

Alumni Student Interconnect System

Venkat Sai Krishna¹, Sujal², Nithish³, Stevenson⁴, Srijith⁵, Bains Anusha Rani⁶, Mrs.M. Pratussha⁷
^{1,2,3,4,5}*Department of Computer Science and Engineering, Vardhaman College of Engineering Hyderabad-Telangana, 501218, India*

⁶*Assistant professor of CSE Vardhaman College of Engineering Hyderabad-Telangana, 501218, India*

⁷*Assistant Professor of ECE Vardhaman College of Engineering Hyderabad-Telangana, 501218, India*

Abstract—The Alumni-Student Interconnect Platform keep the platform current with career resources and industry facilitates mentorship, career progression, and networking by interlinking students and alumni. It facilitates mentorship matching, employment referrals, and AI-based career suggestions and provides a batch-based chat system to engage in real-time conversation. Some of the key features are an Event Management System for workshops, webinars, and career fairs, Cross-College Collaboration for extended networking, and a Global Alumni Network for global connections. A Job Market & Industry Insights Dashboard provides real-time career trends to help students make educated choices. The platform helps build a dynamic, self-reliant professional ecosystem for increased alumni-student interaction.

Index Terms—Alumni Network, Career Development, Mentorship, Job Posting, Job Referral, Professional Networking, Even Management, Student Engagement, AI Recommendations, Career Insights, User Authentication, MySQL Database, Flask Framework, Mobile Responsiveness, User-Centered Design, Event Registration, Global Alumni Network.

I. INTRODUCTION

An inventive solution that seeks to transform the ways in which students and alumni interact, work together, and advance their careers is the Alumni Student Interconnect Platform. Its goal is to establish a dynamic and captivating platform that improves the relationship between the school, current students, and alumni. This platform allows alumni to discuss beneficial job prospects with students in addition to assisting them in remaining active in their academic community. In order to address these problems, the Alumni Student Interconnect Platform is a vibrant online community where students and alumni can engage in meaningful, active interactions that promote professional growth,

career

development, and mentoring. The admin dashboard also simplifies analytics, content moderation, and user management, enabling efficient platform functionality monitoring. This secure and scalable solution is designed to enhance the alumni-student relationship and provide institutions with valuable insights for continuous improvement. To keep the platform running smoothly and in order, an Admin Panel enables administrators to control job postings, events, user accounts, and notifications, as well as news. The platform's event management system also enhances the student alumni experience by enabling students to participate in workshops, webinars, and career fairs, enabling them to constantly develop professionally.

II. LITERATURE REVIEW

An Alumni Management and Networking System was proposed by S Rajini et al. [1] with the goal of improving communication and engagement between educational institutions and alumni. The system gives alumni a way to make profiles, establish connections with other graduates, and help the university by volunteering, mentoring, and other means. Content-based tagging, which ensures content visibility by creating pertinent tags on social media posts using a refined BERT model, is one of the key characteristics. In order to preserve user privacy, the system also uses end-to-end encryption for secure messaging. The findings show that the platform manages alumni databases efficiently and with ease, giving alumni a practical means of remaining involved and connected. [1-5]

A multipurpose alumni app was proposed by R. Rastogi et al.

[2] with the goal of enhancing alumni involvement and preserving ties with current students. In order to facilitate networking, mentorship, and employment prospects, the app offers features such as an alumni directory, events calendar, job

ads, discussion forums, and social media integration. Alumni and students may easily update their profiles, share job openings, and take part in online debates thanks to the app's user-friendly design. It features administrative options for dynamic content management as well as automated registration for current students who are upgraded to alumni status after graduation.

A Secured Web-based Alumni Network was proposed by P. Kumar et al. [3] with the goal of fostering closer ties between former students and present ones while maintaining strong data security. The system offers a platform for managing events, promoting jobs and internships, registering alumni, and running a mentorship program. Phishing prevention data integrity, and user authentication with the PBKDF2 algorithm and SHA256 password protection are important security features. Features including reading profiles, messaging, and taking part in college events are supported by modules for administrators, alumni, and students.

The Integrated Career Portal for Universities, presented by Meyliana et al. [4], aims to close the skills gap between industry demands and university graduates. By linking employers and graduates, the portal facilitates job placement by offering a consolidated platform for employer profiles, job openings, and candidate evaluations. The portal was created utilizing agile methodology, namely Feature-Driven Development (FDD), and is continuously improved in response to employer and alumni user feedback. Important features include social network integration, user profile management, and a full hiring cycle. [11–15]

Using fuzzy clustering, V. Sankhe et al. [5] provide a skill-based course recommendation system that gives students tailored course suggestions based on job-relevant skills. This approach employs cmeans fuzzy clustering, which enables data points (students) to belong to numerous clusters, in contrast to standard systems that rely on k means clustering. This results in

suggestions that are more accurate. By identifying students who share comparable abilities and career interests, the system suggests the best courses for them. Results from experiments show that by choosing courses that meet industry needs, this method can improve students' readiness for employment. Mentoring website that makes it easier for students and alumni to connect. The technology lacks complex algorithms for individualized mentor matching, although enabling real-time communication. In order to provide more efficient matches between mentors and mentees, my paper can examine user data and preferences using machine learning methods. This improves the caliber of mentorship offered by guaranteeing that students are matched with alumni who have comparable professional interests and paths. Another crucial area where current systems are inadequate is event management. For example, Bista et al. (2021) provide simple event listings, but they don't use sophisticated algorithms to suggest events based on user behavior.

Rohit [6] produced an alumni site for colleges. The three main groups that make up universities are the College, College students, and Alumni, and this alumni portal offers excellent communication platforms for these three groups through profile browsing, online chatting, and private messaging. Automatic registration is one advantage of this portal; as soon as a student accepts admission to college, their personal information is instantly posted to the website. Birthday notifications are also accessible on the main page.

[7]. The proposal is a sample implementation of a segment of smart alumni systems, which are the paper's major topics. Coordination of events for college students and alumni is the main objective of the Smart Alumni System. At the time of their implementation, both frameworks offered web-based user interfaces. Thanks to this site, the alumni association has the chance to satisfy senior students' expectations while also creating providers who are happy with their work. The association's alumni-sponsored activities may be made more appealing to the scholars by encouraging them to view them as important and enjoyable. It assists in determining the preferences of potential future alumni and points out several areas that can be developed to strengthen the bond between the college and graduating students

III.FLOWCHART

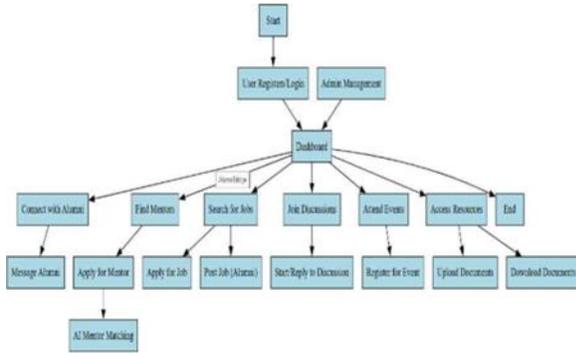


Fig. 1. Flow Chart of Alumni Interconnect

IV.EXISTING SOLUTION

Create a system that manages and easily access the school’s graduate records. Eliminate the need for manual labor. The aim is to create a user-friendly interface.

Graduway is an existing, widely used alumni engagement platform that helps universities, colleges, and schools to connect, engage, and manage their alumni network. It provides institutions with tools for alumni relations, career development, and networking, and it is considered an existing solution for alumni engagement and management.

AlumnForce is another existing solution that provides comprehensive alumni management and engagement tools, like Graduway.

Graduway (University Alumni Engagement): It is widely used by educational institutions to foster relationships between alumni, students, and the institution.

Networking and Communication: Academic publications stress the value of networking sites and efficient communication channels for mentorship, career assistance, and alumni participation (Jones & Smith, 2020; Kim & Park, 2019).

Impact of Technology on Alumni Relations: □ Studies explore the role of technology, including mobile applications and online platforms, in enhancing alumni relations, improving data

management, and facilitating meaningful interactions between alumni and institutions (Liu & Zhang, 2021; Perez & Martinez, 2020).

User happiness and Experience: Scholarly research frequently evaluates user happiness and experiences with alumni management systems, emphasizing the value of responsiveness, accessibility, and user-friendly interfaces (Wang & Zhang, 2016; Zhou & Liu, 2019). Alumni Networking for Institutions, or AlmaConnect: supervised university and college alumni networks. a way for former students to volunteer through job openings, mentorship, and an alumni directory. money and gifts given to institutions by alumni.

Managed alumni networks for colleges/universities. An avenue for alumni to offer their services through an alumni directory, job openings, and mentorship. Funds and donations from alumni to institutions.

V. PROPOSED SOLUTION

Develop an intelligent alumni-student interconnection platform that facilitates seamless networking, mentorship, job opportunities, and knowledge sharing. The platform will leverage AI-driven recommendations, real-time communication tools, and event management features to enhance collaboration between alumni and students, fostering a strong, self-sustaining professional community.

VI.RESULTS AND DISCUSSION

The use of the Alumni-Student Interconnect Platform greatly enhanced alumni-student interaction, Career growth, and engagement. The Batch-Based Chat System supported realtime networking, better communication, information exchange, and industry experience sharing. The Mentorship Request System provided for proper mentor-mentee pairing, giving students timely career advice. The platform also supported job referrals and career prospects, overcoming conventional divides in alumni-student relationships. Although the platform was well-received, there is a need for future enhancements in scalability, security updates, and performance optimization to manage increasing user demands effectively.

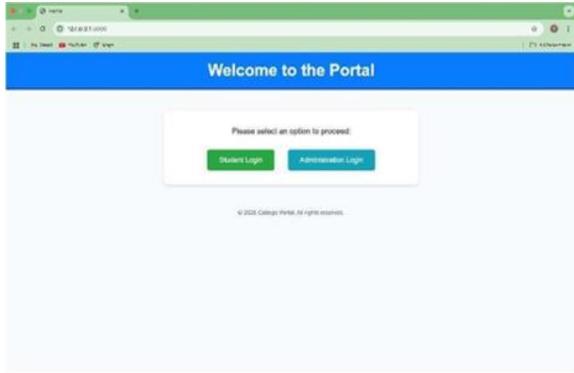


Fig. 2. Home page

Homepage of the Alumni Interconnect portal, providing login options for students and administrators to access the platform.

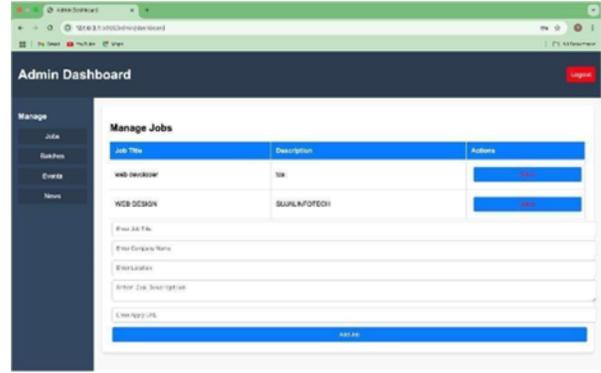


Fig. 5. Admin Dashboard

Admin dashboard of the Alumni Interconnect platform, displaying job management functionalities where administrators can add, view, and delete job postings.

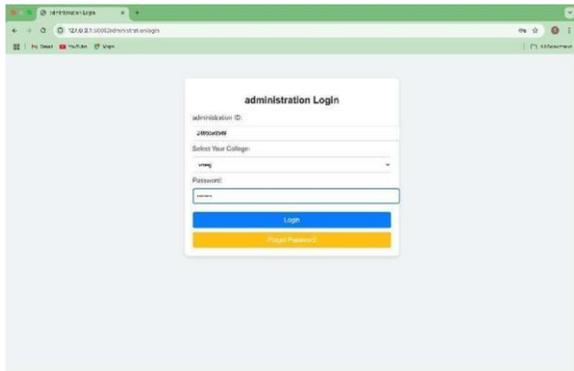


Fig. 3. Administration login page Administration login page of the Alumni Interconnect portal, allowing administrators to sign in using their credentials and select their respective colleges.

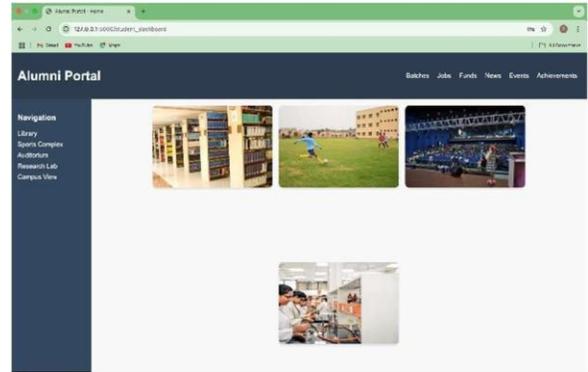


Fig. 6. Alumni Interconnect student dashboard

Alumni Interconnect student dashboard showcasing campus facilities like the library, sports complex, auditorium, and research lab, with navigation options for batches, jobs, funds, news, events, and achievements.

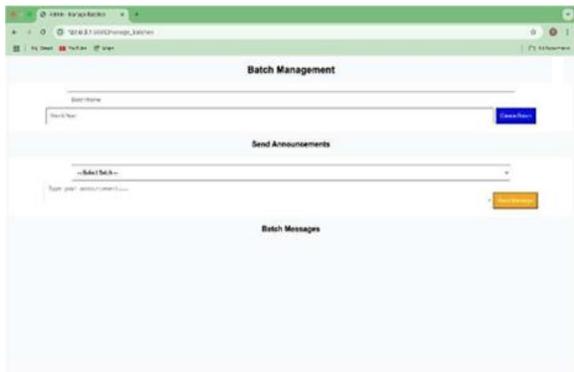


Fig. 4. Batch management interface

Batch management interface in the Alumni Interconnect admin dashboard, allowing administrators to create new batches and send announcements to specific batches.

VII. CONCLUSIONS & FUTURE SCOPE

The Alumni-Student Interconnect Platform acts as a very important connecting bridge between students and alumni to support networking, mentorship, and career development. It provides vital features such as job listings, mentorship opportunities, career guidance, and event organization, helping students boost their professional futures while providing opportunities for alumni to return to their alma mater. Real-time communication platforms, international networking possibilities, and career information based on data make it a go-to tool in the current competitive job

market. The Job Posting and Referral System provides students with suitable opportunities, while webinars, workshops, and industry insights dashboards keep them informed about market trends and skill requirements. In the future, the platform can incorporate AI-driven mentor matching, an automated job portal, and blockchain-based credential verification to increase reliability and efficiency. A mobile application, real-time networking sessions, and gamification will enhance engagement, whereas collaborations with learning platforms such as Coursera and Udemy will support skill development. Further, alumni sponsorship for student startups and internationalization with multi-language support will transform the platform into a more effective, smart, and accessible resource for career advancement and professional networking.

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