International Journal of Computer Sciences and Engineering
Vol.**13**, Issue.**3**, pp.**33-40**, March **2025**
ISSN: 2347-2693 (Online)
Available online at: www.ijcseonline.org

ISSN: 2347-2693 (E)

Research Article

A Bridging Platform for Students and their Alumni using a Social Media Platform

Leena Patil[1*], Aayush Vaibhaw[2], Shaurya Tripathi[3], Ananya Ambade[4] , Mansi Sonekar[5], Vaishali Rajak[6]

[1,2,3,4,5,6]CSE, Priyadarshini College of Engineering, Nagpur, India

**Corresponding Author:* ✉

Received: 23/Jan/2025; **Accepted**: 25/Feb/2025; **Published**: 31/Mar/2025. **DOI**: https://doi.org/10.26438/ijcse/v13i3.3340

Abstract: Alumni Interconnect is a dynamic social networking platform designed to connect students, alumni, and faculty, fostering mentorship, career guidance, and professional networking. It bridges the gap between students and successful alumni, enabling knowledge-sharing and industry insights. The platform offers an intuitive user experience with features like profile management, an interactive feed, messaging, and video meetings for seamless engagement. A robust authentication system ensures security by preventing fake accounts, while admins regulate content to maintain professionalism. By integrating these features, Alumni Interconnect enhances alumni-student engagement, promoting career growth, mentorship, and a strong institutional community. Its focus on authenticity, security, and interactive learning makes it a premier hub for academic and professional development.

Keywords: User authentication, Content moderation, Profile management, Real-time messaging, Interactive feed, Data Security and Privacy, Mentorship and Career Guidance, Video Calling Integration.

1. Introduction

The proposed idea is to create a social media-like website where students and alumni can connect to share ideas, interact, and exchange referrals through posts, webinars, and direct messages. Posts can be used to share motivation, progress, experiences, and job opportunities among users. Additionally, users will have the ability to add others as connections and engage with them. Private contact information will only be shared with connected users if they grant permission.

The website will feature a unique user validation and authorization system to prevent the creation of fake accounts. This will be achieved by cross-verifying a current student's enrollment or registration number with their university and using OTP verification via their university-registered phone number and email ID. This system will ensure that each user can create only one unique account. Similarly, alumni will be required to provide their registered enrollment or registration number, after which an OTP will be sent to their registered email ID and phone number. If alumni no longer have access to their registered email or phone number, they will be prompted to contact the admin. After document verification, they will be allowed to register their accounts using a new email and phone number.

Admins will register using their university registration number, email, and phone number. A unique passkey will be generated for them, which, along with their password, will be required for login.

The website will also feature a hybrid search and recommendation system that combines collaborative and content-based filtering. In the initial stages, the recommendation system will prompt users to provide preferences such as skills, department, and domain. Over time, the system will continuously learn and improve its model based on user interactions.

2. Related Work

1. Reconnectify: An Alumni Association Platform
Reconnectify is a sophisticated, interactive tool that connects alumni, students, and faculty, fostering a vibrant professional network. It offers a user-friendly interface which helps in strengthening the connection between its users. It also includes features such as detailed profile management and engaging feed post which helps in creating an interactive hub

for networking, mentorship and knowledge sharing. Reconnectify also includes features like real-time notifications, event organization, active community, academic prospects. It is made using MERN (mongo, express, react, node) [1].

2. Alumni Connect Hub: A comprehensive Alumni management system

Alumni Connect Hub is the study that outlines the system's functionalities, including real-time communication, professional networking, and event management features. The app's role in fostering knowledge sharing and mentorship opportunities. It highlights the importance of such platforms in creating a collaborative ecosystem that benefits both students and alumni while enhancing institutional ties. It provides an in-depth analysis of the technical design, system architecture, and implementation methods, emphasizing its scalability and user-friendly interface. Additionally, it discusses the potential of the platform to serve as a mentorship hub, facilitate career guidance, and enhance institutional branding through active alumni participation [2].

3. Student-alumni network web app

The Student-Alumni Network Web App is a web-based application designed to strengthen the connection between alumni and students. It offers features such as real-time communication, group discussions, and various social media functionalities. In this platform, alumni can share their work experiences and mention their social media accounts. Additionally, alumni can post about internship opportunities for interested students. Users can also upload their profile pictures to facilitate easier interaction and recognition between alumni and students [3].

4. AlumniConnect: Building Bridges Between Alumni and Students

AlumniConnect is an innovative Android application designed to enhance alumni management and networking. The app aims to foster seamless interaction among alumni, current students, and the Training and Placement Office (TPO) by offering features such as direct communication, job opportunities, and event updates. Alumni can share career openings, while students gain access to internships and placements, creating a bridge for professional growth. It also facilitates sharing important announcements and hosting group discussions, promoting collaboration and mentorship. A feedback mechanism enables alumni and students to provide insights to the TPO, improving career-related activities and resources. By centralizing networking and communication, AlumniConnect strengthens alumni-student relationships and supports the TPO in organizing activities efficiently, contributing to a connected and collaborative ecosystem for all stakeholders [4].

5. Survey On Alumni Connect Forum

Survey On Alumni Connect Forum is designed to efficiently manage alumni information and facilitate seamless connectivity between alumni, current students, and administrators. Alumni can share their job experiences and provide insights into job opportunities to help guide current students. The platform enables students to access valuable information about hackathons, internships, and job openings, while also offering alumni the chance to mentor students on resume building. Developed using React.js or AngularJS for the frontend and Django-Python or Flask for the backend, the application integrates LinkedIn for alumni registration and profile sharing. Additionally, features a discussion forum for students and teachers to engage in meaningful conversations and knowledge exchange [5].

6. An Efficient System for Interconnecting Alumni after Their Studies: A Multipurpose App for Public Assimilation

An Efficient System for Interconnecting Alumni after Their Studies introduces a mobile application designed to strengthen alumni connections after graduation. It provides a structured platform where former students can engage in networking, mentorship, and knowledge sharing. Key features include real-time updates, career opportunities, and discussion forums, promoting professional and academic interactions. By utilizing advanced computing and secure networking techniques, the application ensures user authentication and data protection. The study emphasizes the importance of maintaining long-term alumni relationships and presents a scalable solution to enhance engagement within academic communities[6].

7. Campus Connect to Facilitate Student-Alumni Engagement

It is about a platform designed to enhance interaction between students and alumni by providing a structured digital space for engagement. The study emphasizes the role of alumni in guiding students through mentorship, career opportunities, and academic collaborations. It integrates features such as networking tools, event updates, and discussion forums to facilitate seamless communication. By incorporating modern technology, the system optimizes data management and improves user accessibility. This research contributes to the ongoing efforts in strengthening alumni relations, offering an innovative approach to fostering long-term academic and professional connections [7].

8. An Alumni-Based Collaborative Model to Strengthen Academia and Industry Partnership: The Current Challenges and Strengths.

An Alumni-Based Collaborative Model to Strengthen Academia and Industry Partnership explores the role of alumni networks in bridging the gap between academia and industry through a collaborative model. It highlights how alumni engagement can facilitate knowledge transfer, mentorship, and industry partnerships, ultimately enhancing students' career prospects. The research identifies key challenges, such as maintaining active alumni participation and ensuring efficient communication channels. Additionally, it examines the strengths of alumni-driven initiatives, including their potential to offer industry insights, internships, and funding opportunities for academic institutions. By analyzing existing frameworks, the study provides valuable recommendations for optimizing alumni collaborations to

create a mutually beneficial ecosystem for both academia and industry[8].

9. Alumni Management System
Alumni Management System is an online platform developed to strengthen connections between alumni and their institution. It provides functionalities like user registration, profile management, event participation, job postings, and networking opportunities. By facilitating communication and collaboration, the system enables alumni to maintain ties with their alma mater. Institutions can utilize this platform to expand their alumni network, foster partnerships, and enhance their overall reputation [9].

10. Alumni Engagement in Higher Education Institutions: Perspectives from India
Alumni Engagement in Higher Education Institutions examines the role of alumni engagement in higher education institutions in India, highlighting its significance in fostering academic and professional growth. It explores how alumni networks contribute to institutional development, career guidance, and mentorship programs for students. The research also discusses challenges faced in maintaining active alumni participation, such as lack of communication channels and engagement strategies. It provides valuable insights into optimizing alumni interactions to benefit both institutions and graduates[10].

11. DevOps: Concept, Technology and Tools
DevOps: Concept, Technology and Tools DevOps engineers play a crucial role in managing the entire application lifecycle, encompassing requirement gathering, development, testing, deployment, and continuous monitoring. Integrating DevOps principles into this platform can significantly enhance its performance, scalability, and overall reliability. By adopting a Continuous Integration/Continuous Deployment (CI/CD) pipeline, the platform can streamline software updates, automate deployment processes, and reduce downtime. This approach enables seamless integration of new features and timely updates based on user feedback, ensuring an improved user experience[11].

12. Developing a Comprehensive Website for 'Gore English School': An Analytical Study
Gore English School is a website that plays a vital role in enhancing communication, accessibility, and engagement among students, parents, and staff. It serves as a centralized digital platform that organizes essential information, including academic updates, event notifications, and resource sharing, into an intuitive and user-friendly interface.It includes interactive admission forms that simplify the enrollment process, real-time announcements that keep users informed about important events, and a dedicated section for showcasing academic achievements.It prioritizes secure data management and ease of access, making it user-friendly for individuals with varying levels of technical proficiency[12].

3. Theory/Calculation

The platform integrates Firebase Authentication, Firebase Firestore, MongoDB, and Prisma ORM to manage authentication, data sharing, and real-time interactions efficiently. Firebase Authentication ensures secure login and user verification, while Firestore stores user-related data, including profiles, posts, and connections. This allows for real-time updates, ensuring any changes made by users are reflected instantly across the system.

To handle user connections, Firestore stores connections as a collection where each entry consists of two key fields: the userId of the user who sent the connection request and the targetId of the recipient. This structured storage system enables users to manage their professional network effectively. When a user enters the messages section, their connections are fetched from Firestore, and a user model is created in Prisma, where the connections are stored. This model is refreshed every time the user accesses the messages section, ensuring that any newly established connections are updated in real time.

The Prisma user model also stores messages and conversations, allowing for structured and efficient retrieval of chat data. Conversations maintain a history of messages, enabling seamless access to past interactions. WebSockets are employed to facilitate real-time message exchanges, ensuring minimal latency and providing an instant messaging experience similar to modern social media platforms. This hybrid approach combines the scalability of Firestore with the flexibility of MongoDB, ensuring a robust and high-performance messaging system.

Additionally, strict data access controls are implemented to protect sensitive information. Messages and user data are stored with appropriate permissions, ensuring that only connected users can access relevant information. The combination of Firestore and Prisma ensures data consistency, preventing duplication and synchronizing updates across the system. By leveraging these technologies, the platform delivers a secure, scalable, and dynamic user experience, making alumni-student interactions more structured and efficient.

4. Experimental Method/Procedure/Design

4.1 User Authentication

The platform is designed to support three distinct types of users: current students, alumni, and college administrators, each with specific access rights and functionalities. To ensure a secure and scalable authentication system, Firebase Authentication is used for user management. This approach provides a robust framework for handling login credentials, enforcing security policies, and managing user sessions efficiently.

During the sign-up process, students and alumni must enter their enrollment number, which serves as a unique identifier linked to their academic records. This enrollment number undergoes a verification process before an account can be created, preventing unauthorized access. Additionally, an OTP (One-Time Password) is sent to the user's registered email or phone number as an extra layer of security, ensuring

that only legitimate users can complete the registration process.

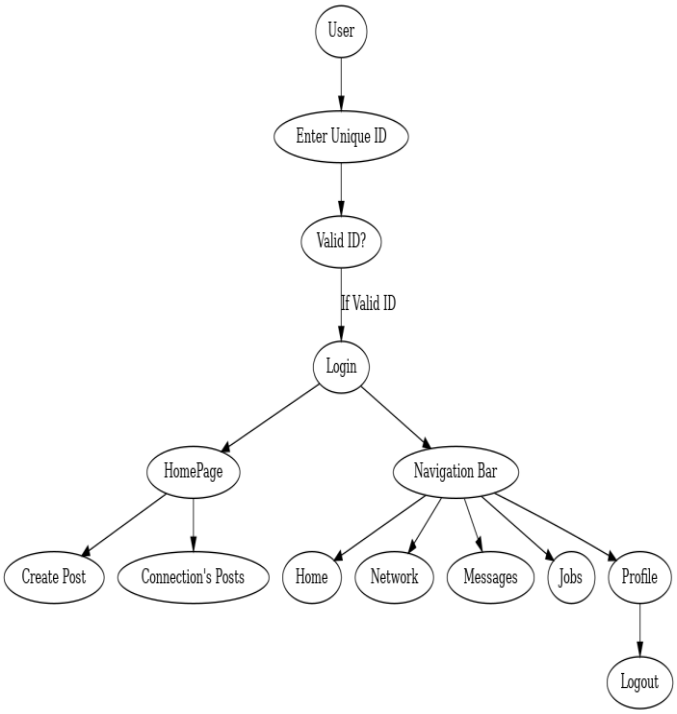

Figure 1. Workflow

For college administrators, authentication follows a similar model but requires them to provide a unique identification number assigned by the institution. This verification mechanism enhances security by restricting administrative privileges to authorized personnel only.

By implementing these authentication measures, the platform effectively mitigates the risk of fake accounts and unauthorized access. Ensuring that only verified users can join fosters a trustworthy environment where students, alumni, and administrators can interact securely. This structured approach not only enhances user confidence but also strengthens the integrity of the platform's network.

4.2 Dashboard

The dashboard serves as the central user interface, designed to provide an intuitive and interactive experience similar to popular social media platforms. It acts as the primary hub where users can engage with the platform's various features, stay informed, and interact seamlessly. Built with a focus on user engagement and accessibility, the dashboard ensures smooth navigation and responsiveness across different devices, offering a consistent experience on desktops, tablets, and mobile phones.

Home Feed - This section displays a dynamic stream of posts, announcements, and important updates from students, alumni, and administrators. Users can stay informed about ongoing discussions, upcoming events, and relevant news within their academic and professional circles.

Notification Panel - To enhance user engagement, the notification system provides real-time alerts about new messages, connection requests, comments, likes, and other interactions. This ensures that users never miss important updates.

Profile Management - Users have full control over their profiles, allowing them to update personal details, add academic or professional achievements, and configure privacy settings to manage visibility and interactions.

Messaging Section - A built-in real-time chat system enables direct messaging and group conversations. Whether for networking, mentorship, or casual discussions, this feature facilitates smooth communication between students, alumni, and administrators.

Posts & Reactions - Users can create and share posts, engage with others through likes and comments, and upload multimedia content such as images, documents, and videos. This fosters an interactive and collaborative environment within the platform.

By integrating these features, the dashboard not only enhances user experience but also strengthens community engagement. Its responsive design ensures a seamless interface across all devices, making interactions smooth, engaging, and efficient.

4.3 Database

The platform leverages a combination of modern database technologies to ensure efficient data management, seamless real-time interactions, and scalability. By integrating Firebase Firestore and MongoDB, the system is designed to handle authentication, posts, and messaging with high performance and reliability.

Authentication & Posts - Firebase Firestore is the primary database used for storing and managing user authentication details and posts. Its cloud-based, NoSQL structure allows for seamless real-time updates, ensuring that posts appear instantly across all user devices. Additionally, its deep integration with Firebase Authentication enhances security while simplifying user management. This approach provides a scalable solution that can handle growing user activity without compromising performance.

Chat System - To support real-time messaging, MongoDB is utilized for storing chat messages and conversations. Integrated with Prisma ORM, MongoDB ensures efficient data management, enabling fast queries and structured interactions. The use of Prisma simplifies database operations, making it easier to maintain, update, and retrieve chat-related data while optimizing performance for high-frequency messaging.

User Metadata - Additional user-related data, such as preferences, messaging metadata, and interaction history, is stored in MongoDB. This allows for greater flexibility in

handling large-scale user interactions, enabling personalized experiences and efficient data retrieval. By maintaining metadata separately, the platform ensures that core authentication and chat functionalities remain lightweight and highly responsive.

By strategically integrating these technologies, the platform delivers a seamless and responsive experience for users, ensuring secure authentication, real-time communication, and scalable content management.

4.4 Integrated real-time chatting

Real-time communication is a crucial feature of the platform, fostering meaningful interactions between students and alumni. By enabling seamless conversations, the system enhances mentorship opportunities, career guidance, and professional networking. To ensure efficient, low-latency messaging, the platform is built with modern real-time communication technologies that prioritize performance, scalability, and user privacy.

Technology Stack - The chat system is implemented using MongoDB (via Prisma) and WebSockets, ensuring instant message delivery with minimal latency. WebSockets enable persistent, bi-directional communication between users, allowing real-time updates without the need for frequent server polling. This results in a more efficient and responsive messaging experience.

Message Storage & Retrieval - Messages are securely stored in MongoDB, which provides a structured approach to data organization. With high-performance retrieval capabilities, users can access their message history quickly, even in large-scale conversations. Prisma ORM further optimized query execution, ensuring smooth interactions without unnecessary delays.

Privacy & Access Control - To maintain a professional and distraction-free environment, alumni have the ability to control who can message them, reducing unnecessary interruptions. This feature empowers users to manage their accessibility, ensuring that communication remains relevant and purposeful.

Group & One-on-One Conversations - The chat system supports both personal and group messaging, enabling flexible interactions. Students and alumni can engage in direct one-on-one discussions for mentorship, while group chats facilitate broader conversations, event planning, and topic-based discussions among multiple users.

By integrating these real-time messaging capabilities, the platform ensures a seamless, interactive, and secure communication experience, making it easier for students and alumni to connect, collaborate, and exchange knowledge effectively.

Table 1. Features and Technologies Used

Sr.No	Feature	Technology Used
1	User Authentication	Firebase Authentication
2	User Roles	Firebase Firestore
3	Connections System	Firebase Firestore
4	Messaging System	MongoDB, Prisma, WebSockets
5	Data Synchronization	Firestore + Prisma ORM
6	Posts & Engagement	Firebase Firestore
7	Data Privacy & Security	Firestore Rules + Prisma
8	Scalability & Performance	Firebase, MongoDB

5. Results and Discussion

The implementation of Alumni Interconnect will significantly enhance networking opportunities, mentorship, and career growth for students and alumni alike. By fostering a professional yet interactive social media-like environment, the platform will enable students to connect with alumni, seek career guidance, and explore job opportunities through shared referrals. The post-sharing feature will encourage users to discuss career paths, experiences, and motivational content, creating a culture of support and inspiration within the community. The direct messaging system will facilitate meaningful conversations, enabling users to exchange knowledge and build strong professional relationships. The robust user authentication system prevents the creation of fake accounts, ensuring that every user is a verified member of the institution. This feature increases trust and credibility within the platform, making it a reliable space for career networking and professional interactions. By bridging the gap between students and alumni, Alumni Interconnect will redefine the way individuals interact within their academic and professional networks. The platform will facilitate collaboration, career growth, and knowledge sharing, ultimately strengthening the bonds between current students and graduates while enhancing opportunities for professional development.

By creating a dedicated online space for students and alumni, Alumni Interconnect fosters long-term engagement and collaboration. It not only helps students in navigating their academic and professional journeys but also allows alumni to give back to their institutions, creating a strong, supportive, and resourceful community. The platform's seamless integration of networking, mentorship, job referrals, and career guidance makes it an invaluable tool for academic institutions looking to strengthen their alumni-student relationships. Alumni Interconnect will serve as a dynamic and influential ecosystem that empowers users, enhances career prospects, and transforms the way educational communities stay connected.

6. Conclusion and Future Scope

Alumni Interconnect successfully establishes a dynamic and interactive platform that bridges the gap between students and alumni, fostering mentorship, career growth, and professional networking. By leveraging Firebase for authentication and posts, and MongoDB with Prisma for real-time chat, the

platform ensures scalability, security, and efficient data management.

With robust user validation mechanisms, it effectively prevents unauthorized access and fake accounts, maintaining the credibility of connections. The integration of a hybrid recommendation system enhances user engagement by personalizing content, connections, and career opportunities. Additionally, real-time messaging and interactive feeds provide an inclusive and collaborative environment for knowledge-sharing and mentorship.

As the platform evolves, its AI-driven insights, cross-institutional networking, and blockchain-based verification can further enhance security, transparency, and scalability. With its comprehensive features, user-centric design, and emphasis on professional growth, Alumni Interconnect has the potential to become an indispensable tool for academic institutions, empowering students and alumni to build meaningful and lasting connections.

Future Scope

The platform establishes a foundation for continued development and expansion in several promising directions that can further enhance its value to educational institutions and their communities.

6.1. AI-Driven Career Insights The existing platform architecture supports the future integration of artificial intelligence capabilities that can provide personalized career guidance. Predictive career pathing based on alumni trajectories with similar backgrounds, skill gap analysis comparing student profiles with industry requirements, automated mentorship matching using compatibility algorithms, personalized content recommendations highlighting relevant opportunities, and natural language processing for extracting insights from alumni-student interactions are some of the potential AI-driven features. These AI capabilities can transform passive networking into active career development, providing students with data-driven guidance based on real alumni outcomes rather than generalized advice.

6.2. Blockchain-Based Verification The authentication system can be enhanced through blockchain technology to provide tamper-proof credential verification. This can include immutable records of academic achievements and credentials, verified professional certifications and experiences, transparent endorsement systems for skills and capabilities, portable digital identity verification across institutional boundaries, and smart contracts for formalizing mentorship agreements. This implementation would address growing concerns about credential fraud while streamlining verification processes for employers and other stakeholders interacting with platform members.

6.3. Cross-Institutional Networking Expanding beyond single-institution deployments represents a significant opportunity for platform growth. Federation protocols allowing secure interaction between different institutional instances, global alumni search capabilities across participating institutions, collaborative projects between students from different universities, expanded mentorship pools drawing from multiple alumni networks, and comparative analytics providing insights into career outcomes across institutions are some of the key aspects. This expansion would maintain institutional identity and data sovereignty while dramatically increasing the networking potential for all participants, particularly benefiting smaller institutions with limited alumni bases.

6.4. Advanced Analytics Dashboard Enhanced data visualization and analytics capabilities can provide valuable insights for institutional leadership. Alumni employment trends and geographic distribution, engagement metrics identifying program strengths and weaknesses, network analysis revealing influential alumni and untapped connections, outcome tracking for students who utilized mentorship resources, and return on investment calculations for alumni engagement initiatives are some of the potential analytical features. These analytics would transform this platform from a networking platform into a strategic decision support system for institutional advancement and student success initiatives.

Data Availability

No external datasets were used in this study

Conflict of Interest

All authors confirm that they have no conflict of interest to disclose.

Funding Source

The author fully financed this research independently without any external funding.

Authors' Contributions

The contributions of each author to the project are as follows:

Author-2 developed the entire chatting system and implemented Prisma for efficient database management while also playing a key role in structuring the research methodology.

Author-3 designed and developed the sign-in logic, ensuring secure authentication and smooth user access, while also contributing to manuscript refinement and technical integrations.

Author-4 worked on the home page section, developing the functionality for creating posts and managing the posts section, while also assisting in manuscript development.

Author-5 Supervised the research, provided guidance to the team, and developed the connections feature to facilitate networking within the platform.

Author-6 Worked on the user profile section, ensuring seamless profile management and user experience, while referring to multiple research papers.

Acknowledgements
We are grateful to our guide, Leena Patil for her invaluable guidance throughout the project. Her expertise and unwavering support played a crucial role in keeping us focused and ensuring the project's success. Her dedication and insightful contributions were instrumental in bringing this project to completion.

References

[1] M. Bhuvana, J. Hemalatha, S. Abinaya, R. Hemavarshini - "Reconnectify: An Alumni Association Platform," *International Journal of All Research Education and Scientific Methods (IJARESM),*ISSN: **2455-6211**, Vol.**12**, Issue.**11**, pp.**1917-1923**, **2024**.

[2] P.P. Sawai, P.V. Chambhare, A.N. Jaysingpure, A.G. Karhe, D.Rathod, Dr V.S Gulhane - "Alumni Connect Hub:A comprehensive Alumni management system," *International journal of Ingenious Research, Invention and Development,* Vol.**3**, pp.**56-64**, **2024**.

[3] M.Arora, A.Negi, Md. S.Khan- "Student-alumni network web app ," *International Journal Of Advance Research, Ideas And Innovations In technology*, Vol.**8**, Issue**.1,** pp.**3171-3181**, **2022**.

[4] S.Kathane, E.Dandge, V. Sahu, K. Shapane, J. Zaidi, R. Mathane - "AlumniConnect: Building Bridges Between Alumni and Students," *International Journal of Research Publication and Reviews* ,Vol.**5**, Issue.**4**, pp.**3639-3643**, **2024**.

[5] N.Barudwale, C.Pandey, A.Wagh, G.Bhasme, Prof.M.Khade - "Survey On Alumni Connect Forum ," *International Research Journal of Modernization in Engineering Technology and Science,* Vol.**5**, Issue.**5,** pp.**3201-3205**, **2023**.

[6] R. Singh, H. Shukla, P. Flodya, S. Singh , R. Rastogi -"An Efficient System for Interconnecting Alumni after Their Studies: A Multipurpose App for Public Assimilation," *5th International Conference on Advances in Computing, Communication Control and Networking* (ICAC3N), pp.**420-425**, **2023**.

[7] Akash J, Harshavardhan J, Janani B. - "Campus Connect to Facilitate Student-Alumni Engagement,"*International Journal of Progressive Research in Science and Engineering*, Vol.**4,** Issue.**21**, pp.**150-156**, **2023**.

[8] R. Malhotra, M. Massoudi, R.Jindal. - "An Alumni-Based Collaborative Model to Strengthen Academia and Industry Partnership: The Current Challenges and Strengths," *Education and Information Technologies*, Vol.**28**, Issue.**15** , pp.**2263-2289**, **2022**.

[9] A. Patil, P. Kamble,S. Patil, V. Kesarkar ,M.A.Pardesi-"Alumni Management System," *International Research Journal of Modernization in Engineering Technology and Science,* Vol.**3**, Issue.**5**, pp.**4540-4543**, **2025**.

[10] P. Veluvali, J. Surisetti, - "Alumni Engagement in Higher Education Institutions: Perspectives from India," In Higher Education - Reflections From the Field, pp.**1-8**, **2023**.

[11] P. Deshwal, P.Ghuli - "DevOps: Concept, Technology and Tools," *International Journal of Computer Sciences and Engineering*, Vol.**8**, Issue.**6**, pp.**73-78**, **2020**.

[12] M. Patil, P. Mote, S. Nanaware, V. Todkar, R. Phuge - "Developing a Comprehensive Website for 'Gore English School': An Analytical Study,"*International Journal of Computer Sciences and Engineering*, Vol.**13**, Issue.**1**, pp.**33-40**, **2025.**

AUTHORS PROFILE

Leena Patil completed her B.E. (CSE) and M.E. (CSE) and was awarded a Ph.D. in Computer Science and Engineering in 2016. She is currently an Associate Professor and Head of the Department (HoD) of Computer Science and Engineering at Priyadarshini College of Engineering, Nagpur, with 23 years of teaching experience. She has published three books, two book chapters, and 45 research papers in reputed international journals, including Scopus- and SCI-indexed journals. Her research interests include Compiler Design, Theory of Computation, Information and Cyber Security, Data Mining, and DBMS. She holds two granted patents and one published patent. She has attended Train-the-Trainer sessions under the ERASMUS+ Project: Cyber Security for All (CS4ALL) in Croatia and Spain. Additionally, she serves on the Board of Studies at RTMNU, Nagpur, and is recognized as a Ph.D. and M.E. research supervisor.

Aayush Vaibhaw is pursuing a B.Tech in Computer Science and Engineering at Priyadarshini College of Engineering, Nagpur, with an expected graduation in 2025. Interested in software development, artificial intelligence, and networking, with a strong passion for creating technology-driven solutions that enhance connectivity and user engagement. Experienced in web development and database management, with a focus on building digital platforms that facilitate professional networking and mentorship. Committed to leveraging technology to improve educational ecosystems and foster meaningful interactions in the digital space.

Shaurya Tripathi is undertaking his B.Tech studies in Computer Science and Engineering at Priyadarshini College of Engineering, Nagpur, he is on track to graduate in 2025. His academic interests include software development, artificial intelligence, and networking. Passionate about developing innovative technology solutions to enhance connectivity and user engagement, he has worked on various projects in web development and database management. His research focuses on digital platforms designed for professional networking and mentorship, aiming to contribute to the advancement of technology-driven educational ecosystems.

Ananya Ambade is a B.Tech student specializing in Computer Science and Engineering at Priyadarshini College of Engineering, Nagpur, she is expected to graduate in 2025. Her academic interests span software development, artificial intelligence, and networking. Driven by a passion for creating innovative technological solutions, she focuses on enhancing

connectivity and user engagement. She has gained experience through various projects in web development and database management. Her research is centered on developing digital platforms for professional networking and mentorship, with the goal of contributing to the evolution of technology-driven educational ecosystems.

Mansi Sonekar is currently pursuing a Bachelor of Technology degree in Computer Science and Engineering at Priyadarshini College of Engineering, Nagpur, and is set to complete it in 2025. She has a strong interest in software development, artificial intelligence, and networking. With a passion for leveraging technology to improve digital interactions, she focuses on designing innovative solutions that enhance connectivity and user engagement. Her experience includes working on web development and database management projects. She is particularly interested in developing digital platforms that support professional networking and mentorship, striving to contribute to the advancement of technology-driven learning environments.

Vaishali Rajak is enrolled in the B.Tech program in Computer Science and Engineering at Priyadarshini College of Engineering, Nagpur, with graduation anticipated in 2025.. Her academic interests include software development, artificial intelligence, and networking systems.She is passionate about building innovative tech solutions that enhance connectivity and user engagement. She has worked on various projects related to web development, database management. Her research focuses on digital platforms for professional networking and mentorship. She aims to contribute to the advancement of technology-driven educational ecosystems.

