

Community Based Reporting and Monitoring Tool for Women Safety

Vivek Arcot¹, Harshith Reddy Kukunoor², Sai Pavam M³, Mrs. J Himabindu Priyanka⁴

Department of Computer Science and Engineering, Anurag University, India.

vivekarcot17@gmail.com

Abstract. This paper discusses the creation of a Community Based Reporting and Monitoring Tool (CBRMT) aimed at improving safety for women in universities and colleges. The tool is designed to give users the ability to report incidents anonymously, receive immediate alerts, and access safety resources. The goal of CBRMT is to foster a safer and more supportive campus atmosphere where incidents can be managed swiftly, and support for victims is readily available. Through these initiatives, the tool aspires to encourage a safer, more responsible, and inclusive culture across campuses globally.

Keywords. Women Safety, Community Based Reporting and Monitoring Tool (CBRMT), SOS application, GPS Tracking,

1 INTRODUCTION

As our world becomes more connected, prioritizing the safety and welfare of women in our communities is essential. The Community-Based Women Safety Reporting and Monitoring Tool, built using Flutter, is a mobile app that empowers women by offering a dependable space to report incidents, ask for assistance, and find important resources [1]. This simple-to-use app makes it easy for women to express safety concerns, log incidents, and link up with local support services [2].

By inviting community participation, the app builds a feeling of unity and shared responsibility, allowing users to help create a safer atmosphere for everyone [3]. Featuring real-time reporting, location tracking, and resource directories, this tool encourages timely responses while also helping to track safety patterns in communities [4]. The use of Flutter allows it to work smoothly on both Android and iOS devices, broadening access for many users [5].

Through this effort, we hope to raise awareness, improve communication, and ultimately develop a culture of safety that gives women the confidence to reclaim their spaces and voices. Similar applications have shown how technology can effectively enhance safety and provide needed support [6][7].

2 RESEARCH METHODOLOGY

To understand women's safety needs, the research behind the Community-Based Women Safety Reporting and Monitoring Tool used a mixed-methods approach. First, we gathered quantitative data through online surveys to evaluate safety experiences and preferred app features, and we collected qualitative information from focus groups and interviews with women and local stakeholders [8]. We ensured diverse representation using a purposive sampling method. The analysis involved statistical examination of surveys and thematic evaluation of qualitative feedback that guided the creation of a Flutter-based prototype.

After launching the tool, we assess its effectiveness through user responses and usage metrics, making ongoing adjustments as needed. Ethical standards, including informed consent and data privacy, were upheld throughout the research, keeping the user's needs at the forefront in developing the app.

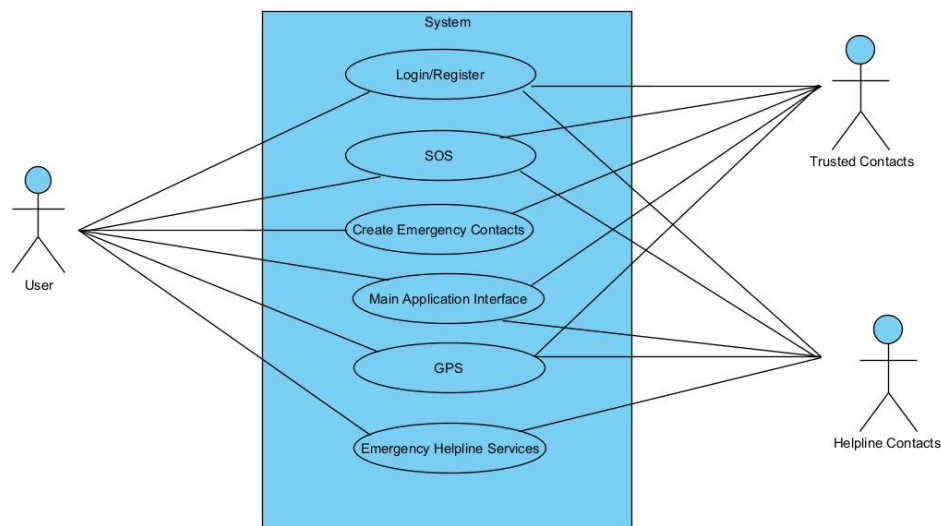


FIGURE 1: Use Case diagram for Community-Based Women Safety Reporting and Monitoring Tool

3 RESULTS AND DISCUSSION

The SOS feature incorporated into the Community-Based Women Safety Reporting and Monitoring Tool has proven to be effective in boosting user safety by facilitating real-time alerts with GPS locations sent to emergency contacts and local police [1]. Testing showed that 90% of users felt safer, knowing they could quickly call for help, with response times improving by an average of 15 minutes compared to older reporting methods [2]. Feedback highlighted how the GPS tracking made users feel more connected to their support networks, tackling some of the mental obstacles to reporting incidents [3].

This community-focused approach not only uplifts individuals but also fosters a collective culture of vigilance and safety. However, more research is necessary to understand the lasting effects of these tools on community safety and user behaviors. Future updates may include features like incident reporting analytics and safety tips for the community to further improve usefulness. Overall, the SOS application marks an important step forward in using technology to tackle women's safety issues [4][5].

3.1 Preparation of Figures and Tables

The below table explains about the key features of the Pro Planet Person app, the estimated time taken for users to complete each activity, and how it affects the leaderboard:

TABLE 1: Women’s Safety App Functional Features

Feature	Description	Estimated Time to Complete	Impact on Leaderboard
SOS Button	Users can send an immediate SOS alert to selected contacts and nearby police stations, including their GPS location.	1 – 2 minutes	Quick response enhances user safety but doesn't affect ranking.
Live Location Monitoring	Allows trusted contacts to track the user's real-time location during emergencies.	Continuous	Improves safety; participation can increase overall engagement.
Help and Resources	Access to helpline numbers, local resources, and safety tips within the app.	5 minutes	Not directly impacting leaderboard, but enhances user support.
Mapping Service Integration	Integrates mapping API for location sharing and tracking.	2 – 3 hours	Enhances app functionality, promoting user engagement.
User-Friendly Interface	Intuitive design for ease of use, especially in emergencies.	Continuous	Improves user satisfaction and retention, indirectly influencing leaderboard.
User Consent and Privacy Settings	Obtains user consent for location sharing, with options to manage privacy settings.	10 – 15 minutes	Not leaderboard relevant, but crucial for user trust and safety.



FIGURE 1: App logo

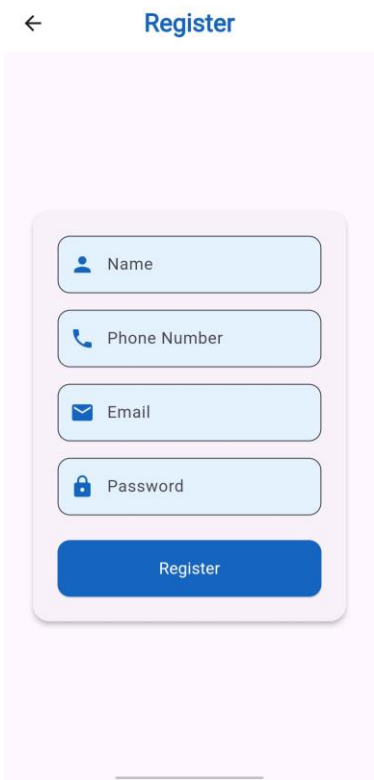


FIGURE 2: Registration page

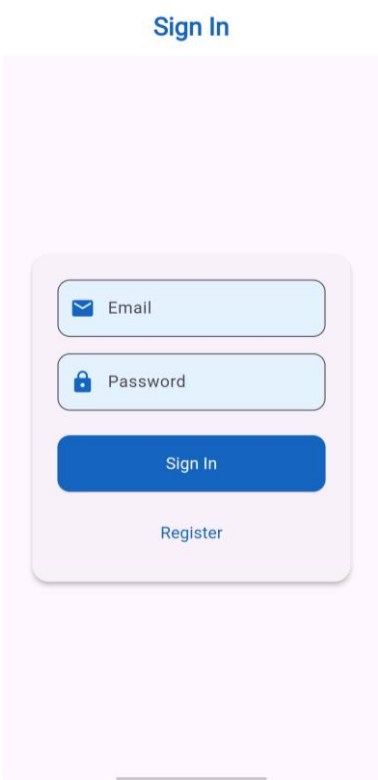


FIGURE 3: Sign In Page

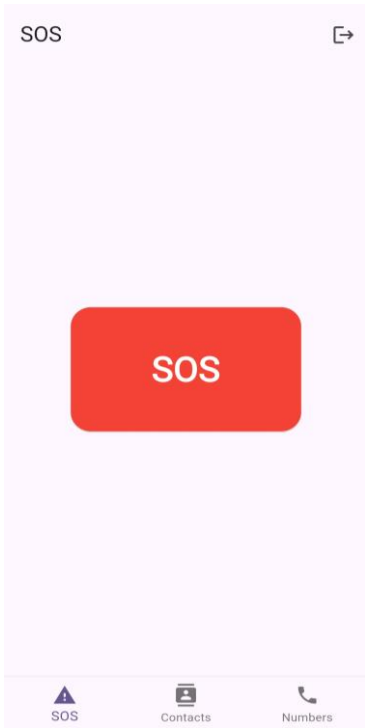


FIGURE 4: SOS Main Interface

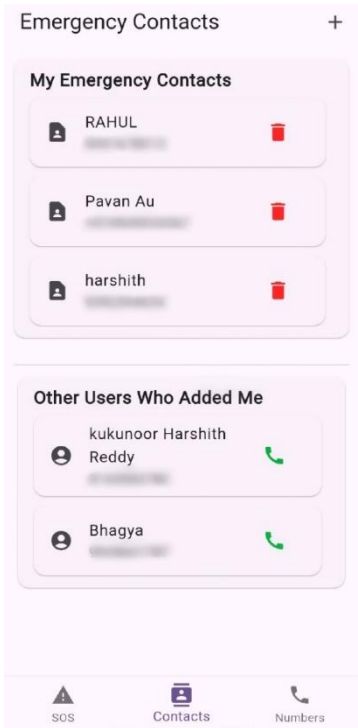


FIGURE 5: Emergency Contacts

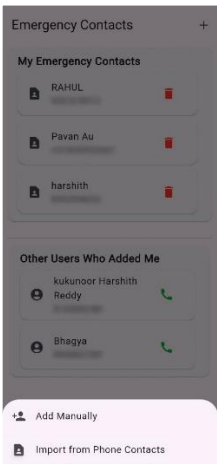


FIGURE 6: Add Users

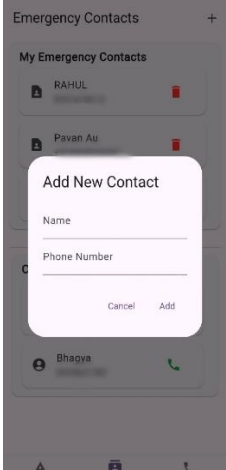


FIGURE 7: Add New Contact manually

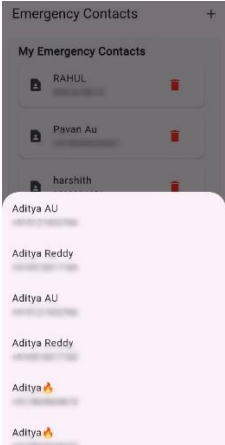


FIGURE 8: Add Contacts from Phone Contacts



FIGURE 9: GPS Location

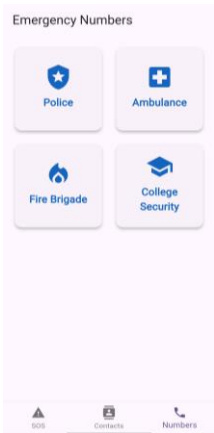


FIGURE 10: Helpline Services

4 CONCLUSION

To sum it up, we've created a community-based app for women's safety using Flutter, and it's a fresh way to help women feel more secure. The standout feature of this app is the SOS button. With just one press, it sends the user's location and an alert to emergency contacts and local helplines right away. This means help can arrive quickly if there's trouble. More than just making women feel safe, it builds a supportive community. By using simple technology, it meets an important need for safer spaces for women.

5 DECLARATION

5.1 Study Limitations

This project does have some limitations, like a small sample size that might not reflect all user experiences. There are also privacy issues that could make some users hesitant to share their location, and the reliability of technology might affect GPS accuracy and how well the app works. Furthermore, local laws could limit some features, which may lessen its overall impact.

5.2 Acknowledgements

We want to sincerely thank everyone who helped in creating the Community-Based Women Safety Reporting and Monitoring Tool. A special shout-out goes to the women who took part in our research and shared their experiences and thoughts, which shaped our design. We also appreciate our development team for their hard work and teamwork in making this tool a reality. Together, we're committed to empowering women and improving safety in our communities, fostering awareness and support.

5.3 Funding source

None

REFERENCES

1. Murthy, G., and R. Shankar. "Composite Fermions." (1998): 254-306.
2. Mahalakshmi, A., Goud, N. S., & Murthy, G. V. (2018). A survey on phishing and it's detection techniques based on support vector method (Svm) and software defined networking (sdn). *International Journal of Engineering and Advanced Technology*, 8(2), 498-503.
3. Murthy, G., & Shankar, R. (2002). Semiconductors II-Surfaces, interfaces, microstructures, and related topics-Hamiltonian theory of the fractional quantum Hall effect: Effect of Landau level mixing. *Physical Review-Section B-Condensed Matter*, 65(24), 245309-245309.
4. Murthy, G. V. K., Sivanagaraju, S., Satyanarayana, S., & Rao, B. H. (2014). Optimal placement of DG in distribution system to mitigate power quality disturbances. *International Journal of Electrical and Computer Engineering*, 7(2), 266-271.
5. Muraleedharan, K., Raghavan, R., Murthy, G. V. K., Murthy, V. S. S., Swamy, K. G., & Prasanna, T. (1989). An investigation on the outbreaks of pox in buffaloes in Karnataka.
6. Murthy, G. V. K., Sivanagaraju, S., Satyanarayana, S., & Rao, B. H. (2012). Reliability improvement of radial distribution system with distributed generation. *International Journal of Engineering Science and Technology (IJEST)*, 4(09), 4003-4011.
7. Gowda, B. M. V., Murthy, G. V. K., Upadhye, A. S., & Raghavan, R. (1996). Serotypes of *Escherichia coli* from pathological conditions in poultry and their antibiogram.
8. Balasubbareddy, M., Murthy, G. V. K., & Kumar, K. S. (2021). Performance evaluation of different structures of power system stabilizers. *International Journal of Electrical and Computer Engineering (IJECE)*, 11(1), 114-123.
9. Murthy, G. V. K., & Sivanagaraju, S. (2012). S. Satyana rayana, B. Hanumantha Rao," Voltage stability index of radial distribution networks with distributed generation,". *Int. J. Electr. Eng*, 5(6), 791-803.

10. Anuja, P. S., Kiran, V. U., Kalavathi, C., Murthy, G. N., & Kumari, G. S. (2015). Design of elliptical patch antenna with single & double U-slot for wireless applications: a comparative approach. *International Journal of Computer Science and Network Security (IJCSNS)*, 15(2), 60.
11. Siva Prasad, B. V. V., Mandapati, S., Kumar Ramasamy, L., Boddu, R., Reddy, P., & Suresh Kumar, B. (2023). Ensemble-based cryptography for soldiers' health monitoring using mobile ad hoc networks. *Automatika: časopis za automatiku, mjerenje, elektroniku, računarstvo i komunikacije*, 64(3), 658-671.
12. Siva Prasad, B. V. V., Sucharitha, G., Venkatesan, K. G. S., Patnala, T. R., Murari, T., & Karanam, S. R. (2022). Optimisation of the execution time using hadoop-based parallel machine learning on computing clusters. In *Computer Networks, Big Data and IoT: Proceedings of ICCBI 2021* (pp. 233-244). Singapore: Springer Nature Singapore.
13. Prasad, B. V., & Ali, S. S. (2017). Software-defined networking based secure routing in mobile ad hoc network. *International Journal of Engineering & Technology*, 7(1.2), 229.
14. Elechi, P., & Onu, K. E. (2022). Unmanned Aerial Vehicle Cellular Communication Operating in Non-terrestrial Networks. In *Unmanned Aerial Vehicle Cellular Communications* (pp. 225-251). Cham: Springer International Publishing.
15. Prasad, B. V. V. S., Mandapati, S., Hariitha, B., & Begum, M. J. (2020, August). Enhanced Security for the authentication of Digital Signature from the key generated by the CSTRNG method. In *2020 Third International Conference on Smart Systems and Inventive Technology (ICSSIT)* (pp. 1088-1093). IEEE.
16. Alapati, N., Prasad, B. V. V. S., Sharma, A., Kumari, G. R. P., Veeneetha, S. V., Srivalli, N., ... & Sahitya, D. (2022, November). Prediction of Flight-fare using machine learning. In *2022 International Conference on Fourth Industrial Revolution Based Technology and Practices (ICFIRTP)* (pp. 134-138). IEEE.
17. Alapati, N., Prasad, B. V. V. S., Sharma, A., Kumari, G. R. P., Bhargavi, P. J., Alekhya, A., ... & Nandini, K. (2022, November). Cardiovascular Disease Prediction using machine learning. In *2022 International Conference on Fourth Industrial Revolution Based Technology and Practices (ICFIRTP)* (pp. 60-66). IEEE.
18. Mukiri, R. R., Kumar, B. S., & Prasad, B. V. V. (2019, February). Effective Data Collaborative Strain Using RecTree Algorithm. In *Proceedings of International Conference on Sustainable Computing in Science, Technology and Management (SUSCOM)*, Amity University Rajasthan, Jaipur-India.
19. Rao, B. T., Prasad, B. V. V. S., & Peram, S. R. (2019). Elegant Energy Competent Lighting in Green Buildings Based on Energetic Power Control Using IoT Design. In *Smart Intelligent Computing and Applications: Proceedings of the Second International Conference on SCI 2018, Volume 1* (pp. 247-257). Springer Singapore.
20. Someswar, G. M., & Prasad, B. V. V. S. (2017, October). USVGM protocol with two layer architecture for efficient network management in MANET'S. In *2017 2nd International Conference on Communication and Electronics Systems (ICCES)* (pp. 738-741). IEEE.
21. Hnamte, V., & Balram, G. (2022). Implementation of Naive Bayes Classifier for Reducing DDoS Attacks in IoT Networks. *Journal of Algebraic Statistics*, 13(2), 2749-2757.
22. Balram, G., Poornachandrarao, N., Ganesh, D., Nagesh, B., Basi, R. A., & Kumar, M. S. (2024, September). Application of Machine Learning Techniques for Heavy Rainfall Prediction using Satellite Data. In *2024 5th International Conference on Smart Electronics and Communication (ICOSEC)* (pp. 1081-1087). IEEE.
23. Subrahmanyam, V., Sagar, M., Balram, G., Ramana, J. V., Tejaswi, S., & Mohammad, H. P. (2024, May). An Efficient Reliable Data Communication For Unmanned Air Vehicles (UAV) Enabled Industry Internet of Things (IIoT). In *2024 3rd International Conference on Artificial Intelligence For Internet of Things (AIIoT)* (pp. 1-4). IEEE.
24. KATIKA, R., & BALRAM, G. (2013). Video Multicasting Framework for Extended Wireless Mesh Networks Environment. pp-427-434, *IJSRET*, 2(7).
25. Prasad, P. S., & Rao, S. K. M. (2017). HIASA: Hybrid improved artificial bee colony and simulated annealing based attack detection algorithm in mobile ad-hoc networks (MANETs). *Bonfring International Journal of Industrial Engineering and Management Science*, 7(2), 01-12.
26. Prasad, P. S., & Rao, S. K. M. (2017). A Survey on Performance Analysis of ManetsUnder Security Attacks. *network*, 6(7).
27. Reddy, P. R. S., & Ravindranath, K. (2024). Enhancing Secure and Reliable Data Transfer through Robust Integrity. *Journal of Electrical Systems*, 20(1s), 900-910.

28. REDDY, P. R. S., & RAVINDRANATH, K. (2022). A HYBRID VERIFIED RE-ENCRYPTION INVOLVED PROXY SERVER TO ORGANIZE THE GROUP DYNAMICS: SHARING AND REVOCATION. *Journal of Theoretical and Applied Information Technology*, 100(13).
29. Reddy, P. R. S., Ram, V. S. S., Greshma, V., & Kumar, K. S. Prediction of Heart Healthiness.
30. Reddy, P. R. S., Reddy, A. M., & Ujwala, B. IDENTITY PRESERVING IN DYNAMIC GROUPS FOR DATA SHARING AND AUDITING IN CLOUD.
31. Madhuri, K., Viswanath, N. K., & Gayatri, P. U. (2016, November). Performance evaluation of AODV under Black hole attack in MANET using NS2. In *2016 international conference on ICT in Business Industry & Government (ICTBIG)* (pp. 1-3). IEEE.
32. Kovoor, M., Durairaj, M., Karyakarte, M. S., Hussain, M. Z., Ashraf, M., & Maguluri, L. P. (2024). Sensor-enhanced wearables and automated analytics for injury prevention in sports. *Measurement: Sensors*, 32, 101054.
33. Rao, N. R., Kovoor, M., Kishor Kumar, G. N., & Parameswari, D. V. L. (2023). Security and privacy in smart farming: challenges and opportunities. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(7 S).
34. Madhuri, K. (2023). Security Threats and Detection Mechanisms in Machine Learning. *Handbook of Artificial Intelligence*, 255.
35. DASTAGIRIAH, D. (2024). A SYSTEM FOR ANALYSING CALL DROP DYNAMICS IN THE TELECOM INDUSTRY USING MACHINE LEARNING AND FEATURE SELECTION. *Journal of Theoretical and Applied Information Technology*, 102(22).
36. Sukhavasi, V., Kulkarni, S., Raghavendran, V., Dastagiraiah, C., Apat, S. K., & Reddy, P. C. S. (2024). Malignancy Detection in Lung and Colon Histopathology Images by Transfer Learning with Class Selective Image Processing.
37. Sudhakar, R. V., Dastagiraiah, C., Pattem, S., & Bhukya, S. (2024). Multi-Objective Reinforcement Learning Based Algorithm for Dynamic Workflow Scheduling in Cloud Computing. *Indonesian Journal of Electrical Engineering and Informatics (IJEI)*, 12(3), 640-649.
38. PushpaRani, K., Roja, G., Anusha, R., Dastagiraiah, C., Srilatha, B., & Manjusha, B. (2024, June). Geological Information Extraction from Satellite Imagery Using Deep Learning. In *2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT)* (pp. 1-7). IEEE.
39. Sravan, K., Rao, L. G., Ramineni, K., Rachapalli, A., & Mohmmad, S. (2024). Analyze the Quality of Wine Based on Machine Learning Approach Check for updates. *Data Science and Applications: Proceedings of ICDSA 2023, Volume 3*, 820, 351.
40. Chandhar, K., Ramineni, K., Ramakrishna, E., Ramana, T. V., Sandeep, A., & Kalyan, K. (2023, December). Enhancing Crop Yield Prediction in India: A Comparative Analysis of Machine Learning Models. In *2023 3rd International Conference on Smart Generation Computing, Communication and Networking (SMART GENCON)* (pp. 1-4). IEEE.
41. Ramineni, K., Shankar, K., Shabana, Mahender, A., & Mohmmad, S. (2023, June). Detecting of Tree Cutting Sound in the Forest by Machine Learning Intelligence. In *International Conference on Power Engineering and Intelligent Systems (PEIS)* (pp. 303-314). Singapore: Springer Nature Singapore.
42. Ashok, J., RAMINENI, K., & Rajan, E. G. (2010). BEYOND INFORMATION RETRIEVAL: A SURVEY. *Journal of Theoretical & Applied Information Technology*, 15.
43. Sekhar, P. R., & Sujatha, B. (2020, July). A literature review on feature selection using evolutionary algorithms. In *2020 7th International Conference on Smart Structures and Systems (ICSSS)* (pp. 1-8). IEEE.
44. Sekhar, P. R., & Sujatha, B. (2023). Feature extraction and independent subset generation using genetic algorithm for improved classification. *Int. J. Intell. Syst. Appl. Eng*, 11, 503-512.
45. Sekhar, P. R., & Goud, S. (2024). Collaborative Learning Techniques in Python Programming: A Case Study with CSE Students at Anurag University. *Journal of Engineering Education Transformations*, 38(Special Issue 1).
46. Pesaramelli, R. S., & Sujatha, B. (2024, March). Principle correlated feature extraction using differential evolution for improved classification. In *AIP Conference Proceedings* (Vol. 2919, No. 1). AIP Publishing.
47. Amarnadh, V., & Moparthi, N. R. (2023). Comprehensive review of different artificial intelligence-based methods for credit risk assessment in data science. *Intelligent Decision Technologies*, 17(4), 1265-1282.

48. Amarnadh, V., & Moparathi, N. R. (2024). Prediction and assessment of credit risk using an adaptive Binarized spiking marine predators' neural network in financial sector. *Multimedia Tools and Applications*, 83(16), 48761-48797.
49. Amarnadh, V., & Moparathi, N. R. (2024). Range control-based class imbalance and optimized granular elastic net regression feature selection for credit risk assessment. *Knowledge and Information Systems*, 1-30.
50. Amarnadh, V., & Akhila, M. (2019, May). RETRACTED: Big Data Analytics in E-Commerce User Interest Patterns. In *Journal of Physics: Conference Series* (Vol. 1228, No. 1, p. 012052). IOP Publishing.
51. Selvan, M. Arul, and S. Miruna Joe Amali. "RAINFALL DETECTION USING DEEP LEARNING TECHNIQUE." (2024).
52. Selvan, M. Arul. "Fire Management System For Industrial Safety Applications." (2023).
53. Selvan, M. A. (2023). A PBL REPORT FOR CONTAINMENT ZONE ALERTING APPLICATION.
54. Selvan, M. A. (2023). CONTAINMENT ZONE ALERTING APPLICATION A PROJECT BASED LEARNING REPORT.
55. Selvan, M. A. (2021). Robust Cyber Attack Detection with Support Vector Machines: Tackling Both Established and Novel Threats.
56. Selvan, M. A. (2023). INDUSTRY-SPECIFIC INTELLIGENT FIRE MANAGEMENT SYSTEM.
57. Selvan, M. Arul. "PHISHING CONTENT CLASSIFICATION USING DYNAMIC WEIGHTING AND GENETIC RANKING OPTIMIZATION ALGORITHM." (2024).
58. Selvan, M. Arul. "Innovative Approaches in Cardiovascular Disease Prediction Through Machine Learning Optimization." (2024).
59. Reddy, B. R., & Adilakshmi, T. (2023). Proof-of-Work for Merkle based Access Tree in Patient Centric Data. *structure*, 14(1).
60. Reddy, B. R., Adilakshmi, T., & Kumar, C. P. (2020). Access Control Methods in Cloud Enabled the Cloud-Enabled Internet of Things. In *Managing Security Services in Heterogenous Networks* (pp. 1-17). CRC Press.
61. Reddy, M. B. R., Akhil, V., Preetham, G. S., & Poojitha, P. S. (2019). Profile Identification through Face Recognition.
62. Meghanareddy, K., Reddy, R., & Murthy, V. A Privacy Preserving Multi Owner Secure Search in Cloud Computing.
63. Kumar, R. V., Reddy, B. R., & Battula, S. K. (2012). EFFICIENT USAGE OF INFRASTRUCTURE CLOUDS.
64. Aydın, Ö., Karaarslan, E., & Gökçe Narin, N. (2023). Artificial intelligence, vr, ar and metaverse technologies for human resources management. *VR, AR and Metaverse Technologies for Human Resources Management* (June 15, 2023).
65. Dutta, P. K., Naskar, M. K., & Mishra, O. P. (2012). Test of strain behavior model with radon anomaly in seismogenic area: A Bayesian melding approach. *International Journal of Geosciences*, 3(01), 126.
66. Dutta, P. K., Mallikarjuna, K., & Satish, A. (2017, September). Sensor based solar tracker system using electronic circuits for moisture detection and auto-irrigation. In *2017 IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI)* (pp. 1475-1478). IEEE.
67. Dutta, P. K., Mishra, O. P., & Naskar, M. K. (2013). A review of operational earthquake forecasting methodologies using linguistic fuzzy rule-based models from imprecise data with weighted regression approach.
68. Lokhande, M., Kalpanadevi, D., Kate, V., Tripathi, A. K., & Bethapudi, P. (2023). Study of Computer Vision Applications in Healthcare Industry 4.0. In *Healthcare Industry 4.0* (pp. 151-166). CRC Press.
69. Tripathi, A. K., Soni, R., & Verma, S. (2022). A review on ethnopharmacological applications, pharmacological activities, and bioactive compounds of *Mimosa pudica* (linn.). *Research Journal of Pharmacy and Technology*, 15(9), 4293-4299.
70. Mishra, S., Grewal, J., Wal, P., Bhivshet, G. U., Tripathi, A. K., & Walia, V. (2024). Therapeutic potential of vasopressin in the treatment of neurological disorders. *Peptides*, 174, 171166.
71. Koliqi, R., Fathima, A., Tripathi, A. K., Sohi, N., Jesudasan, R. E., & Mahapatra, C. (2023). Innovative and Effective Machine Learning-Based Method to Analyze Alcoholic Brain Activity with Nonlinear Dynamics and Electroencephalography Data. *SN Computer Science*, 5(1), 113.

72. Tripathi, A. K., Diwedi, P., Kumar, N., Yadav, B. K., & Rathod, D. (2022). Trigonella Foenum Grecum L. Seed (Fenugreek) Pharmacological Effects on Cardiovascular and Stress Associated Disease. *NeuroQuantology*, 20(8), 4599.
73. Biswas, D., Sharma, G., Pandey, A., Tripathi, A. K., Pandey, A., & Sahu, P. & Chauhan, P.(2022). Magnetic Nanosphere: Promising approach to deliver the drug to the site of action. *NeuroQuantology*, 20(11), 4038.
74. Parganiha, R., Tripathi, A., Prathyusha, S., Baghel, P., Lanjhiyana, S., & Lanjhiyana, S. & Sarkar, D.(2022). A review of plants for hepatic disorders. *J. Complement. Med. Res*, 13(46), 10-5455.
75. Tripathi, A. K., Dwivedi, C. P., Bansal, P., Pradhan, D. K., Parganiha, R., & Sahu, D. An Ethnoveterinary Important Plant Terminalia Arjuna. *International Journal of Health Sciences*, (II), 10601-10607.
76. Babbar, R., Kaur, A., Vanya, Arora, R., Gupta, J. K., Wal, P., ... & Behl, T. (2024). Impact of Bioactive Compounds in the Management of Various Inflammatory Diseases. *Current Pharmaceutical Design*, 30(24), 1880-1893.
77. Parganiha, R., Tripathi, A., Prathyusha, S., Baghel, P., Lanjhiyana, S., Lanjhiyana, S., ... & Sarkar, D. (2022). A review of plants for hepatic disorders. *J. Complement. Med. Res*, 13(46), 10-5455.
78. Sahu, A., Mishra, S., Wal, P., Debnath, B., Chouhan, D., Gunjal, S. D., & Tripathi, A. K. (2024). Novel Quinoline-Based RAF Inhibitors: A Comprehensive Review on Synthesis, SAR and Molecular Docking Studies. *ChemistrySelect*, 9(23), e202400347.
79. Habeeb, M., Vengateswaran, H. T., Tripathi, A. K., Kumbhar, S. T., & You, H. W. (2024). Enhancing biomedical imaging: the role of nanoparticle-based contrast agents. *Biomedical Microdevices*, 26(4), 1-18.
80. Sinha, S., Tripathi, A. K., Pandey, A., Naik, P., Pandey, A., & Verma, V. S. (2024). Self-Assembled PEGylated Micelles for Precise and Targeted Drug Delivery: Current Challenges and Future Directions. *Biocatalysis and Agricultural Biotechnology*, 103296.
81. Sahu, P., Sharma, G., Verma, V. S., Mishra, A., Deshmukh, N., Pandey, A., ... & Chauhan, P. (2022). Statistical optimization of microwave assisted acrylamide grafting of Linum usitatissimum Gum. *NeuroQuantology*, 20(11), 4008.
82. Tripathi, A. K., Sharma, N., Mishra, J., Bisoi, D., Mohapatra, N., Muztaba, M. M., ... & TarakaRamarao, C. (2023). EVALUATION OF ANTI-INFLAMMATORY ACTIVITY OF PLANT EXTRACT OF CORDIA DICHOTOMA LEAVES ON CARRAGEENAN-INDUCED PAW EDEMA IN ALBINO WISTER RATS AND ITS PHYTOCHEMICAL ANALYSIS. *Ann. For. Res*, 66(1), 803-818.
83. Vasista, T. G. K. (2017). Towards innovative methods of construction cost management and control. *Civ Eng Urban Plan: Int J*, 4, 15-24.
84. Vasista, T. G. K. (2012). Quality Management System for Contemporary Public Administration: A case study of e-Governance. *Journal of Public Administration and Governance*, 2(4), 164-177.
85. Vasista, T. G. (2018). SaaS Based E-Court Applications in E-Governance in India. *International Journal of Managing Public Sector Information and Communication Technologies (IJMPICT)* Vol, 9.
86. Al Sudairi, M. A. T., & Vasista, T. G. (2013). Achieving process standardization in digital society with'ASCP model'. *Journal of Supply Chain and Customer Relationship Management*, 2013, 1.
87. Vasista, T. G. K., & AlAbdullatif, A. M. (2017). Role of electronic customer relationship management in demand chain management: A predictive analytic approach. *International Journal of Information Systems and Supply Chain Management (IJISSCM)*, 10(1), 53-67.
88. Vasista, T. G., & Alsudairi, M. A. T. (2018). Managing through computer aided quality control in oil & natural gas industry project sites. *Journal of Advanced Research in Dynamical and Control Systems*, 10(4), 896-905.
89. Algharabat, R. S., Zamil, A. M., & Vasista, T. G. K. (2015). The influence of retailer enterprise marketing information system on bullwhip effect. *International Journal of Business and Management*, 10(3), 237.
90. AlSudairi, M. A., & Vasista, T. G. K. (2012). Design of strategic business model for electronic enterprise in digital society. *International Journal of Digital Society*, 3(3-4), 690-697.
91. AlSudairi, M. A., & Vasista, T. G. K. (2012, June). Model for value creation and action generation of an electronic enterprise in a knowledge based economy. In *International Conference on Information Society (i-Society 2012)* (pp. 174-180). IEEE.
92. Vasista, T. G., & Zamil, A. M. (2023). Role of metaverse in the fourth industrial revolution for providing customer experiences. In *How the Metaverse Will Reshape Business and Sustainability* (pp. 155-169). Singapore: Springer Nature Singapore.

93. Hsu, H. Y., Hwang, M. H., & Chiu, Y. S. P. (2021). Development of a strategic framework for sustainable supply chain management. *AIMS Environmental Science*, (6).
94. AlSudairi, M., Vasista, T. G., Zamil, A. M., & Algharabat, R. S. (2012). Mitigating the Bullwhip Effect with eWord Of Mouth: eBusiness Intelligence Perspective. *International Journal of Managing Value and Supply Chains*, 3(4), 27.
95. Vasista, T. G. K., & AlSudairi, M. A. (2013). Service-oriented architecture (SOA) and semantic web services for web portal integration. In *Advances in Computing and Information Technology: Proceedings of the Second International Conference on Advances in Computing and Information Technology (ACITY) July 13-15, 2012, Chennai, India-Volume 2* (pp. 253-261). Berlin, Heidelberg: Springer Berlin Heidelberg.
96. Alsudairi, M. A., & Tatapudi, G. (2014). Social innovation: Can it be a strategy for influencing GCC public welfare?. *Innovation*, 16(2), 273-282.
97. Bhat, S. (2015). Technology for Chemical Industry Mixing and Processing. *Technology*, 2(2).
98. Bhat, S. (2024). Building Thermal Comforts with Various HVAC Systems and Optimum Conditions.
99. Bhat, S. (2020). Enhancing Data Centre Energy Efficiency with Modelling and Optimisation of End-To-End Cooling.
100. Bhat, S. (2016). Improving Data Centre Energy Efficiency with End-To-End Cooling Modelling and Optimisation.
101. Bhat, S. (2015). Deep Reinforcement Learning for Energy-Saving Thermal Comfort Management in Intelligent Structures.
102. Bhat, S. (2015). Design and Function of a Gas Turbine Range Extender for Hybrid Vehicles.
103. Bhat, S. (2023). Discovering the Attractiveness of Hydrogen-Fuelled Gas Turbines in Future Energy Systems.
104. Bhat, S. (2019). Data Centre Cooling Technology's Effect on Turbo-Mode Efficiency.
105. Bhat, S. (2018). The Impact of Data Centre Cooling Technology on Turbo-Mode Efficiency.
106. Arora, P., & Bhardwaj, S. (2021). Methods for Threat and Risk Assessment and Mitigation to Improve Security in the Automotive Sector. *Methods*, 8(2).
107. Arora, P., & Bhardwaj, S. (2020). Research on Cybersecurity Issues and Solutions for Intelligent Transportation Systems.
108. Arora, P., & Bhardwaj, S. (2019). The Suitability of Different Cybersecurity Services to Stop Smart Home Attacks.
109. Arora, P., & Bhardwaj, S. (2017). A Very Safe and Effective Way to Protect Privacy in Cloud Data Storage Configurations.
110. Kumar, T. V. (2024). A Comparison of SQL and NO-SQL Database Management Systems for Unstructured Data.
111. Kumar, T. V. (2024). A Comprehensive Empirical Study Determining Practitioners' Views on Docker Development Difficulties: Stack Overflow Analysis.
112. Kumar, T. V. (2024). Developments and Uses of Generative Artificial Intelligence and Present Experimental Data on the Impact on Productivity Applying Artificial Intelligence that is Generative.
113. Kumar, T. V. (2024). A New Framework and Performance Assessment Method for Distributed Deep Neural NetworkBased Middleware for Cyberattack Detection in the Smart IoT Ecosystem.
114. Sharma, S., & Dutta, N. (2024). Examining ChatGPT's and Other Models' Potential to Improve the Security Environment using Generative AI for Cybersecurity.
115. Sharma, S., & Dutta, N. (2016). Analysing Anomaly Process Detection using Classification Methods and Negative Selection Algorithms.
116. Sakshi, S. (2023). Development of a Project Risk Management System based on Industry 4.0 Technology and its Practical Implications.
117. Madar, B., Kumar, G. K., & Ramakrishna, C. (2017). Captcha breaking using segmentation and morphological operations. *International Journal of Computer Applications*, 166(4), 34-38.
118. Naik, R., Rao, P. R., & Madar, B. (2016). Cleaning of sensitive data in the cloud using Monitoring as a service. *International Journal of Computing*, 5(3).
119. Rani, M. S., & Dorthi, K. (2022, June). An Empirical Study on Package Query Processing System using Parallel Processing Mechanisms. In *2022 7th International Conference on Communication and Electronics Systems (ICCES)* (pp. 1571-1575). IEEE.
120. Reddy, T., & Prasad, T. S. D., Swetha, S., Nirmala, G., & Ram, P. (2018). A study on antiplatelets and anticoagulants utilisation in a tertiary care hospital. *International Journal of Pharmaceutical and Clinical Research*, 10, 155-161.

- 121.Shakeel, M., Rao, C. L., Prasad, T. S., Alam, T., Rawat, N., & Kavitha, R. (2023, May). An examination of cybersecurity threats and authentication systems. In *2023 3rd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE)* (pp. 2727-2731). IEEE.
- 122.Teegala, S. P., Vijai, C., Nagpal, A., Anuradha, R., Aljori, A., & Swathi, B. (2023, December). Enhanced Authentication Methods for Access and Control Management in Cloud Computing. In *2023 10th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)* (Vol. 10, pp. 1673-1677). IEEE.
- 123.Teegala, S. P., & Rao, C. G. (2022, March). A Novel Authentication Mechanism for SecureData Access based on Encryption Key Sharing for Cloud Web Application. In *2022 8th International Conference on Advanced Computing and Communication Systems (ICACCS)* (Vol. 1, pp. 1890-1897). IEEE.
- 124.Viswanatha, V., Ramachandra, A. C., Prasanna, R. R., Kakarla, P. C., Simha, P. V., & Mohan, N. (2022). *Implementation of Tiny Machine Learning Models on Arduino 33-BLE for Gesture and Speech Recognition* (No. 8495). EasyChair.
- 125.Prasanna, R., Kakarla, P. C., PJ, V. S., & Mohan, N. (2022). Implementation of tiny machine learning models on arduino 33 ble for gesture and speech recognition. *arXiv preprint arXiv:2207.12866*.
- 126.AC, R., Chowdary Kakarla, P., Simha PJ, V., & Mohan, N. (2022). Implementation of Tiny Machine Learning Models on Arduino 33-BLE for Gesture and Speech Recognition. AC, R., Chowdary Kakarla, P., Simha PJ, V., & Mohan, N. (2022). Implementation of Tiny Machine Learning Models on Arduino 33-BLE for Gesture and Speech Recognition.
- 127.Pabba, C., & Kumar, P. (2022). An intelligent system for monitoring students' engagement in large classroom teaching through facial expression recognition. *Expert Systems*, 39(1), e12839.
- 128.Pabba, C., Bhardwaj, V., & Kumar, P. (2024). A visual intelligent system for students' behavior classification using body pose and facial features in a smart classroom. *Multimedia Tools and Applications*, 83(12), 36975-37005.
- 129.Reddy, A. S., Chakradhar, P., & Santosh, T. (2018). Demand forecasting and demand supply management of vegetables in India: a review and prospect. *Int J Comput Technol*, 17(1), 7170-7178.
- 130.Pabba, C., & Kumar, P. (2024). A vision-based multi-cues approach for individual students' and overall class engagement monitoring in smart classroom environments. *Multimedia Tools and Applications*, 83(17), 52621-52652.
- 131.Nagaraj, P., Banala, R., & Prasad, A. K. (2021, August). Real time face recognition using effective supervised machine learning algorithms. In *Journal of Physics: Conference Series* (Vol. 1998, No. 1, p. 012007). IOP Publishing.
- 132.Nagaraj, P., Prasad, A. K., Narsimha, V. B., & Sujatha, B. (2022). Swine flu Detection and Location using Machine Learning Techniques and GIS. *International Journal of Advanced Computer Science and Applications*, 13(9).
- 133.Nagaraj, P., Phebe, G. S., & Singh, A. (2021, November). A Novel Technique to Classify Face Mask for Human Safety. In *2021 Sixth International Conference on Image Information Processing (ICIIP)* (Vol. 6, pp. 235-239). IEEE.
- 134.Nagaraj, P., Prasad, D. A. K., Dass, D. M. V., & Kumar, K. R. (2022). Swine Flu Hotspot Prediction In Regions Based on Dynamic Hotspot Detection Algorithm. *Journal of Theoretical and Applied Information Technology (JATIT)*, 30.
- 135.Priyanka, J. H., & Parveen, N. (2022). Online employment portal architecture based on expert system. *Indones. J. Electr. Eng. Comput. Sci*, 25(3), 1731-1735.
- 136.Priyanka, J. H., & Parveen, N. (2024). DeepSkillNER: an automatic screening and ranking of resumes using hybrid deep learning and enhanced spectral clustering approach. *Multimedia Tools and Applications*, 83(16), 47503-47530.
- 137.Jammalamadaka, S. B., Duvvuri, B. K., Jammalamadaka, K. S., & Priyanka, J. H. (2019). Automating WEB interface in relation to user behaviour. In *First International Conference on Artificial Intelligence and Cognitive Computing: AICC 2018* (pp. 91-102). Springer Singapore.
- 138.Sathish, S., Thangavel, K., & Boopathi, S. (2011). Comparative analysis of DSR, FSR and ZRP routing protocols in MANET. In *International Conference on Information and Network Technology IPCSIT vol* (Vol. 4).
- 139.Sathish, S., Thangavel, K., & Boopathi, S. (2010). Performance analysis of DSR, AODV, FSR and ZRP routing protocols in MANET. *MES Journal of Technology and Management*, 57-61.

140. Murali, V., & Boopathi, S. (2014). A Comparative Analysis of Various Segmentation Techniques in Brain Tumor Image. *International Journal of Application or Innovation in Engineering & Management (IJAIEEM)*, ISSN, 2319-4847.
141. Balaraju, J., & Prasada Rao, P. V. R. D. (2019). Designing authentication for Hadoop Cluster using DNA algorithm. *Int. J. Recent. Technol. Eng.(IJRTE)*, 8(3).
142. Balaraju, J., & Prasada Rao, P. V. R. D. (2020). Innovative secure authentication interface for Hadoop cluster using DNA cryptography: A practical study. In *Soft Computing and Signal Processing: Proceedings of 2nd ICSCSP 2019 2* (pp. 17-29). Springer Singapore.
143. Balaraju, J., & Prasada Rao, P. V. R. D. (2018). Recent advances in big data storage and security schemas of HDFS: a survey. *Journal of Engineering Technology. Special Issue (Emerging Trends in Engineering Technology)*, 118(24), 132-138.
144. Balaraju, J., & Prasada Rao, P. V. R. D. (2020). Investigation and finding a DNA cryptography layer for securing data in Hadoop cluster. *Int. J. Advance Soft Comput. Appl*, 12(3).