feature extraction to classify Fake News" is in review in *Future Generation Computer Systems*, Elsevier.
49. A paper titled, "Driver Identification Using Optimized Deep Learning Model in Smart Transportation" is accepted for publication in *ACM Transactions on Internet Technology*.
50. A paper titled, "A Two Stage Text Feature Selection Algorithm for Improving Text Classification" is accepted for publication in *ACM Transactions on Asian and Low-Resource Language Information Processing*.
51. A paper titled, "Blockchain based Attack Detection on Machine Learning Algorithms for IoT based E-Health Applications" is accepted for publication in *IEEE IoT Magazine*.

Conferences

1. A paper titled, "An Incentive Based Approach for COVID-19 using Blockchain Technology" is accepted in *IEEE Globecom 2020*.

2. A paper titled, "A Framework for Prediction and Storage of Battery Life in IoT Devices using DNN and Blockchain" is accepted in IEEE Globecom 2020.
3. A paper titled, "A Blockchain-based Credibility Scoring Framework for Electronic Medical Records" is accepted in IEEE Globecom 2020.
4. A paper titled, "An ensemble model for intrusion detection in the Internet of Softwarized Things" is accepted in ICDCN 2021.
5. A paper titled, "Propagation of Fake News Using Social Media: Mitigation and Research Challenges" is accepted in CSoNet 2020.
6. Presented a technical paper titled, "A Novel Approach for Home Surveillance System Using IoT Adaptive Security", in SUSCOM-2019: International Conference on Sustainable Computing in Science, Technology & Management (SUSCOM-2019). Amity University Rajasthan, India.
7. Presented a technical paper titled, "Earthquake Analysis: Visualizing Seismic Data with Python" in International Conference on Computational Vision and Bio Inspired Computing organized by Inventive research organization, and RVS Technical Campus, Coimbatore, India during 21-22 September 2017.
8. Presented a technical paper titled "Fuzzy Association Rule based Classification on Heart Disease Dataset" in Emerging Research in Computing, Information, Communication and Applications, August 2014, Bangalore, India.
9. Presented a technical paper titled "Performance Comparison on Wireless Mobile Ad-HOC Routing Protocols" in the National Conference organized by the Department of Information Technology on 24th February 2009, at Sasurie College of Engineering, Vijayamangalam, Tirupur (Dt), Tamil Nadu, India.
10. Presented a technical paper titled "Bidirectional Routing Protocols for Asymmetric Mobile Ad-HOC Networks" in the National Conference organized by the Department of Computer Science and Engineering held on 6th October, 2009, at SNS College of Technology, Coimbatore, Tamil Nadu, India.
11. Presented a technical paper titled "Term Set Search using Fuzzy Based Indexing Scheme for Peer-to-Peer Environment" in the National Conference organized by the Department of Computer Science and Engineering on 04th February 2011, at S.S.M. College of Engineering, Komarapalayam, Namakkal (Dt), Tamil Nadu and at VidyaaVikas College of Engineering and Technology, Tiruchengode, Tamil Nadu, India on 18th February 2011.
12. Presented a technical paper titled " DYNAMIC UPDATE OF LOCATION QUERIES OF MOVING OBJECTS IN ROAD NETWORKS" in " Innovation in Communication, Information and Computing (ICICIC'13)" Sasurie College of Engineering, Tirupur, Tamil Nadu, India, on January 9 - 11, 2013.
13. Presented a technical paper titled "A Macro Level Security Approach for Cloud Computing Infrastructure" in the International Conference on Emerging Technologies in Cloud Computing (ICETT 2011) organized by the Department of Computer Science and Engineering, Baseline Mathews II College of Engineering, Sasthamcotta, Kollam, Kerala, India held on 25th and 26th March, 2011
14. Presented a technical paper titled "SECURED MULTIMEDIA COMMUNICATION ON INTRANET USING CRYPTOGRAPHY" in the International Conference on Advanced Computing Technologies (icact' 2011), organized by the Department of Computer Science

and Engineering, J.K.K.N Engineering College, Komarapalayam-
638183. Namakkal Dt, Tamilnadu, India, held on 29th & 30th July 2011.