

Pro Planet Person APP

Thrisha Reddy Yelapati¹, Lohith Reddy Sanjamgari², Suma Narmeta³, Dr. J Himabindu Priyanka⁴

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

21eg105g30@gmail.com

Abstract. The application leverages gamification and personalized recommendations to encourage eco-friendly behaviors, track environmental impact, and reward users for their commitment to protecting the planet. By integrating features such as daily challenges, educational content, and a community leaderboard, the app seeks to empower individuals to make positive changes in their daily lives while building a community of like-minded environmental enthusiasts.

Keywords: Sustainable development, Gamified Challenges, Green Information Systems.

1 INTRODUCTION

A platform designed to recognize environmentally conscious individuals and engage them in daily tasks aimed at transforming them into pro-planet persons. This application enables users to live more environmentally responsible lives. It teaches users with interesting material, gamifies learning through daily eco-tips. Global institutions like United nations have long voiced the critical role of engineers play in solving the world's sustainable challenges. This requires universities to redefine the connotation attached to "becoming an engineer" [1]. One popularly known learning strategy to integrate sustainability in a flexible manner in education is gamification. There is growing evidence on how game-based learning apps can help expand student perspectives on complex concepts like sustainability through critical reflection facilitated by interpersonal communication [2]. The first piece of work consists of the research on the meaning of integrating sustainability in design engineering education, and the main skills and competencies to address [4,5] There are different skills to consider when it comes to design engineers' education on sustainability. It also finds an echo in the twelve questions to address the integration of sustainability in engineering curricula identified in [5], The proposal from [4] is specifically dedicated to education in engineering and provide identified cross-disciplinary competencies for sustainability education, which are: critical thinking, working in an interdisciplinary group (collaboration), ability to solve problems (integrated resolution), system thinking, normative competence, self-knowledge, contextualization and vision of the future (anticipatory), strategic competence. The work consists of a descriptive study of experiments in educating engineers for sustainability. Case studies are documented and analysed using a specific assessment grid to evaluate the way education for sustainability is reached but also encounters specific difficulties. Many research papers discuss these topics such as [6], [7], [8], [9], [10], [11], [12]. Traditional environmental apps usually focus on providing information about sustainability practices, tracking carbon footprints, and offering tips for eco-friendly living. Many environmental organizations run awareness campaigns through websites, social media, and other platforms to educate the public about sustainability and eco-friendly practices. Innovative learning methods, Broadening perceptions, scalability showcases the importance of current work. The major objectives include promote environmental awareness, encourage sustainable practices, track and measure impact, enhance User Engagement.

2 RESEARCH METHODOLOGY

Through this study, we demonstrate how interactive pedagogy such as gamification can enhance interest in understanding sustainability. we contribute to the gamification by offering tailored recommendations to inspire eco-friendly actions, track users' environmental contributions, and reward their dedication to preserving the planet. With features like daily tasks, educational resources, and a community leaderboard, the platform motivates individuals to adopt sustainable habits in their everyday routines. By fostering a community of environmentally conscious users, the app empowers individuals to make meaningful changes while connecting with others who share the same passion for environmental sustainability. The gamification in

engineering education literature by disseminating two new gamified tools that can help universities, faculty, and researchers utilise and evaluate novel ways of integrating sustainability in their engineering courses.[3] The modifications include individual participation which empowers them to take sustainable steps.

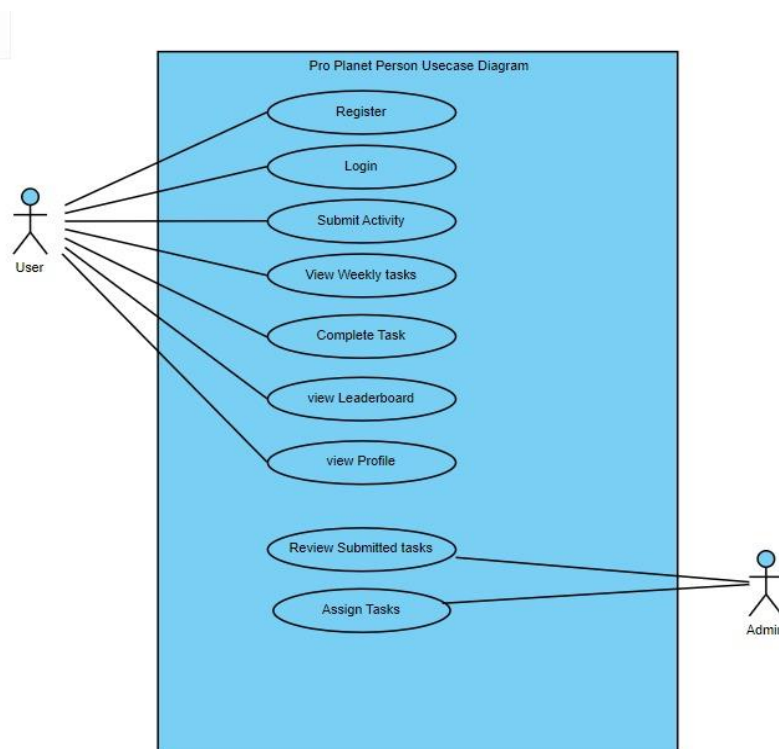


FIGURE 1: Use Case diagram for Pro Planet Person App

3 RESULTS AND DISCUSSION

The reflections revealed that participants effectively connected with the application's motivation and understood how each step in the game contributed to their progress. They recognized how these actions led to increased rewards and improved leaderboard standings, enhancing their overall experience. The coins integrated into the application foster a sense of healthy competition among users. The final results maintain transparency through a manual verification process, ensuring that all participants make the necessary efforts and changes. This approach promotes fairness and accountability within the platform.

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: Game Dynamics and Estimated Timeline for each activity

Feature	Description	Estimated Time to complete	Impact on Leaderboard
Daily and weekly Challenges	Users are assigned eco-friendly tasks to complete daily tasks. (e.g. recycling)	10 – 20 minutes	Completion of daily tasks earns users pro planet coins, increasing leaderboard ranking.
Pro Planet Verification	Users Submit proof completing eco-friendly tasks for admin review.	5 – 10 minutes	Verified tasks contribute significantly to earn coins boosting leaderboard position.
Educational Content	Interactive questions to raise awareness.	5-10 minutes	Completing quizzes tied to content can provide extra bonus points slightly influencing the leaderboard.
Community Leaderboard	A public ranking system that displays the top users based on their pro planet coin earnings.	Continuous	Users position depend on their total pro planet coins, consistent participation improves ranking.
Proof of Submission	Users upload proof of achieving specific sustainability milestones.	5 – 10 minutes	Earn special badges and large number of coins, moving users up the leaderboard.



FIGURE 2: Logo of the Pro Planet Person App

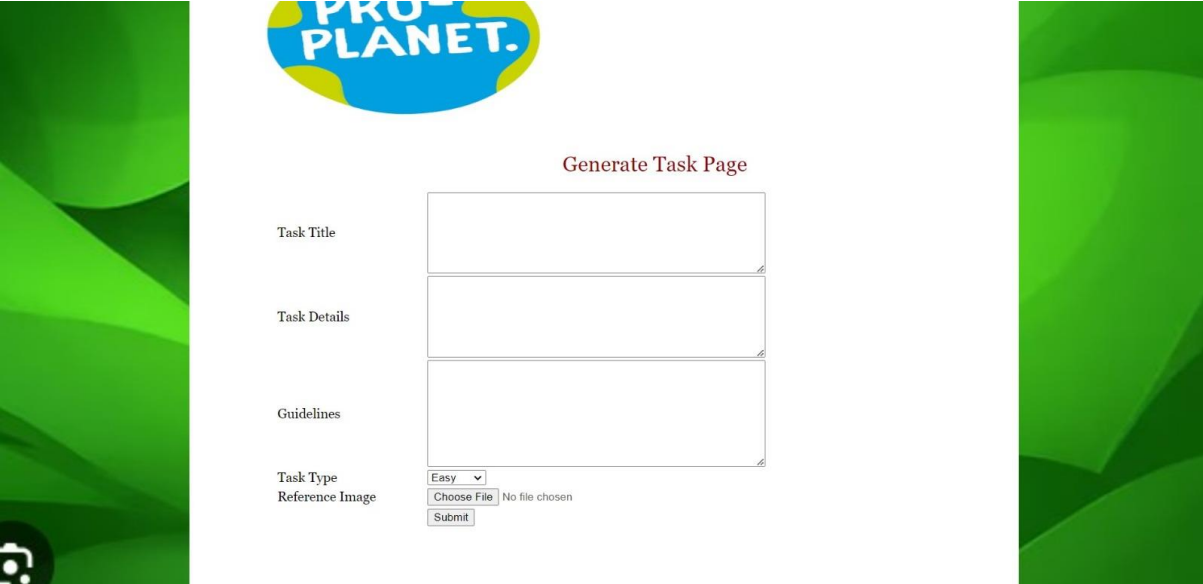


FIGURE 3: Generate Task Page



FIGURE 4: Task Details, type



FIGURE 5: proof of submission

4 DECLARATIONS

4.1 Study Limitations

None

4.2 Acknowledgements

We would like to express our heartfelt gratitude to all those who contributed to the development of Pro Planet Person App. Special thanks to our pilot users, whose feedback and participation during testing were crucial in refining the app’s features and functionality. Special mention to our guide who supported in

developing this application. Together, we can inspire positive change and create a community committed to protecting our planet.

4.3 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 its 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. Satyanarayana, 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., Haritha, 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., & Moparthi, 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., & Moparthi, 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 Network Based 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., Aljbori, 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 Secure Data 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).