RESEARCH ARTICLE

RSP Science Hub

International Research Journal on Advanced Science Hub
2582-4376
www.rspsciencehub.com
Vol. 07, Issue 01 January

Check for updates

http://dx.doi.org/10.47392/IRJASH.2025.001

AI-Powered Alumni Portal: Connect, Learn, Thrive

Mr. E. Loganathan[1], S Y Agalya[2], K Hariharan[3], A Kavi Bharathi[4]

[1]Assistant professor, Dept. of CSE, Erode Sengunthar Engineering College, Erode, Tamil Nadu, India.

[2, 3,4]UG Scholar, Dept. of CSE, Erode Sengunthar Engineering College, Erode, Tamil Nadu, India.

Emails: *logacse1@gmail.com[1], agalyashanmugam40@gmail.com[2], haripsp2004@gmail.com[3], kavib2682004@gmail.com[4]*

Article history

Received: 10 December 2024
Accepted: 27 December 2024
Published: 21 January 2025

Keywords:
Alumni Portal, AI-Powered, Networking, Mentorship, Career Opportunities, Profile Management, Event Management, Career Path Suggestions, User Management, Resume Analysis, Job Postings.

Abstract

Educational institutions often struggle to maintain strong connections with their alumni, leading to missed opportunities for career development, mentorship, and community engagement. Existing alumni association systems generally lack personalization and advanced technologies like artificial intelligence (AI), resulting in limited networking options for both alumni and current students. Traditional solutions rely on basic databases or social media groups that are insufficient for fostering meaningful interactions, thereby limiting sustained engagement and career support. To address these gaps, this project proposes an AI-powered Alumni Association platform designed to enhance personalized engagement, drawing on insights from survey papers that highlight the role of intelligent systems in educational networking. The platform will integrate AI-driven functionalities such as personalized networking recommendations, a job portal, donation mechanisms, and success story tracking to create dynamic and valuable interactions. Additionally, features like a comprehensive alumni directory and feedback system will enable continuous improvement, adapting to users' evolving needs. The goal is to establish a supportive ecosystem where alumni and students can engage in lifelong connections with the institution, promoting a culture of mentorship, career development, and community contribution while strengthening institutional bonds.

1. Introduction

The AI-Powered Alumni Portal: Connect, Learn, Thrive project is designed to create an engaging and interactive platform that strengthens the connection between alumni, current students, and the institution. By offering a space where alumni can reconnect with their alma mater, the portal facilitates opportunities for networking, mentorship, and career support. This platform not only helps alumni stay involved with their educational community but also enables them to share valuable career opportunities with students. Students benefit significantly from this innovative portal, as it provides them with direct access to alumni who can offer guidance and insights into their professional journeys. The platform features job postings tailored to students' interests and skills, along with AI-driven career suggestions based on their resumes. This personalized approach empowers students to make informed decisions about their future paths and facilitates their engagement in events, internships, and job opportunities. Additionally, the admin dashboard

streamlines user management, content moderation, and analytics, allowing for effective oversight of the platform's functionality. By leveraging advanced AI technologies and incorporating features such as donation tracking and event management, the portal fosters a vibrant community that promotes professional growth and collaboration. This secure and scalable solution is designed to enhance the alumni-student relationship and provide institutions with valuable insights for continuous improvement.

2. Literature Review

2.1. Alumni Management and Networking System

S Rajini et al. [1] proposed an Alumni Management and Networking System aimed at enhancing alumni engagement and communication with educational institutions. The system provides a platform for alumni to create profiles, connect with fellow alumni, and contribute to the institution's success through mentorship, volunteering, and other forms of support. Key features include content-based tagging using a fine-tuned BERT model for generating relevant tags on social media posts, ensuring content visibility. The system also employs end-to-end encryption for secure messaging, protecting user privacy. The results indicate that the platform is user-friendly and effective in managing alumni databases, providing a convenient way for alumni to stay connected and engaged. [1-5]

2.2. Design of an Alumni Portal with Data Security

M Babu et al. [2] proposed a Design of an Alumni Portal with a strong focus on data security, aiming to improve communication between alumni and current students in a college setting. The system enables alumni to share information about job opportunities, industrial trends, and other career-related resources with students, fostering a supportive alumni-student network. Key features include auto-registration for current students, an admin-controlled dashboard for dynamic content updates, and post-campus placement assistance. The system employs the SMS4-BSK cryptosystem for data encryption, providing high security against potential data breaches.

2.3. Alumni Mentorship Portal Using Cloud Computing

A.Induja et al. [3] proposed a Alumni Mentorship Portal Using Cloud Computing, known as MENTRI, which is designed to enhance mentorship between alumni and current students. The portal provides a platform for students to connect with alumni for guidance on career paths, current industry expectations, and academic development. The system incorporates responsive user interfaces, Cpanel for navigation, and deployment on cloud servers using Amazon Web Services (AWS). Key features include interactive modules such as discussion forums, human chatbot, job postings, and a video call/chat feature, creating a comprehensive mentorship environment.

2.4. Customized Alumni Portal Implementing Natural Language Processing Techniques

V Keerthi et al. [4] proposed a Customized Alumni Portal that uses natural language processing (NLP) techniques to enhance communication and collaboration between students, alumni, faculty, and industry. The portal provides features like an events calendar, job opportunities, mentoring, and discussion forums. The system also incorporates NLP to summarize and tag posts, making information retrieval easier, and utilizes an obscenity detection algorithm to maintain professional content. Additionally, the portal uses the SemRe-Rank algorithm for tag summarization and a recommendation system based on item-specific tag preferences, helping user's access relevant content.

2.5. Almahub: An Engaging, Supportive Alumni-Students Interaction Platform

The AlmaHub platform [5] is designed as an engaging, supportive space to bridge the interaction gap between alumni and current students. Accessible as both a mobile application and a website, AlmaHub aims to foster communication by enabling alumni to share career advice, job opportunities, and experiences with students. Key features include job postings, text-based chat, and a profile management system. The platform includes separate modules for students and alumni, providing personalized experiences based on user roles. AlmaHub enhances user connectivity and supports professional networking, offering job boards, real-time communication, and a dynamic interface for alumni-student interactions.

2.6. Fostering Alumni Involvement And Professional Advancement: A User-

Centric Perspective On The National University Alumni Portal

A. D. Lacasandile et al. [6] explores the National University Alumni Portal designed with a user-centric approach to enhance alumni engagement and support their professional growth. By following a prototyping methodology, the portal is developed iteratively with feedback-driven improvements. Key features include seamless navigation, personalized content, AI-powered career guidance, and event management. The portal facilitates alumni-to-alumni interactions, mentorship, job opportunities, and social impact engagement, aiming to strengthen alumni bonds and support institutional reputation, curriculum development, and industry relevance. The AI-driven career guidance system provides customized job recommendations, skill development resources, and continuous learning opportunities, contributing to alumni professional success.

2.7. Intellicampus: Ai-Powered College Portal with Auto-Scheduler and News Sharing

The IntelliCampus portal [7] is an AI-powered platform designed for college environments, providing tools to enhance academic scheduling and information sharing. The portal includes features like an auto-scheduler for class management, a news-sharing module, file upload/download functions, and a reminder system for students and teachers. IntelliCampus allows teachers to upload course materials, manage schedules, and share announcements, while students access schedules, materials, and updates through a centralized dashboard. Developed using HTML, CSS, PHP, and JavaScript, the system runs on XAMPP with Apache, utilizing MySQL for data management and authentication to ensure secure access.

2.8. A Personalized News Recommendation Algorithm Integrating User Comments

L. Fan et al. [8] presents a Personalized News Recommendation Algorithm that integrates user comments to improve the accuracy of news recommendations. Traditional news recommendation algorithms based on user browsing history often fail to capture user interests effectively. This new approach calculates user similarity by incorporating comment relevance and news popularity, using BERT for feature extraction of news and comments. By considering user comments and news "hotness," the algorithm calculates user preference more accurately, resulting in higher recommendation precision. Experimental results demonstrated significant improvement in recommendation precision, recall, and F1-score compared to traditional algorithms.

2.9. Ai-Powered Resume Based Qa Tailoring For Success In Interviews

P. Varalakshmi et al. [9] proposed a AI-Powered Resume-Based Q&A System aimed at improving interview preparation by generating personalized interview questions from resume content. The system leverages Natural Language Processing (NLP) and Large Language Models (LLMs) like BERT, T5, ROBERTA, and XLNET to extract keywords from resumes and generate relevant questions and answers. This approach achieves high semantic accuracy (97%), assisting job seekers by aligning their skills with suitable job opportunities. The system provides a performance comparison across models, highlighting the effectiveness of specific LLMs for different Q&A needs. [6-10]

2.10. Machine Learning-Based Social Media Recommendation

X. Zheng et al. [10] proposed a Machine Learning-Based Social Media Recommendation Algorithm aimed at improving recommendation accuracy and efficiency by integrating social network correlation factors. The proposed approach builds on traditional collaborative filtering methods, enhanced with clustering algorithms for scalability on large datasets. By factoring in user interactions, ratings, and social network relationships, the system can provide personalized recommendations. Implemented on a Hadoop cloud platform, the algorithm leverages MapReduce for distributed processing, increasing computational efficiency and making the algorithm suitable for large-scale social media applications.

2.11. A Survey On Artificial Intelligence (Ai) Based Job Recommendation Systems

D. Suwalka et al. [11] proposed a AI-powered job recommendation systems, examining recent developments to improve job matching accuracy for job seekers. Key topics include the challenges these systems face, such as sparse data, privacy concerns, and biases, and how advancements in deep learning, reinforcement learning, and knowledge graphs have been utilized to address these challenges. The paper

discusses filtering methods and machine learning algorithms, providing an overview of various recommendation techniques like collaborative filtering, content-based filtering, hybrid methods, and demographic filtering. The authors emphasize the importance of personalizing job recommendations based on user profiles, qualifications, and preferences to enhance job satisfaction and application relevance. By recommending relevant events, we can increasing By recommending relevant events.

2.12. An Efficient System For Interconnecting Alumni After Their Studies: A Multipurpose App For Public Assimilation

R. Rastogi et al. [12] proposed a introduces a Multipurpose Alumni App designed to strengthen alumni engagement and maintain connections with current students. The app provides features like an alumni directory, events calendar, job postings, discussion forums, and social media integration to support networking, mentorship, and job opportunities. The app's design focuses on ease of use for alumni and students to update profiles, share job opportunities, and participate in online discussions. It includes automated registration for current students, who are promoted to alumni status post-graduation, and administrator controls for dynamic content management.

2.13. Secured Web-based Alumni Network and Information Systems

P. Kumar et al. [13] proposed a Secured Web-based Alumni Network designed to strengthen connections between alumni and current students while ensuring robust data security. The system provides a platform for alumni registration, job and internship postings, event management, and a mentorship program. Key security features include phishing prevention, data integrity, and user authentication using the PBKDF2 algorithm with SHA256 for password protection. Modules for students, alumni, and administrators support functionalities like viewing profiles, messaging, and participating in college events.

2.14. The Development of Integrated Career Portal in University Using Agile Methodology

Meyliana et al. [14] presents the Integrated Career Portal for universities, designed to bridge the gap between university graduates' competencies and industry demands. The portal supports job placement for graduates by connecting them with employers, providing a centralized platform for job opportunities, employer profiles, and candidate assessments. Developed using agile methodology, particularly Feature-Driven Development (FDD), the portal is iteratively refined based on user feedback from alumni and employers. Key features include a complete recruitment cycle, in the refer of User profile management, and social media integration. [11-15]

2.15. Skill-Based Course Recommendation System

V. Sankhe et al. [15] introduces a Skill-Based Course Recommendation System that utilizes fuzzy clustering to provide students with personalized course recommendations based on skills relevant to job roles. Unlike traditional systems that rely on k-means clustering, this system uses c-means fuzzy clustering to allow data points (students) to belong to multiple clusters, providing more accurate recommendations. The system identifies students with similar skills and career interests, recommending the most suitable courses. Experimental results demonstrate that this approach can enhance student preparedness for job roles by identifying courses aligned with industry demands. Mentorship portal that facilitates connections between students and alumni. While the system allows for real-time communication, it lacks sophisticated algorithms for personalized mentor matching. By utilizing machine learning algorithms, my paper can analyze user data and preferences to provide more effective matches between mentors and mentees. This ensures that students are paired with alumni who share similar career interests and trajectories, enhancing the quality of mentorship available. Event management is another critical area where existing systems fall short. For instance, while Bista et al. (2021) offers basic event listings, they do not utilize intelligent algorithms to recommend events based on user interactions. My paper addresses this issue by integrating collaborative filtering techniques to suggest events that align with individual user interests. By recommending relevant events, we can increase participation rates and strengthen the sense of community among alumni and current students. Moreover, many existing systems lack the capability for real-time updates and continuous user

engagement. Cordova et al. (2020) emphasized the importance of ongoing interactions but did not provide mechanisms for regularly updating alumni activities. To tackle this challenge, my paper will include features that allow for dynamic data updates, encouraging alumni to share their achievements and experiences. This continuous feedback loop not only keeps the platform SemRe-Rank algorithm for tag summarization and a recommendation system based on item-specific tag preference.

3. Comparative Study

The table Table: 1 below show the comparative study of the Ai-Powered Alumni Portal: Connect, Learn, Thrive.

Table 1 Comparative Study

Ref. No.	Author Name	Publication Year and Publisher	Title of Paper	Methodology	Disadvantage
1	Rajini S,Hari Prasad B, Upendrasingh A	2023 IEEE	Alumni Management and Networking System	BERT model for content-based tagging.	Lacks feasibility discussion, cost estimates, and implementation timelines; potential issues with speed due to encryption.
2	Babu M, Sandhiya K, Preetha V, Sankara Eshwari S, Ramya Chitra M	2021 IEEE	Design Of Alumni Portal With Data Security	AES (Advanced Encryption Standard) for data encryption.	Does not address potential performance issues related to the encryption process or its impact on user experience.
3	A.Induja, R. Robsi, B. Latha	2022 IEEE	Alumni Mentorship Portal Using Cloud Computing	UX plotting and cloud estimating techniques	The platform lacks mechanisms to ensure effective matching between mentors and mentees, limiting its practical impact
4	A.A.Shinu, V.Keerthi, M. anoj,M. Shaheer, N. S. Nair, A. John	2019 IEEE	Customized Alumni Portal implementing Natural Language Processing Techniques	Naive Bayes for text classification, sentiment analysis models.	The use of SemRe-Rank for NLP adds computational complexity, potentially slowing down tag generation and recommendation.
5	S. S. Patil, A. Bhasme, P. Bobade, A. Barkade and P. Pore	2023 IEEE	AlmaHub: An Engaging, Supportive Alumni-Students Interaction Platform	Content-based filtering to personalize user interactions	The job portal feature lacks integration with modern recruitment tools, limiting its usability for professional job postings
6	A. D. Lacasandile, R. B. Altuna, A. C. Nova, L. P. Diaz, K. R. Gunay and A. E. A. Balbuena	2023 IEEE	Fostering Alumni Involvement and Professional Advancement: A User-Centric Perspective on the National University Alumni Portal	Collaborative filtering for resource and event recommendations.	Dependence on continuous alumni feedback may delay updates and improvements if responses are insufficient.
7	P. Mithun, R. Delish Kumar and S. Dikshit	2024 IEEE	IntelliCampus: AI-Powered College Portal with Auto-Scheduler and News Sharing	Genetic algorithm for scheduling optimization.	Relies heavily on local hosting (XAMPP and Apache), which may limit scalability and compatibility with cloud-based environments.
8	L. Fan, X. Su, H. Song and Y. Dai	2022 IEEE	A Personalized News Recommendation Algorithm Integrating User Comments	Collaborative filtering combined with sentiment analysis.	Limited to text-based news and comments, restricting its applicability to multimedia content like videos or images.

9	P.Varalakshmi and N. M. K. Bugatha	2024 IEEE	AI-owered Resume Based QA Tailoring for Success in Interviews	BERT for information extraction, question generation.	Dependency on web scraping may introduce inconsistency in data quality, affecting question generation accuracy.
10	T. Lai and X. Zheng	2015 IEEE	Machine learning based social media recommendation	k-Nearest Neighbors (k-NN) for recommendation.	k-Nearest Neighbors is time-consuming, potentially slowing down the recommendation process in real-time applications.
11	A. Patil, D. Suwalka, A. Kumar, G. Rai and J. Saha	2023 IEEE	A Survey on Artificial Intelligence (AI) based Job Recommendation Systems	primarily collaborative filtering and content-based.	High computational complexity in hybrid filtering may lead to slower performance, particularly for large datasets.
12	R. Rastogi, S. Singh, R. Singh, S. Garg and G. Yadav	2023 IEEE	An Efficient System for Interconnecting Alumni after Their Studies: A Multipurpose App for Public Assimilation	REST API for data exchange.	Potential privacy and security concerns due to sensitive data storage, requiring robust protection to ensure user trust..
13	P. Kumar, S. Swetha and M. Sundari	2023 IEEE	Secured Web-based Alumni Network and Information Systems	RSA and AES for data encryption.	May experience performance issues due to multiple security layers, impacting user experience on a large scale.
14	Meyliana, H. A. E. Widjaja, B. Sablan, K. L. M. Ulo, K. Phusavat and A. N. Hidayanto	2017 IEEE	The development of integrated career portal in university using agile methodology	Agile Sprint Planning for iterative development.	Initial setup and regular updates for integrated databases may be resource-intensive, slowing system performance.
15	V. Sankhe, J. Shah, T. Paranjape,R.Shankarmani	2020 IEEE	Skill Based Course Recommendation System	Fuzzy c-means clustering for grouping students	The use of fuzzy clustering and weighted modes may increase computational complexity, impacting scalability.

4. Discussion

The literature review highlights a variety of alumni management systems, each contributing unique features and methodologies. However, a significant number of these systems fail to fully address the evolving needs of alumni and current students. For instance, while Rajini et al. (2023) developed an alumni networking platform that employs advanced tagging methods, the absence of personalized recommendations limits its ability to connect users with relevant content tailored to their interests. This gap is crucial as personalized experiences can significantly enhance engagement, making alumni

feel valued and connected to their alma mater.Similarly, Babu et al. (2021) prioritized data security in their alumni portal through encryption techniques but overlooked the importance of role-based access control (RBAC). Without RBAC, the risk of unauthorized access to sensitive data increases, potentially eroding trust among users. My paper aims to bridge this gap by implementing RBAC, ensuring that only authorized users—alumni, students, and administrators—have access to specific information. This enhancement not only fortifies data security but also creates a more structured environment for user interactions. In the realm of mentorship, Induja et al. (2022) presented a cloud-based mentorship portal that facilitates connections between students and alumni. While the system allows for real-time communication, it lacks sophisticated algorithms for personalized mentor matching. By utilizing machine learning algorithms, my paper can analyze user data and preferences to provide more effective matches between mentors and mentees. This ensures that students are paired with alumni who share similar career interests and trajectories, enhancing the quality of mentorship available. Event management is another critical area where existing systems fall short. For instance, while Bista et al. (2021) offers basic event listings, they do not utilize intelligent algorithms to recommend events based on user interactions. My paper addresses this issue by integrating collaborative filtering techniques to suggest events that align with individual user interests. By recommending relevant events, we can increase participation rates and strengthen the sense of community among alumni and current students. Moreover, many existing systems lack the capability for real-time updates and continuous user engagement. Cordova et al. (2020) emphasized the importance of ongoing interactions but did not provide mechanisms for regularly updating alumni activities. To tackle this challenge, my paper will include features that allow for dynamic data updates, encouraging alumni to share their achievements and experiences. This continuous feedback loop not only keeps the platform vibrant but also provides institutions with valuable insights for promotional activities. The analysis of user-generated content is also a vital task for enhancing engagement. Many existing systems rely on manual data entry, limiting their ability to leverage user insights. In contrast, my paper will implement natural language processing (NLP) techniques to analyze posts and resumes, extracting valuable information to tailor content and recommendations. By automating this analysis, we can improve the relevance of the information presented to users, fostering a more engaging and supportive environment.

Conclusion

This paper has presented a detailed exploration of the potential that AI technologies hold for revolutionizing alumni engagement through the development of the "AI-Powered Alumni Portal: Connect, Learn, Thrive." This innovative portal stands to significantly enhance the connectivity between alumni, students, and educational institutions, leveraging advanced AI capabilities to foster a more interactive and supportive network. By integrating personalized networking recommendations, job portals, donation mechanisms, and success story tracking, the platform not only streamlines alumni and student interaction but also greatly enriches their engagement and professional growth. Our analysis indicates that while existing alumni management systems provide foundational networking functions, they often lack the depth in personalization and real-time engagement that AI integration offers. The proposed AI-driven functionalities within the portal, such as resume-based career suggestions and tailored event notifications, will enable users to receive highly relevant and timely content, thereby increasing user activity and satisfaction. Moreover, the inclusion of a robust admin dashboard facilitates efficient platform management, ensuring a secure and scalable environment for all users. Through continuous feedback and updates, the platform is poised to evolve, adapting to new challenges and opportunities in alumni engagement. Future work will focus on refining AI algorithms and expanding the portal's capabilities to include more intuitive mentorship programs and deeper analytics for tracking alumni career progression. By continuously enhancing the user experience and expanding its features, the AI-Powered Alumni Portal aims to set a new standard for alumni platforms globally, creating a lasting impact on the way educational institutions interact with their graduates.

References

[1]. R. S, H. P. B and U. A, "Alumni Management and Networking System," 2023 2nd International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), Coimbatore, India, 2023, pp. 1-5, doi: 10.1109/ ICAECA56562. 2023. 10200060.

[2]. B. M, S. K, P. V, S. E. S and R. C. M, "Design of Alumni Portal with Data Security," 2021 Second International Conference on Electronics and Sustainable Communication Systems (ICESC), Coimbatore, India, 2021, pp.1-7,doi: 10.1109/ICESC51422.2021.9532986.

[3]. A. Induja, R. Robsi and B. Latha, "Alumni Mentorship Portal Using Cloud Computing," 2022 1st International Conference on Computational Science and Technology (ICCST), CHENNAI, India, 2022, pp. 1-5, doi: 10.1109/ ICCST55948.2 022.10040315.

[4]. A. A. Shinu, V. Keerthi, M. Manoj, M. Shaheer, N. S. Nair and A. John, "Customized Alumni Portal implementing Natural Language Processing Techniques," 2019 International Conference on Intelligent Computing and Control Systems (ICCS), Madurai, India, 2019, pp. 927-931, doi: 10.1109/ICCS45141.2019.9065320.

[5]. S. S. Patil, A. Bhasme, P. Bobade, A. Barkade and P. Pore, "AlmaHub: An Engaging, Supportive Alumni-Students Interaction Platform," 2023 IEEE 8th International Conference for Convergence in Technology (I2CT), Lonavla, India, 2023, pp. 1-6, doi: 10.1109/ I2CT57861.2023.10126226.

[6]. A. D. Lacasandile, R. B. Altuna, A. C. Nova, L. P. Diaz, K. R. Gunay and A. E. A. Balbuena, "Fostering Alumni Involvement and Professional Advancement: A User-Centric Perspective on the National University Alumni Portal," 2023 IEEE 15th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment, and Management (HNICEM), Coron, Palawan, Philippines, 2023, pp. 1-6, doi: 10.1109/HNICEM60674.2023.10589170.

[7]. P. Mithun, R. Delish Kumar and S. Dikshit, "IntelliCampus: AI-Powered College Portal with Auto-Scheduler and News Sharing," 2024 International Conference on Knowledge Engineering and Communication Systems (ICKECS), Chikkaballapur, India, 2024, pp. 1-11, doi: 10.1109/ICKECS61492.2024.10616672.

[8]. L. Fan, X. Su, H. Song and Y. Dai, "A Personalized News Recommendation Algorithm Integrating User Comments," 2022 4th International Conference on Frontiers Technology of Information and Computer (ICFTIC), Qingdao, China, 2022, pp. 489-492, doi: 10.1109/ ICFTIC57696. 2022.10075241.

[9]. P. Varalakshmi and N. M. K. Bugatha, "AI-Powered Resume Based QA Tailoring for Success in Interviews," 2024 Third International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS), Krishnankoil, Virudhunagar district, Tamil Nadu, India, 2024, pp. 1-6, doi: 10.1109/ INCOS59338. 2024.10527664.

[10]. T. Lai and X. Zheng, "Machine learning based social media recommendation," 2015 2nd IEEE International Conference on Spatial Data Mining and Geographical Knowledge Services (ICSDM), Fuzhou, China, 2015, pp. 28-32, doi: 10.1109/ ICSDM.2015.7298020.

[11]. A. Patil, D. Suwalka, A. Kumar, G. Rai and J. Saha, "A Survey on Artificial Intelligence (AI) based Job Recommendation Systems," 2023 International Conference on Sustainable Computing and Data Communication Systems (ICSCDS), Erode, India, 2023, pp. 730-737, doi: 10.1109/ICSCDS56580.2023.10104718.

[12]. R. Rastogi, S. Singh, R. Singh, S. Garg and G. Yadav, "An Efficient System for Interconnecting Alumni after Their Studies: A Multipurpose App for Public Assimilation," 2023 5th International Conference on Advances in Computing, Communication Control and Networking (ICAC3N), Greater Noida, India, 2023, pp. 1583-1589, doi: 10.1109/ ICAC3N60023.

2023.10541457.

[13]. P. Kumar, S. Swetha and M. Sundari, "Secured Web-based Alumni Network and Information Systems," 2023 7th International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, India, 2023, pp. 1427-1434, doi: 10.1109/ICICCS56967.2023.10142761.

[14]. Meyliana, H. A. E. Widjaja, B. Sablan, K. L. M. Ulo, K. Phusavat and A. N. Hidayanto, "The development of integrated career portal in university using agile methodology," 2017 International Conference on Information Management and Technology (ICIMTech), Special Region of Yogyakarta, Indonesia, 2017, pp. 310-315, doi: 10.1109/ ICIMTech. 2017. 8273557.

[15]. V. Sankhe, J. Shah, T. Paranjape and R. Shankarmani, "Skill Based Course Recommendation System," 2020 IEEE International Conference on Computing, Power and Communication Technologies (GUCON), Greater Noida, India, 2020, pp. 573-576, doi: 10.1109/ GUCON48875. 2020.9231074.