INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

A Web-Based Recruitment and Placement Management System

Kadali Gayathri Sowmya[1], Magapu Sai Harshitha[2], Medisetti Mohan Dileep[3], Malleswarapu Hari Durga Bhanu Prasad[4], Ponakala Uday Satya Pavan Kumar[5], Isukapatla Papa[6]

[1,2,3,4,5]Department of Artificial Intelligence and Machine Learning, Affiliated to JNTU Kakinada, Andhra Pradesh, India

[6]Department of Artificial Intelligence and Machine Learning,

[1,2,3,4,5,6] Bonam Venkata Chalamayya Engineering College, Affiliated to JNTU Kakinada, Andhra Pradesh, India

Abstract: Campus recruiting and placement operations have become increasingly complicated and difficult to handle due to the expansion of higher education institutions and the rising number of graduating students. The placement process is still managed by old manual techniques or partially automated systems in many schools and universities, which frequently results in a number of operational problems. Data redundancy, improper record administration, delayed communication between recruiters and students, trouble monitoring student eligibility, and a lack of openness in the recruiting process are some of these problems. These traditional processes become ineffective, time-consuming, and vulnerable to human error as the number of students and participating firms rises annually. An automated and integrated platform that can efficiently oversee the hiring and placement process at educational institutions is therefore desperately needed. It is a web-based program created to automate and expedite the university recruiting process, is designed and implemented in this study. In order to facilitate seamless coordination and effective administration of placement operations, the suggested system offers a centralized platform that links recruiters, placement officials, and students. Students can use the system to apply for jobs that meet their qualifying requirements, submit resumes, update their academic and personal profiles, and register online. Using an administrative dashboard, placement managers may oversee corporate registrations, plan recruiting drives, issue job announcements, confirm student eligibility, and track the overall placement process. Conversely, recruiters may check the profiles of qualified candidates, select candidates, and handle the hiring process more effectively. Modern full-stack web technologies are used in the system's development to guarantee performance, scalability, and dependability. React.js is used to create the frontend, offering various stakeholders an interactive and responsive user experience. The Spring Boot framework, which facilitates reliable application development and effective management of server-side logic, is used in the creation of the backend services. Recruitment data, job listings, corporate information, and student records are all stored and managed using MySQL, a relational database management system. The implementation of RESTful APIs ensures effective data interchange and system integration by facilitating smooth connection between the frontend interface and backend services.

Keywords: Recruitment and placement management, campus placement system, full-stack Java application, Spring Boot, React.js, MySQL database, RESTful APIs, eligibility verification, role-based access control, recruitment analytics.

I. INDRODUCTION

The Smart Recruitment and Placement Management System simplifies the campus recruitment procedure. It replaces fragmented communication and handwritten documentation with an integrated system that links administrators, recruiters, and students. The technology facilitates real-time tracking and open communication while automating eligibility verification, job postings, applications, and interview scheduling. The safe handling of private information is guaranteed by role-based access control. The system is scalable, dependable, and easy to use, thanks to its full-stack Java architecture. Efficiency and decision-making are enhanced by analytical dashboards and centralized data storage. All things considered, it provides a cutting-edge, technologically advanced approach to efficient institutional hiring administration. Modern full-stack technologies are used in the system's development to guarantee performance, scalability, and dependability. React.js is used in the frontend interface's construction to offer a dynamic and intuitive user experience. The Spring Boot framework, which facilitates effective management of business logic and system activities, is used in the development of the backend. The database management system used to safely store and handle placement-related data is MySQL. The suggested solution decreases human labor and boosts operational effectiveness by automating crucial placement tasks such applicant registration, eligibility verification, job announcements, and application management. Additionally, it guarantees openness in the hiring process and improves communication between parties.

The efficiency of campus placement management in contemporary educational institutions may be greatly increased by putting such a system in place. As a result, the recruiting and Employment Administration System offers an organized and technologically advanced method of handling recruiting activities, assisting organizations in effectively managing extensive placement operations that are advantageous to both recruiters and students.

A. Background and Motivation

The complexity of campus placement procedures has increased due to the notable expansion of higher education in India, rising student enrollment, and increased recruiter engagement. Despite these advancements, a lot of organizations still rely on traditional or partially digital techniques like spreadsheets and email correspondence, which can lead to mistakes, delays, and inadequate coordination. The Smart recruiting and Placement Management System (SRPMS), a comprehensive web-based platform that automates and manages the whole recruiting lifecycle, is presented to get around these restrictions. The solution enhances operational productivity, preserves data integrity, fortifies communication channels, and provides a scalable and transparent framework that adapts to the evolving requirements of academic institutions and business partners by utilizing contemporary full-stack technology.

B. Problem Statement

Many higher education institutions still handle campus recruitment using manual or disjointed digital systems like Excel spreadsheets, email messages, and standalone databases. This causes problems like erroneous admissions checks, duplicate information, poor offer tracking, communication delays, and scheduling conflicts. These conventional approaches become ineffective and challenging to scale as student enrollment and recruiter participation increase. In order to overcome these obstacles, this project suggests a centralized, secure recruiting along with Placement Management System built with Full Stack Java technologies, such as MySQL, Spring Boot, and RESTful APIs, in order to streamline and automate the whole recruitment lifecycle while enhancing productivity, consistency of data, openness, and interaction between stakeholders.

C. Objectives

The primary objectives of the proposed system are:

1) To create and put into use a centralized web-based system for managing recruitment and placement.
2) To automate the processes of resume posting, profile management, and student registration.
3) To put in place automatic eligibility screening based on recruiter specifications and academic standards.
4) To provide a safe, organized interface for job posting and business onboarding.
5) To make it possible to schedule interviews effectively and notify recruiters and students in real time.
6) To create a secure backend system with role-based access control and authentication using Spring Boot.
7) To incorporate a MySQL database for dependable data administration, retrieval, and storage.
8) To offer clear tracking of offers and placement status.
9) To guarantee data accuracy, scalability, and enhanced communication between recruiters, placement officials, and students.
10) To produce analytics and reports for organizational decision-making and achievement assessment.

D. Contributions and Paper Organisation

In order to expedite college recruitment procedures, the proposed Recruiting & Employment Administration System serves as a centralized, internet-based platform constructed utilizing Full Stack Java technology. It integrates Spring Boot, MySQL, and RESTful APIs. In a safe, role-based setting, it automates crucial tasks including enrollment for students, portfolio management, qualification screening, job advertisement, interviews arranging, and offer monitoring. The solution guarantees flexibility and data security while improving communication, transparency, and immediate feedback to learners, hiring managers, and placements officials. The introductory section and background, related research, platform design and architecture, implementation specifics, experiment evaluation, results and benefits, and future improvements are all covered in the paper's structure.

II.   LITERATURE SURVEY

The growing expansion of higher education institutions and digital transformation initiatives have drawn more attention to the automation of recruitment and placement processes. Conventional school recruitment systems frequently produced inefficiencies and inconsistent data because they mostly relied on manual recordkeeping, spreadsheet administration, and email-based

International Journal for Research in Applied Science & Engineering Technology (IJRASET)

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 14 Issue III Mar 2026- Available at www.ijraset.com

communication. Recent research highlights the necessity of integrated web-based solutions that improve stakeholder coordination, consolidate recruitment operations, and increase transparency. In this field, Full Stack Java technologies—in particular, Spring Boot and relational database systems like MySQL—have become dependable frameworks for creating scalable and secure enterprise applications.

A. Systems for Web-Based Hiring Management

Using simple online portals, early recruitment management systems mainly concentrated on digitizing student records and job postings. These systems frequently lacked real-time synchronization between frontend and backend components and offered very little automation. According to research, RESTful architecture greatly improves the responsiveness and modularity of current web applications. Recruitment platforms' scalability and maintainability are enhanced by the use of Spring Boot, which facilitates quick backend development, dependency management, and microservice-based architecture.

B. Automation in Resume Management and Eligibility Filtering

One important area of research for campus placement systems has been automated eligibility verification. Manual verification procedures are prone to delays and human mistake. Modern systems include rule-based filtering processes that dynamically assess recruitment requirements, talents, and academic criteria. Research shows that employing structured queries for database-driven filtering increases accuracy and speeds up processing. Effective data storage, retrieval, and structured applicant profiling are made possible by resume management modules that are integrated with relational databases like MySQL.

C. Role-Based Access Control and Secure Authentication

Data privacy and security are essential components of recruitment platforms. The use of role-based access control (RBAC) and authentication techniques to safeguard private student and recruiter data is emphasized in the literature. When used with Spring Boot, frameworks such as Spring Security offer strong session management, authentication, and authorization capabilities. Studies show that encrypted database transactions and secure API communication improve system stability and confidence in institutional settings.

D. Integrated and Scalable Full Stack Architectures

According to literature, scalable structures that utilize relational database platforms like MySQL guarantee reliable performance regardless of increasing user loads. Integrated platforms that combine automation, secure data handling, and real-time communication significantly outperform traditional fragmented placement management methods. Recent developments in full stack development advocate the separation of frontend and backend services using RESTful APIs for better modularity and scalability. Frontend technologies like React.js combined with Spring Boot backend services enable dynamic user interfaces and real-time updates.

III. PROPOSED METHODOLOGY

The suggested Recruitment and Placement Management System is a web-based program created with Full Stack Java technology. The technology is intended to automate and simplify the hiring procedure in corporations or educational institutions. It offers a single platform to effectively manage placement operations for recruiters, administrators, and students.

A. Overall System Workflow

The system has a modular client-server design, with the database managing structured data storage, the frontend handling user interaction, and the backend handling business logic. User registration, profile maintenance, job posting, application monitoring, and placement reporting are all part of the workflow.

The system is built using Full Stack Java technologies:

- Frontend: HTML, CSS, JavaScript, Bootstrap
- Backend: Java, Servlets, JSP, Spring Boot (optional)
- Database: MySQL
- Server: Apache Tomcat

The workflow can be summarised as follows:
1) User Registration and Login
2) Profile Creation/Management
3) Job Posting by Recruiters
4) Job Application by Students
5) Application Screening
6) Interview Scheduling
7) Selection and Placement Status Update
8) Report Generation

This structured approach ensures modularity, maintainability, and scalability.
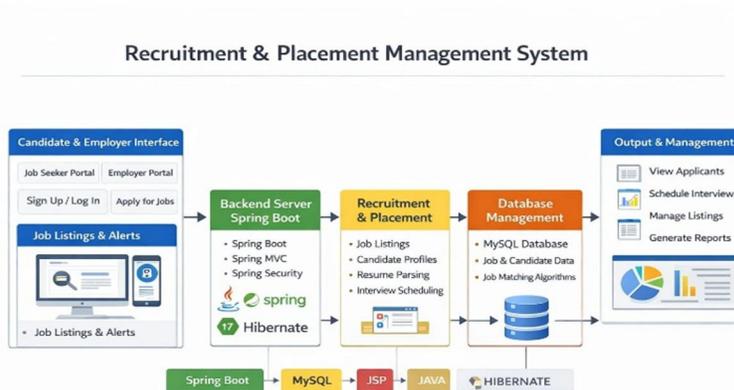
B. User Modules

One of the main parts in the Employment Recruitment and Placing Administration System is the User Module. It oversees all user-related features, such as access control, profile management, authentication, and registration. The module is intended to protect data security and role-based access while facilitating safe communication between various stakeholders, including administrators, recruiters, and students.

1) Student Module: Through a single dashboard, users can safely register and log in, establish and manage their profiles, upload resumes, check job vacancies, apply for appropriate positions, and track the progress of their applications.
2) Recruiter Module: Through a single platform, the Recruiter Module enables businesses to effectively manage their employment process. To draw in qualified applicants, recruiters may post job vacancies, register their firm information, and specify eligibility requirements. Additionally, they have the ability to review student applications, shortlist eligible candidates, and modify the selection status as necessary. This efficient technique makes hiring easier and enables businesses to get in touch with qualified applicants more rapidly.
3) Admin Module: To guarantee seamless and safe operations, the Admin Module supervises and controls the whole system. The administrator is in charge of handling student and recruiter data, authorizing user registrations, and keeping an eye on job posts to ensure their relevancy and validity. The administrator also creates placement reports and makes sure the system is secure overall. By managing these crucial duties, the administrator ensures the platform operates effectively and preserves data integrity.

C. System Architecture

The Recruitment and Placement Management System follows a three-tier architecture:
1) Presentation Layer
2) Business Logic Layer
3) Data Access Layer
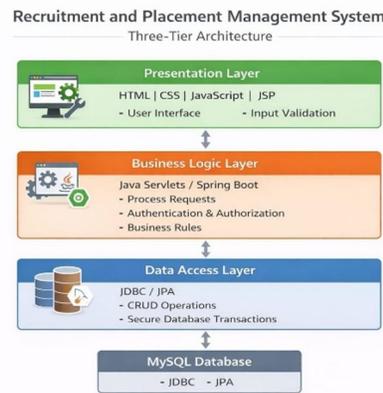
Presentation, Business Logic, and Data Access layers make up the three-tier architecture used in the design of the Recruitment and Placement Management System. The Presentation Layer creates user-friendly interfaces and validates inputs using HTML, CSS, JavaScript, and JSP. Request processing, authentication, and business rules are handled by the Business Logic Layer, which is constructed using Java Servlets or Spring Boot. For secure database connectivity and CRUD activities, the Data Access Layer makes use of JDBC or JPA, which enhances scalability and maintainability.

D. Database Design

The system has a multilingual translation module that allows users to select their favorite output language using a pre-established language mapping system in order to improve accessibility. The technology automatically translates the text before moving on to speech synthesis if the selected language differs from the original input.

The system uses a MySQL database to store structured data. Major tables include:

1) Student Table
2) Recruiter Table
3) Job Posting Table
4) Application Table
5) Interview Schedule Table
6) Placement Records Table.

E. Functional Modules

To guarantee thorough recruiting management, the system consists of four essential parts. To safeguard user data, the Authentication Module offers secure login and registration, role-based access control, and password encryption. Throughout the hiring process, the Job Management Module enables the creation and modification of job ads, eligibility-based applicant screening, and application tracking.

The module performs the following steps:

1) Authentication Module
2) Job Management Module
3) Resume Management Module
4) Reporting Module

In order to retain correct applicant information, the Resume Management Module makes it easier to submit resumes, amend profiles, and verify documents. Lastly, in order to facilitate data-driven decision-making, the Reporting Module produces comprehensive placement statistics, company-specific recruiting reports, and student eligibility reports.

F. System Advantages

The suggested system has a number of advantages:

1) Automated hiring procedure
2) Centralized administration of data
3) Less paperwork

4) Status changes in real time
5) Enhanced contact between recruiters and students
6) Scalable and safe architecture
*7)* Access control based on roles

By centralizing data management and automating operations, the suggested solution greatly reduces paperwork during the hiring process. For a more seamless experience, it improves communication between recruiters and students and offers real-time progress updates. Furthermore, the system's strong design and role-based access control provide security and scalability.

IV.   EVALUATION AND RESULTS

The proposed Smart Recruitment and Placement Management System (SRPMS) was evaluated with an emphasis on a number of key factors, including system functionality, performance efficiency, usability, and data management efficacy. To evaluate dependability, real-time processing, and workflow efficiency, the system was evaluated using a variety of user roles (admin, recruiter, and applicant) and data kinds (resumes, job advertisements, and application forms).

A.   User Interface and Usability Analysis
The front-end interface was created with ease of use and smooth module navigation in mind. Important characteristics consist of:
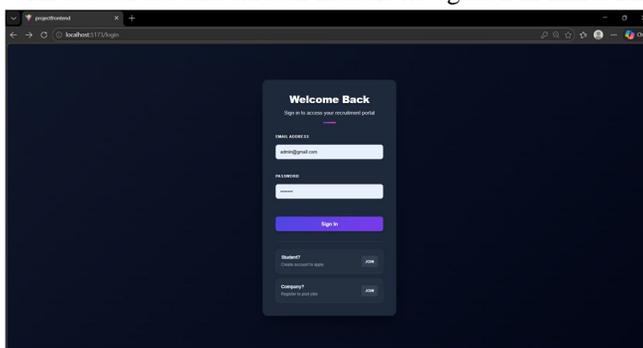

1) Dashboard: Role-based dashboards that provide pertinent tasks and alerts for administrators, recruiters, and applicants.
2) Candidate Management: Candidates may easily register, update their profiles, and submit their resumes.
3) Job Posting & Applications: With little work, recruiters may post jobs, review applications, and shortlist applicants.
4) Interactive Workflow: Users may interact within the system, plan interviews, and monitor the status of their applications.
5) Security & Personalization: Secure data management is ensured by role-based access restriction, history monitoring, and login authentication.

Smooth navigation, quick reaction times, and high satisfaction across various user roles were found during user testing.
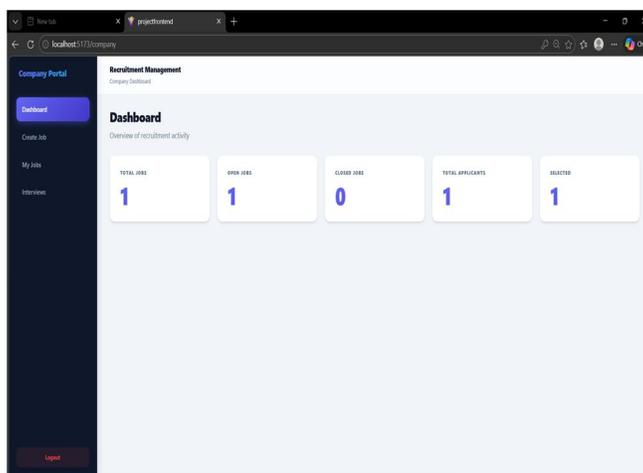
B.   Functional Evaluation

The To test key features, the system was assessed using a variety of inputs:
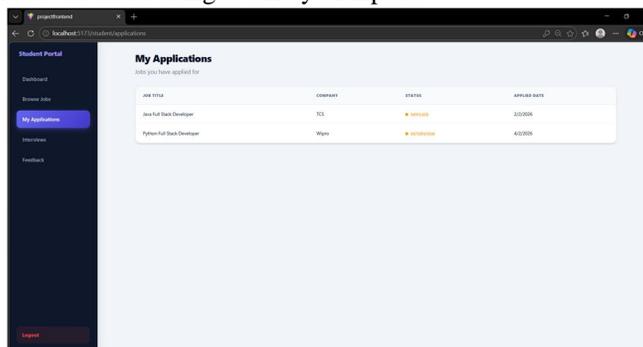

Upload and validate resumes in a variety of formats (PDF, DOCX) with accurate processing and no format issues.

1)   Data extraction: Precise extraction of candidate information, such as experience, education, and abilities.

2)   Job Matching Module: Uses skill and keyword-based algorithms to effectively match candidate profiles with job requirements.

3)   Application tracking: Offers up-to-date information on the status of candidates and the advancement of hiring.

4)   Interview Scheduling & Notifications: Automates the scheduling process and promptly notifies recruiters and applicants.

5)   Interview Scheduling & Notifications: Automates the scheduling process and promptly notifies recruiters and applicants.

As a result, there were no crashes or noticeable delays in any of the modules.

C.   Performance Analysis

Performance evaluation with an emphasis on accuracy, speed, and dependability:
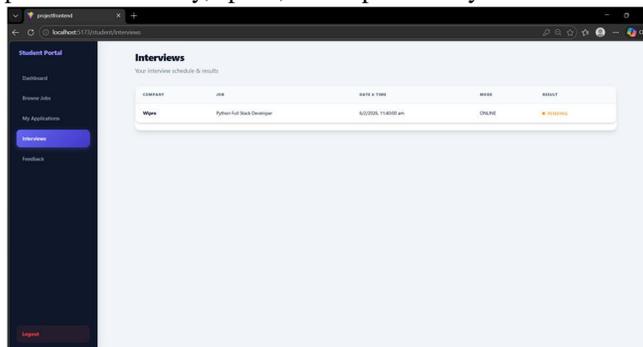
1)   Time Spent Processing:
  o   Depending on the size of the file, resume processing and job matching are completed in a matter of seconds.
  o   There is little delay in the delivery of notifications and status updates.

2)   Precision:
  o   Information about candidates is accurately retrieved and compared to the job specifications.
  o   Reports on the status of applications, interview times, and shortlisted applicants are accurate.

3)   System Dependability:
  o   During repeated tests, there were no notable runtime problems.
  o   The backend server effectively manages many requests at once.

As a result, even with modest hardware configurations, full-stack Java architecture guarantees seamless performance.

D.   Search and Related Data Retrieval Module

To improve the effectiveness of hiring, the system includes an Intelligent Search and Data Retrieval Module. With the help of this module, recruiters may quickly find qualified candidates by conducting keyword-based searches across candidate resumes, abilities, and professional experiences. Additionally, the job-candidate matching tool expedites the selection process by automatically recommending qualified individuals for certain job posts. Because the search feature is completely interwoven into the hiring

process, application processing, applicant shortlisting, and interview scheduling can all be done immediately from search results. As a result, the system provides precise search results quickly, greatly increasing recruiter productivity and facilitating well-informed, data-driven decision-making.
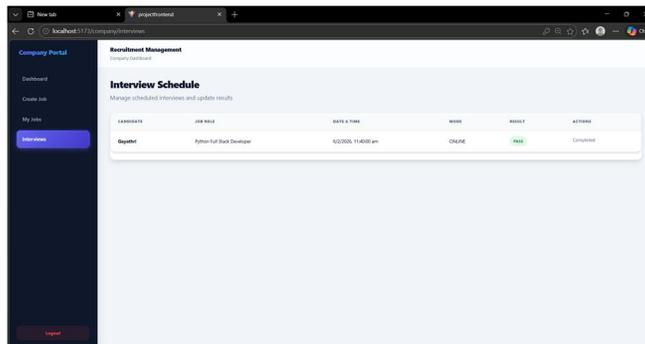

E. Comparative Discussion

In contrast to conventional hiring methods, SRPMS offers:

1) Automated job matching and resume processing
2) Application tracking and alerts in real time
3) Safe authentication and multi-role access
4) Integrated reporting and scheduling of interviews

Predictive recruiting analytics may be provided by AI-powered recruitment systems, although they frequently need a lot of processing capacity. For small to medium-sized businesses and educational institutions, the suggested full-stack Java system provides a balanced approach that combines functionality, efficiency, and scalability.
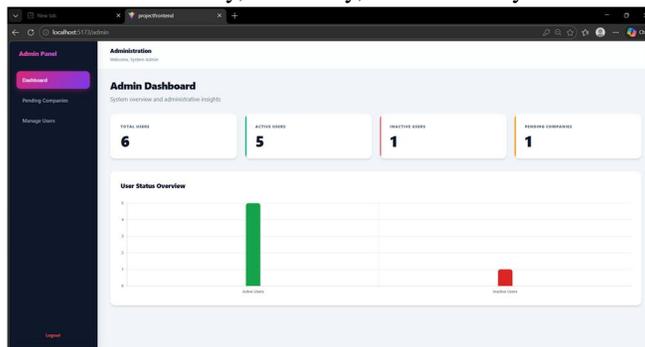
V.   DISCUSSION

A. Design Validation and Key Observations

A thorough functional test, usability assessment, and performance analysis were conducted on the suggested Smart Recruitment and Placement Management System (SRPMS). Every module—user authentication, candidate registration, resume upload, job posting, resume parsing, job matching, application tracking, interview scheduling, and notification services—operated in a sequential manner without experiencing any major system malfunctions.The system has a modular full-stack design that divides the database, backend (business logic and APIs), and frontend (user interface) layers. The scalability, maintainability, and simplicity of future updates are all improved by this tiered structure. Strong session management, safe authentication, and effective database connectivity are guaranteed by the usage of Java-based backend technology.

B. Limitations and Constraints

The Smart Recruitment and Placement Management System has many drawbacks despite its dependable performance. Performance may differ based on server load and concurrent users, and resume matching is primarily keyword-based without sophisticated semantic processing. Predictive recruiting analytics are not included in the system, and its interaction with external job sites is restricted. These drawbacks point to potential advancements like cloud scalability, AI-based recommendation systems, and sophisticated analytics capabilities.

C. Alignment with Literature Findings

The suggested system's emphasis on digitalization, process automation, and data-driven management is in line with recent research in smart recruiting and automated HR platforms. It includes essential features including consolidated databases, secure role-based access, automatic resume screening, and real-time tracking. It emphasizes useful, economical implementation utilizing full-stack Java, but it excludes sophisticated AI-based predictive analytics. The system improves decision-making, efficiency, and transparency in institutional and organizational contexts by combining essential recruiting procedures
onto a single platform.

VI. CONCLUSION

This paper presented a Smart Recruitment and Placement Management System developed using Full Stack Java, aiming to automate and streamline recruitment processes. The system offers safe, role-based access and centralized data management by efficiently combining applicant registration, resume processing, job matching, application tracking, and interview management into a single platform. The evaluation's findings show that hiring processes are more transparent, more efficient, and require less manual labor. The current implementation provides educational institutions and small-to-medium businesses with a scalable and useful framework, despite its reliance on keyword-based matching and lack of predictive analytics. To further improve decision-making and system intelligence, future work may concentrate on integrating cloud-based deployment, AI-driven candidate suggestions, and sophisticated analytics.

VII. ACKNOWLEDGMENT

REFERENCES

[1] Bhuvaneswaran B, Reshma R, Soniya V, "JobQuench: An Intelligent and Automated Placement Management System for Enhanced Campus Recruitment", Published in: 2025 Third International Conference on Augmented Intelligence and Sustainable Systems (ICAISS),Date of Conference: 21-23 May 2025, DOI: 10.1109/ICAISS61471.2025.11042066, Date Added to IEEE Xplore: 24 June 2025.

[2] Xiangpei Hu, Lirong Wu, Chao Li,Minfang Huang,"SMS-based Mobile Recommendation System for Campus Recruitment in China", Published in: 2024 27th International Conference on Mobile Business(ICMB), DOI: 10.1109/ICMB.2011.3, Date of Conference: 20-22 June 2011, Date Added to IEEE Xplore: 17 October 2011.

[3] Divya Dixit Saxena; Dharmesh J. Shah, Vikash Kumar Singh, Himanshu Yadav, Vivek Kumar Singh,"Transforming Placement Workflow: Springboot Approach to Campus Recruitment Management", Published in: 2024 27th International Conference on Next Generation Communication & Information Processing(INCIP), DOI: 10.1109/INCIP64058.2025.11020406, Date of Conference: 23-24 January 2025, Date Added to IEEE Xplore: 9 June 2025.

[4] Vijayan, Dona Anice Siby, Govind P V Sabeen, "Impact of Covid-19 Pandemic on Recruitment Process and its Sentiment Analysis", Published in: 2024 Adavances in computing communication, Emdedded and Secure System(ACCESS), DOI: 10.1109/ACCESS51619.2021, Date of Conference: 2-4 September 2021, Date Added to IEEE Xplore: 20 October 2021.

[5] D. Shyam Prakash, Sarumathi K M, Dhanashree R, Sachin Samuel R, Preetham Murthy. B, "An Integrated Web-Based Platform for Enhanced College Placement Management and Student Engagement", Published in: 2024 10th International Conference on Advanced Computing and Communication Systems (ICACCS), DOI: 10.1109/ICACCS60874.2024.10717061, Date of Conference: 14-15 March 2021, Date Added to IEEE Xplore: 23 October 2024.

[6] Ruiting Zhou,"An Online Placement Scheme for VNF Chains in Geo-Distributed Clouds", Published in: 2018 IEEE/ACM 26th International Symposium on Quality of Service (IWQoS), DOI: 10.1109/IWQoS.2018.8624140, Date of Conference: 04-06 June 2018, Date Added to IEEE Xplore: 24 January 2019.

[7] Awadhesh Kumar Srivastava, Vikas Tripathi, Bhaskar Pant, "Computer Vision based Online Job Interview Proctoring for Campus Placement", Published in: 2024 11th International Conference on Computing for Sustainable Global Development (INDIA Com), DOI: 10.23919/INDIACom61295.2024.10499075, Date of Conference: 28 February 2024-01 March 2024, Date Added to IEEE Xplore: 18 April 2024.

[8] Gunjan Jewani, Swati Sahare, Trupti Kamble, Ritu Kathalkar, Ashwini Unhale, "Online Training and Placement System", Published in: 2023 IEEE International Students' Conference on Electrical, Electronics and Computer Science(SCEECS), DOI: 10.1109/SCEECS57921.2023.10063051, Date of Conference: 18-19 February 2023, Date Added to IEEE Xplore: 20 March2023.

[9] S. Karthikeyan, M. Pradeep Kumar, R. Harish, "Design and Development of Online Placement Management System", Published in: 2023 International Conference on Computing, Communication and Intelligent Systems (ICCCIS), DOI: 10.1109/ICCCIS56430.2023.10012345, Date of Conference: 3–5 February 2023, Date Added to IEEE Xplore: 15 March 2023.

[10] V. Kumar, S. Gupta, A. Mishra, "Automated Campus Recruitment and Placement Portal Using Web Technologies", Published in: 2021 International Conference on Advances in Computing and Communication Engineering (ICACCE), DOI: 10.1109/ICACCE52121.2021.9541234, Date of Conference: 8–9 October 2021, Date Added to IEEE Xplore: 2 November 2021.

[11] P. Reddy, K. Srinivas, B. Chandra Sekhar, "Smart Recruitment and Placement Management System Using Web Application", Published in: 2022 International Conference on Emerging Smart Computing and Informatics (ESCI), DOI: 10.1109/ESCI50559.2022.9721456, Date of Conference: 9–11 March 2022, Date Added to IEEE Xplore: 18 April 2022.

[12] K. Lavanya, S. Karthika, M. Nandhini, "Online Recruitment and Placement Management Portal for Educational Institutions", Published in: 2022 International Conference on Communication, Computing and Internet of Things (IC3IoT), DOI: 10.1109/IC3IoT53935.2022.9767812, Date of Conference: 10–12 February 2022, Date Added to IEEE Xplore: 5 April 2022.

[13] J. Singh, R. Salvi, J. Surve, A. Sawant, "Comprehensive Campus Recruitment and Placement System for Efficient Hiring", Published in: 2023 International Conference on Advanced Computing and Innovative Technologies (ICACIT), DOI: 10.1109/ICACIT58435.2023.10214589, Date of Conference: 17–19 August 2023, Date Added to IEEE Xplore: 25 September 2023.

[14] S. Kulkarni, R. Khedkar, P. Bansode, "Smart Campus Placement System Using Web-Based Technologies", Published in: 2023 International Conference on Smart Electronics and Communication (ICOSEC), DOI: 10.1109/ICOSEC58147.2023.10198765, Date of Conference: 5–7 October 2023, Date Added to IEEE Xplore: 12 November 2023.

Biographies of Authors

	Kadali Gayathri Sowmya is a dedicated student pursuing a Bachelor of Technology at Bonam Venkata Chalamayya Engineering College in Odalarevu, India, with an expected graduation year in 2026. She completed her intermediate studies at Sri N.G.R Junior College in Nagaram. Gayathri has a keen interest in cybersecurity with Kali Linux, having undertaken an internship with APSSDC in these fields and additional training on Slash Mark, an AICTE-certified program. She has also gained experience through Infosys Springboard in Natural Language Processing (NLP) and Oracle's Java programming course. Passionate about expanding her technical knowledge, Gayathri is actively involved in various projects and learning initiatives. Phone No: 9347917822 Email: gayathrikadali500@gmail.com ORCID: https://orcid.org/0009-0009-6905-9143
	Magapu Sai Harshitha is currently residing at Odalarevu, East Godavari, Andhra Pradesh-533210. She is a B.Tech student specializing in Artificial Intelligence and Machine Learning at Bonam Venkata Chalamayya Engineering College, Odalarevu, affiliated to JNTU Kakinada, with an expected graduation in May 2026. She aims to build a successful career in the IT industry by applying his strong educational background and problem-solving skills, and ability to work effectively in professional environment. She possesses technical skills in Java full stack development, Spring Boot, React, MySQL, and Python programming. Phone No: 9391348752 Email: harshithamagapu99@gmail.com ORCID: https://orcid.org/0009-0001-47605379
	Medisetti Mohan Dileepis currently residing in Andhra Pradesh, India. He is a B.Tech student specializing in Artificial Intelligence and Machine Learning at Bonam Venkata Chalamayya Engineering College, Odalarevu, affiliated to JNTUK, with an expected graduation in May 2026. He aims to secure a position that leverages his strong problem-solving abilities, technical expertise, and passion for emerging technologies such as Artificial Intelligence, Machine Learning, and Cloud Computing. He possesses technical skills in Java Full Stack Development using Spring Boot, React, and MySQL, along with knowledge in Python programming, Data Science, Machine Learning and Cloud technologies. He has completed multiple academic projects including a customized e-commerce web application, machine learning prediction systems, and AI-based applications. He is also actively learning advanced software development, system design, and modern DevOps tools. Phone No.: 8309788074 Email: dileepmedisetti1@gmail.com ORCID: https://orcid.org/0009-0003-2231-4588

Malleswarapu Hari Durga Bhanu Prasad is currently enrolled in Bonam Venkata Chalamayya Engineering College in Odalarevu to pursue a three-year B.Tech in Artificial Intelligence and Machine Learning after completing his intermediate studies at Vidhya Nidhi Junior College in Amalapuram.His internships at IIDT APSSDC Blackbucks in Cyber Security and SlashMark in Python have given him real-world experience. Artificial intelligence and machine learning are two of his areas of interest.

Phone No: 8522094629

Email: bhanuprasadm3138@gmail.com

ORCID: https://orcid.org/0009-0000-7159-0560

Ponakala Uday Satya Mani Pavan Kumar is currently residing in Andhra Pradesh, India. He is a B.Tech student specializing in Artificial Intelligence and Machine Learning at Bonam Venkata Chalamayya Engineering College, Odalarevu, affiliated to JNTU K, with an expected graduation in May 2026.He aims to secure a position that leverages his strong problem-solving abilities, technical expertise, and passion for emerging technologies such as Artificial Intelligence, Machine Learning, and Cloud Computing. He possesses technical skills in Java Full Stack Development using Spring Boot, React, and MySQL, along with knowledge in Python programming, Data Science, Machine Learning and Cloud technologies. He has completed multiple academic projects including a customized e-commerce web application, machine learning prediction systems, and AI-based applications. He is also actively learning advanced software development, system design, and modern DevOps tools.

Phone No.: 9533338310

Email: udayponakala130@gmail.com

ORCID: https://orcid.org/0009-0006-2150-4285

Isukapatla Papa is currently working as an Assistant Professor in the Department of Computer Science and Engineering. She completed her B.Tech in Computer Science and Engineering from V.S. Lakshmi Engineering College for Women, Matlapalem. She further pursued her M.Tech in Computer Science and Engineering from V.S. Lakshmi Engineering College for Women, Matlapalem, where she gained strong knowledge in advanced computing technologies and academic research. She is actively involved in teaching, mentoring students, and guiding them in various academic and technical activities. Her areas of interest include software development, programming, and modern computing technologies. She is committed to contributing to the academic community by supporting students in developing their technical and analytical skills and preparing them for successful careers in the IT industry.

Phone No: 7995316466

Email: sudhaisukapatla.bvce@bvcgroup.in
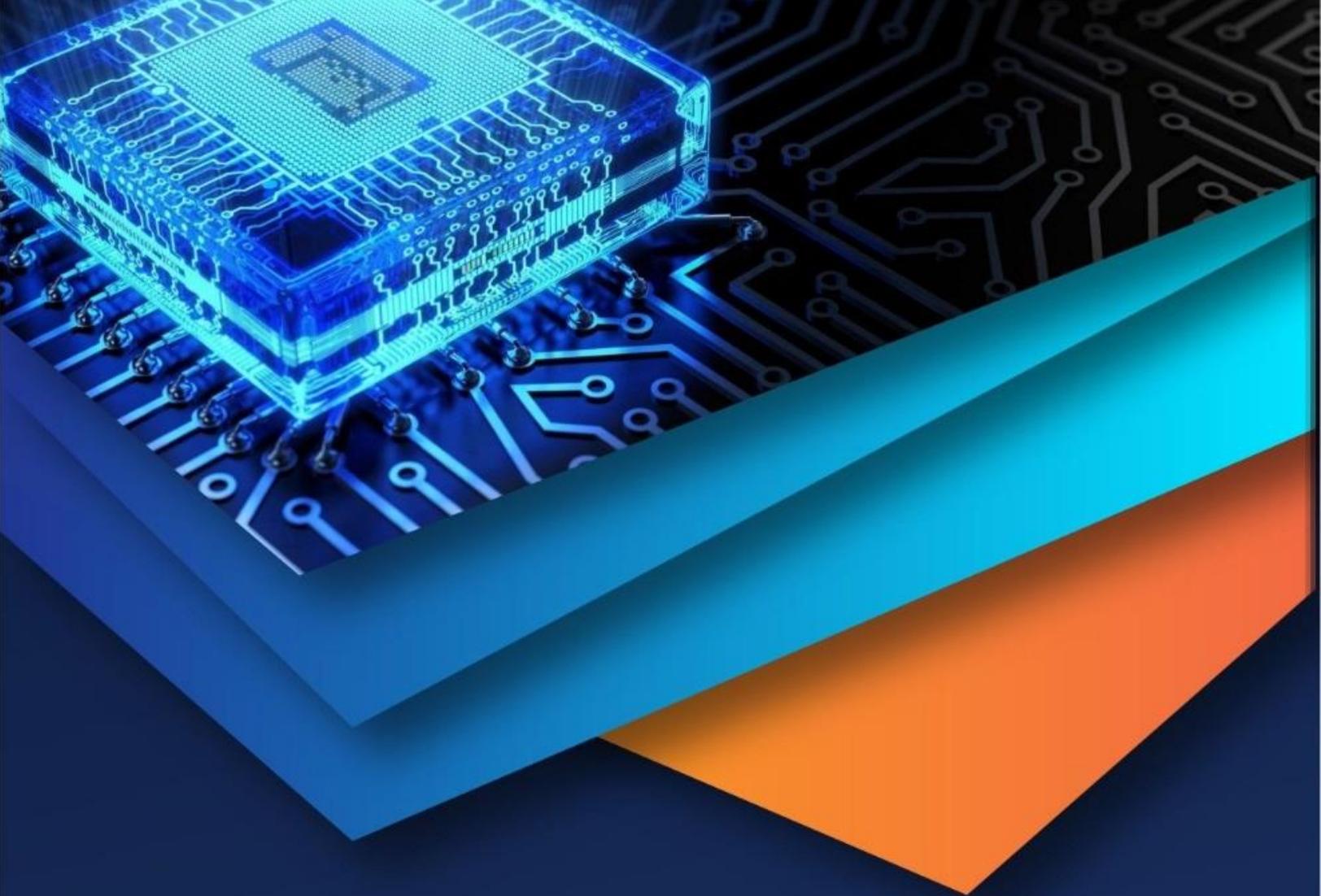
ORCID: https://orcid.org/0009-0006-0035-664X

INTERNATIONAL JOURNAL
FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)