

AWSAR-A Job Portal

Mr. M. Praveen Kumar¹, Resoju Sahitha², Dharmanna Prasanna Sai³, Durga Kavva⁴

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

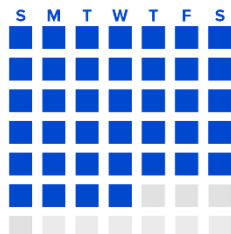
resojusahitha@gmail.com

Abstract. The AWSAR Job Portal is developed to provide job seekers with a platform to register, log in, and apply for jobs with ease. The purpose of this project was to create a full-stack web application, ensuring smooth user experience and addressing common challenges such as responsiveness and compatibility across browsers. The project used technologies like React.js, Tailwind CSS for frontend development, and Node.js with Express.js for backend management. MongoDB was implemented for database storage. The key challenge faced was the unresponsiveness of the 'Apply to a job' button post-login, which was successfully resolved through code optimization. This manuscript discusses the system's architecture, methodology, issues encountered, and future enhancements.

Keywords: Job portal, React.js, Node.js, Express.js, MongoDB, Full-stack development.

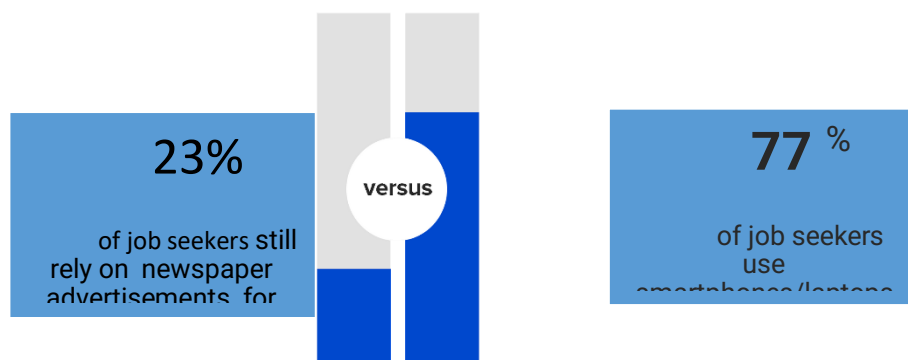
1 INTRODUCTION

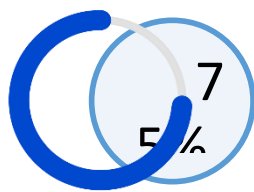
The AWSAR Job Portal was designed to address the growing need for job seekers to find and apply for jobs efficiently. Current job platforms often suffer from issues such as non-responsive designs, inefficient backend processing, and limited scalability. This research aims to create a full-stack web application that provides a seamless experience from registration to job application. The problem statement was primarily focused on improving the responsiveness of the interface, ensuring data security, and enhancing backend performance.



Filling a government vacancy, on an average, takes around

80 days and sometimes even up to 6 months.





of the candidates do not have the required **skills for the jobs** they apply to

Current Job Search Scenarios



The objective of this work was to design a dynamic job portal using modern technologies like React.js, Node.js, Express.js, and MongoDB. Recent advancements in full-stack development and the popularity of MERN (MongoDB, Express, React, Node) stack allowed for the creation of a scalable and efficient web application. The work also focuses on cross-browser compatibility and maintaining a clean, intuitive UI to attract users.

2 RESEARCH METHODOLOGY

The development process was divided into the frontend and backend phases:

Frontend: Developed using React.js for a dynamic and interactive user interface, paired with Tailwind CSS for styling. Vite.js was used as the build tool to speed up the development process.

Backend: Built using Node.js and Express.js, the backend handles user authentication, job postings, and interaction with the MongoDB database. Middleware functions were implemented for user authentication and error handling.

Database: MongoDB was chosen for its flexibility in managing unstructured data. It was used to store user credentials, job information, and applications.

Issue Resolution: During testing, the 'Apply to a job' button was found to be unresponsive post-login due to conflicts in JavaScript functions. This was resolved by reworking the state management of React components and ensuring compatibility across browsers.

3 THEORY AND CALCULATION

The AWSAR Job Portal relies on the theory of client-server architecture. In this system, the frontend (client) communicates with the backend (server) via RESTful APIs. This ensures that each job application request is processed asynchronously, preventing page reloads and improving the user experience.

For future development, the portal may incorporate recommendation algorithms based on user activity, which could involve mathematical models such as collaborative filtering and data clustering techniques. These models will help in enhancing the user experience by providing personalized job suggestions.

3.1 Mathematical Expressions and Symbols

No complex mathematical models or calculations were necessary for this project. The main focus was on frontend and backend development, so mathematical expressions are not applicable in this context. If equations were needed for features like job recommendation algorithms in future versions, they could involve statistical analysis and machine learning, which would be expressed using appropriate mathematical notation and tools.

4 RESULTS AND DISCUSSION

The AWSAR Job Portal was successfully developed using the MERN stack. The primary issue encountered was related to the unresponsiveness of the 'Apply to a job' button, which was due to conflicts in the JavaScript code managing state. This was resolved by optimizing the state management logic in React.js and ensuring cross-browser compatibility.

Testing showed that the portal worked efficiently on multiple browsers, and feedback from users emphasized the need for a smooth, mobile-responsive interface. Further improvements in UI design were made based on this feedback, ensuring that all key functions worked seamlessly across devices.

4.1.1 Preparation of Figures and Tables

- **Figure 1:** Overview of AWSAR Job Portal's user interface.



FIGURE 1.1:A Job Portal UI

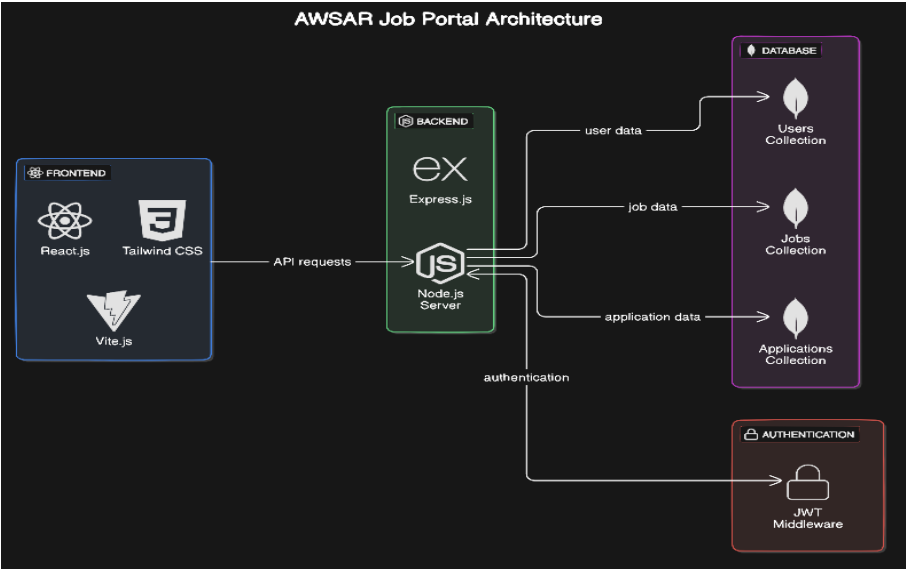


FIGURE 1.2. Architecture Diagram

Tables should be formatted using Microsoft Word’s table tool. For example:

- **TABLE 1:** Breakdown of frontend and backend technologies used.

Technology	Purpose	Description
React.js	Frontend Framework	JavaScript library for building user interfaces and managing the application state.
Tailwind CSS	Frontend Styling	A utility-first CSS framework for creating responsive and mobile-first designs.
Vite.js	Frontend Build Tool	A faster build tool for compiling and bundling the frontend components.
Node.js	Backend Runtime	A JavaScript runtime used to execute server-side logic.
Express.js	Backend Framework	A lightweight web application framework for Node.js used to create RESTful APIs.
MongoDB	Database	NoSQL database for storing user credentials, job postings, and applications.
Bcrypt.js	Security(Password Hashing)	A library used for encrypting passwords to ensure secure storage.
Postman	API Testing	Tool used to test and document RESTful API endpoints during development.

● **Table 2:** RESTful API routes and their respective functions.

API Route	Method	Description	Function
/register	POST	Registers a new user	Accepts user data, validates it, and saves the user to the database.
/login	POST	Logs in an existing user	Authenticates the user by checking email and password, returning a JWT token.
/jobs	GET	Retrieves a list of available jobs	Fetches all jobs from the database and returns them to the frontend.
/apply-job/:id	POST	Applies for a specific job	Allows a logged-in user to apply for a job, saving application data.
/user/:id	GET	Retrieves user profile information	Returns user-specific information such as applied jobs and profile details.
/logout	POST	Logs out the user	Invalidates the user session and logs the user out.

4.1.2 Formatting Figures

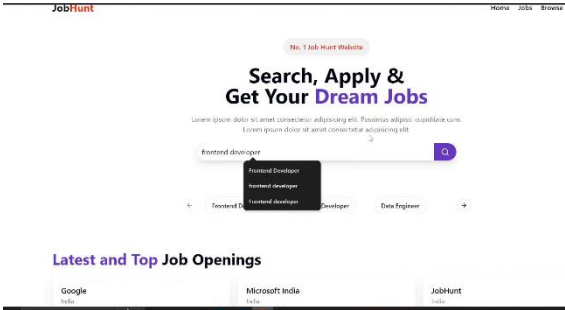


FIGURE 2:Search and applying of jobs

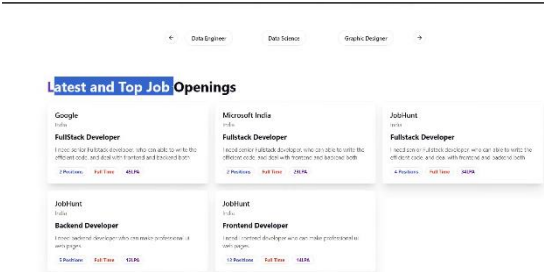


FIGURE 3: List of latest jobs

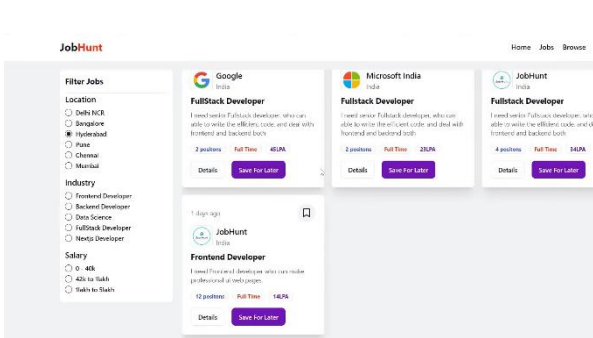


FIGURE 4:Jobs openings

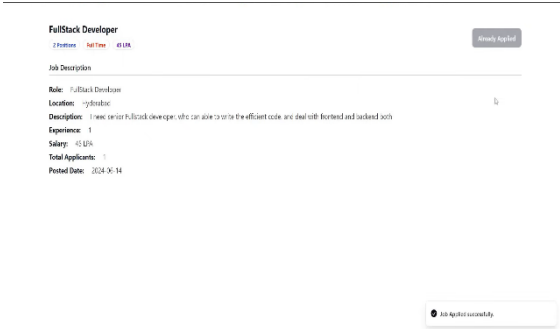


FIGURE 5:Job Applications

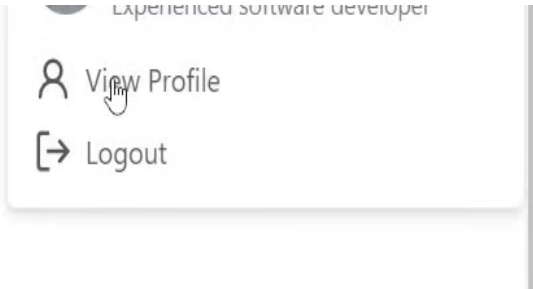


FIGURE 6:User Profile

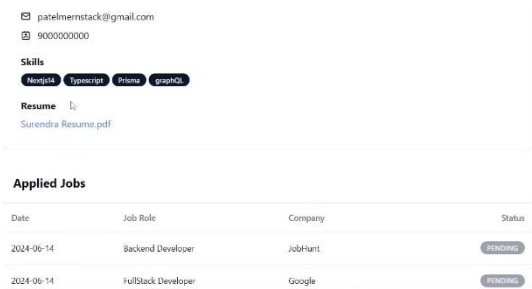


FIGURE 7:Information of user

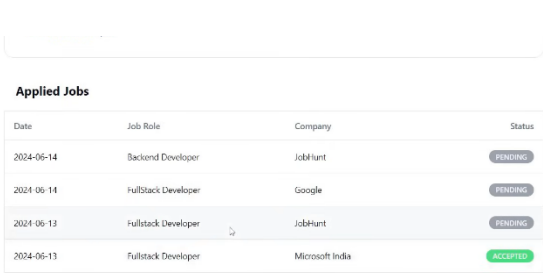


FIGURE 8:Application Status

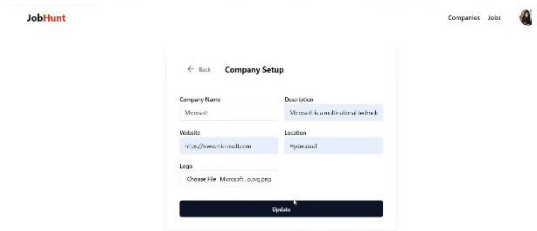
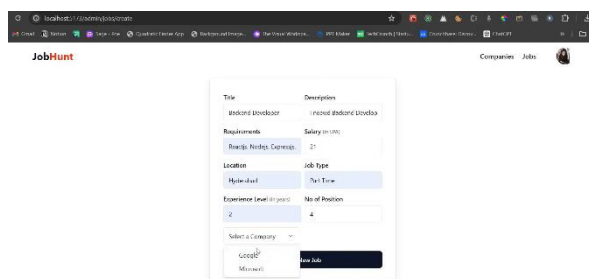
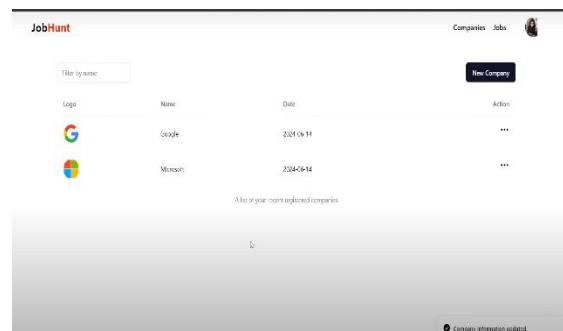


FIGURE 9:company setup/registration

**FIGURE 10:**Job Posting**FIGURE 11:**Dashboard of companies and postings recruiter view

The AWSAR Job Portal is a robust and scalable full-stack application that successfully addresses the common challenges of job search platforms. The project highlighted the importance of responsive design and cross-browser compatibility, which were achieved using React.js and Tailwind CSS. Backend functionality was powered by Node.js and Express.js, providing a seamless experience for job seekers to register and apply for jobs.

Although the initial issue of button responsiveness posed a challenge, it was successfully resolved. Future enhancements will focus on implementing job recommendation systems and improving security features.

5 CONCLUSIONS

The AWSAR Job Portal is a robust and scalable full-stack application that successfully addresses the common challenges of job search platforms. The project highlighted the importance of responsive design and cross-browser compatibility, which were achieved using React.js and Tailwind CSS. Backend functionality was powered by Node.js and Express.js, providing a seamless experience for job seekers to register and apply for jobs.

Although the initial issue of button responsiveness posed a challenge, it was successfully resolved. Future enhancements will focus on implementing job recommendation systems and improving security features.

6 DECLARATIONS

6.1 Study Limitations

The major limitation encountered during this study was the unresponsiveness of the 'Apply to a job' button due to JavaScript conflicts, which were resolved. Additional improvements may be needed to optimize mobile performance and ensure compatibility with less commonly used browsers.

6.2 Acknowledgements

We would like to express our gratitude to our mentors for their valuable guidance throughout the project. Special thanks to the team for their efforts in developing and testing the job portal. We also thank [Institution Name] for providing the necessary resources and platform for the development of this project.

6.3 Funding source

None. This project did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

6.4 Competing Interests

None. The authors declare that there are no competing interests regarding the publication of this manuscript.

7 HUMAN AND ANIMAL RELATED STUDY

7.1 Ethical Approval

Not applicable. This study does not involve human or animal subjects, and therefore, no ethical approval is required.

7.2 Informed Consent

Not applicable. As no human participants were involved in this research, informed consent is not required.

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. 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., 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., Patten, 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 Indutrial 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 Enabledthe 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., 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 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).