

# **InternSprint: Bridging Students & Companies through Smart Internships**

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**Abstract:** Internships have become an essential component of higher education as they help students gain practical exposure, improve professional skills, and understand real-world work environments. However, the process of finding suitable internships remains challenging due to unverified platforms, scattered information, lack of transparency, and inefficient communication between students and companies. Many students struggle to identify genuine internship opportunities that align with their academic background and career goals, while companies face difficulties in reaching qualified candidates efficiently. To address these challenges, this research proposes InternSprint, a web-based internship management platform designed to act as a bridge between students, companies, and educational institutions. The system provides verified internship postings, student profile management, application tracking, and administrative monitoring. InternSprint simplifies the internship search and recruitment process, improves transparency, and ensures secure interaction among stakeholders. The platform aims to enhance student career development, reduce administrative workload, and strengthen academic-industry collaboration.

**Keywords:** Internship Platform, Web Application, Career Development, Industry Collaboration, Internship Management System

## **I. INTRODUCTION**

In the modern education system, internships play a vital role in preparing students for professional careers. They allow students to apply theoretical concepts learned in classrooms to real-world situations, develop technical and soft skills, and gain industry exposure before graduation. Many universities and colleges have made internships compulsory as part of their curriculum to improve employability.

Despite their importance, students face several challenges when searching for internships. Information about internships is often scattered across multiple platforms such as job portals, social media, and college notice boards. Many of these sources contain outdated or fake listings, making it difficult for students to trust them. Additionally, the application process is often unstructured, leading to confusion, lack of feedback, and poor tracking of applications.

Companies also experience difficulties in recruiting interns. Sorting through numerous applications, verifying student credentials, and managing communication requires significant time and resources. Educational institutions lack centralized systems to monitor internship activities and ensure that students gain meaningful learning experiences.

To overcome these issues, a centralized and verified digital platform is required. InternSprint is proposed as a web-based solution that connects students and companies in a transparent and structured manner. The platform aims to simplify the internship process, improve communication, and ensure authenticity for all stakeholders.

## **II. LITERATURE SURVEY**

The literature survey conducted for this study is summarized in a tabular format, providing a comprehensive overview of relevant research works. The table encompasses crucial details such as the name of the study, author(s), publication year, research objectives, and key advantages and disadvantages identified in each work.



Paper Title	Year	Authors	Description
Development of Website-Based Information System to Facilitate Students in Finding Internship Opportunities [1]	2024	Billy Hendrawan, Rizki Alim Novianto, Siti Sahara	The research paper "Development of Website-Based Information System to Facilitate Students in Finding Internship Opportunities" focuses on the design and implementation of a web-based information system that assists students in identifying suitable internship opportunities. The study highlights the difficulties faced by students due to scattered internship information and inefficient manual processes. The proposed system provides centralized internship listings, student profile management, search and filtering options, and application tracking features. The system improves accessibility and efficiency for students and educational institutions; however, it mainly concentrates on internship discovery and does not extensively address verification of postings or deep collaboration with companies.
Online Internship Portal [2]	2025	Akshaya et al.	The research paper "Online Internship Portal" presents a centralized digital platform designed to automate and streamline the internship recruitment process. The system connects students, companies, and academic coordinators through verified internship listings, real-time application tracking, and administrative monitoring features. By reducing manual intervention, the portal improves transparency and efficiency in internship management. However, the study primarily focuses on automation and operational efficiency rather than fostering long-term academic-industry collaboration.
A Systematic Review of Online Internship Portals [3]	2026	Chipade et al.	This research paper provides a systematic review of existing online internship portals and analyzes emerging trends such as virtual internships, AI-based recommendation systems, and secure verification mechanisms. The study identifies major challenges in current platforms, including fraudulent internship postings, lack of personalization, limited institutional integration, and concerns related to data privacy. The review emphasizes the need for more intelligent, reliable, and secure internship platforms that can better serve students, recruiters, and academic institutions.
Internship Management System for Academic-Industry Collaboration [4]	2020	Mydyti and Kadriu	The research paper explores the role of an Internship Management System (IMS) in strengthening relationships between students, businesses, and academic institutions. The system aims to improve communication, reduce administrative workload, and support organizations in identifying suitable student talent. While the study highlights the benefits of digitized internship coordination, it places greater emphasis on institutional communication and offers limited focus on student-centric usability and real-time engagement features.
			The research paper "Profile-Based Internship Matching System" proposes an automated system that matches students with

Profile-Based Internship Matching System [5]	2025	Divyajyothi et al.	internship opportunities based on skill profiling and recruiter requirements. The platform improves the accuracy of internship recommendations and reduces mismatches between student skills and job expectations. Despite its intelligent matching capability, the system does not sufficiently address issues related to internship verification, institutional monitoring, and transparency.
Automated Internship Management System [6]		Dhanya et al.	The research paper "Automated Internship Management System" presents a digital solution aimed at automating the internship coordination process between students, institutions, and organizations. The system focuses on reducing manual effort by providing online registration, internship postings, application handling, and monitoring features. The study highlights how automation improves efficiency, minimizes paperwork, and enhances transparency in internship management. However, the system offers limited emphasis on advanced verification mechanisms and large-scale industry collaboration
Smart Student Career Platforms [7]	2021	Zhang et al.	The research paper "Smart Student Career Platforms" explores intelligent digital platforms designed to support student career development through structured data management and personalized services. The study emphasizes the use of technology to assist students in identifying suitable career and internship opportunities based on their profiles and interests. While the platform improves career guidance and accessibility, it focuses more on recommendation support and less on verified internship recruitment and institutional monitoring.

### III. EXISTING SYSTEM

The current internship search process is largely fragmented and inefficient. Students typically rely on job portals, social media posts, personal references, or college notices to find internships. These sources often provide incomplete or unreliable information, resulting in inefficiencies and reduced reliability.

A significant limitation of the existing system is the absence of a verification mechanism. Fake internship postings and unpaid opportunities are common, exposing students to potential exploitation. Additionally, application tracking is inadequate, and students rarely receive feedback or status updates from companies.

Companies face challenges in managing a large number of applications, filtering suitable candidates, and maintaining effective communication. Educational institutions have limited control over internship activities and lack tools to monitor student progress. Consequently, the existing system fails to meet the expectations of students, companies, and educational institutions, highlighting the need for a centralized, secure, and transparent internship management platform.

### IV. PROPOSED SYSTEM

To overcome the limitations of the existing system, InternSprint has been designed as a web-based internship management platform that provides a centralized, secure, and transparent environment for students, companies, and administrators. The system is structured into three main modules: Student, Company, and Admin.

The Student Module allows users to register and create detailed profiles, including education, skills, and resumes. Students can search for internships using multiple filters such as domain, location, and required skills. They can apply

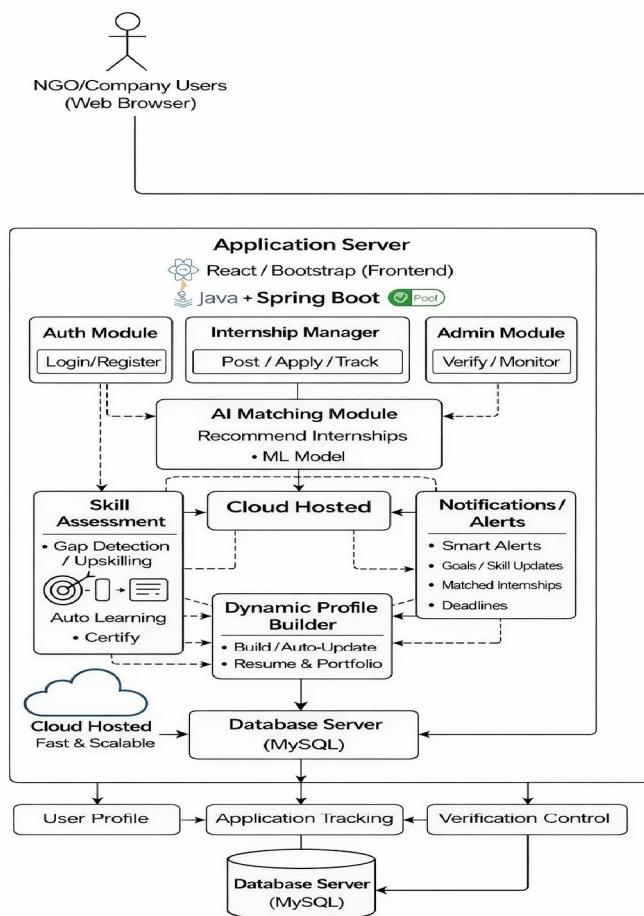
for opportunities and track application status in real time, which enhances transparency and reduces uncertainty in the application process.

The Company Module enables organizations to register, post internship requirements, and review student profiles. Companies can shortlist candidates and manage applications efficiently. Only verified companies are allowed to post internships, ensuring authenticity and trust.

The Admin Module is responsible for verifying company registrations, monitoring postings, managing users, and maintaining platform security. This oversight ensures transparency, prevents misuse, and guarantees reliability across all system operations.

InternSprint follows a three-tier architecture with React and Bootstrap for the frontend, Java SpringBoot for the backend, and MySQL as the relational database. The frontend provides a responsive and interactive user interface, while the backend handles business logic, authentication, authorization, and API communication. The system also incorporates AI-powered modules for internship matching and skill-gap detection, providing personalized recommendations and guidance for students. A notification system delivers alerts for internship matches, deadlines, and skill-building suggestions, enhancing engagement and usability. Overall, the platform reduces manual effort, improves communication, and ensures reliable internship opportunities.

#### System Architecture of InternSprint



**Fig 1.** System Architecture



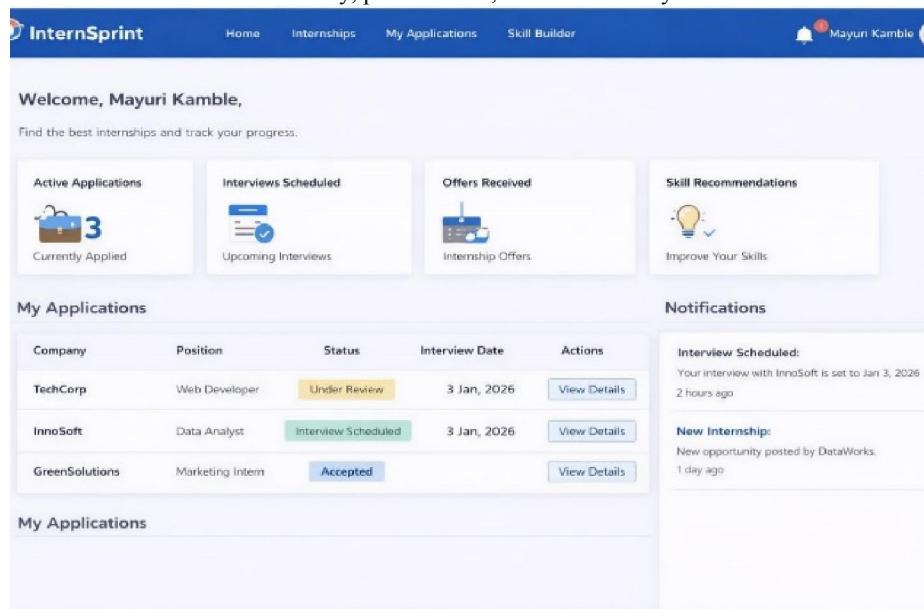
InternSprint follows a three-tier architecture:

Frontend: React

Backend: Spring Boot

Database: MySQL

The frontend provides a responsive and interactive user interface. The backend handles business logic, authentication, authorization, and API communication. MongoDB stores user profiles, internship listings, and application data efficiently. This architecture ensures scalability, performance, and data security.



Welcome, Mayuri Kamble,

Find the best internships and track your progress.

**Active Applications:** 3 Currently Applied

**Interviews Scheduled:** 3 Upcoming Interviews

**Offers Received:** 0 Internship Offers

**Skill Recommendations:** Improve Your Skills

**My Applications:**

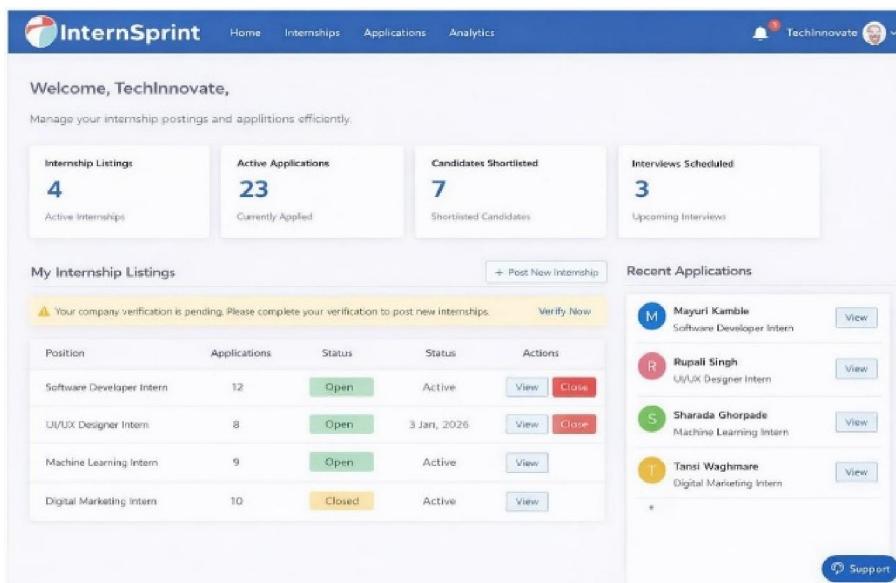
Company	Position	Status	Interview Date	Actions
TechCorp	Web Developer	Under Review	3 Jan, 2026	<a href="#">View Details</a>
InnoSoft	Data Analyst	Interview Scheduled	3 Jan, 2026	<a href="#">View Details</a>
GreenSolutions	Marketing Intern	Accepted		<a href="#">View Details</a>

**Notifications:**

- Interview Scheduled:** Your interview with InnoSoft is set to Jan 3, 2026 2 hours ago
- New Internship:** New opportunity posted by DataWorks. 1 day ago

**My Applications:**

Fig 2. Student-side interface



Welcome, TechInnovate,

Manage your internship postings and applications efficiently.

**Internship Listings:** 4 Active Internships

**Active Applications:** 23 Currently Applied

**Candidates Shortlisted:** 7 Shortlisted Candidates

**Interviews Scheduled:** 3 Upcoming Interviews

**My Internship Listings:**

Position	Applications	Status	Status	Actions
Software Developer Intern	12	Open	Active	<a href="#">View</a> <a href="#">Close</a>
UI/UX Designer Intern	8	Open	3 Jan, 2026	<a href="#">View</a> <a href="#">Close</a>
Machine Learning Intern	9	Open	Active	<a href="#">View</a>
Digital Marketing Intern	10	Closed	Active	<a href="#">View</a>

**Recent Applications:**

Avatar	User	Position	Status	Actions
M	Mayuri Kamble	Software Developer Intern	<a href="#">View</a>	
R	Rupali Singh	UI/UX Designer Intern	<a href="#">View</a>	
S	Sharada Ghorpade	Machine Learning Intern	<a href="#">View</a>	
T	Tansi Waghrane	Digital Marketing Intern	<a href="#">View</a>	

Fig 3. Company-side interface



## V. METHODOLOGY

The development of InternSprint with software development lifecycle:

- Requirement Analysis: Identifying needs of students, companies, and institutions
- Design: Creating system architecture, database schema, and UI wireframes
- Development: Implementing frontend and backend functionalities
- Testing: Performing functional and usability testing
- Deployment: Hosting the platform for user access
- Evaluation: Collecting user feedback and refining the system

This approach ensures systematic development and continuous improvement.

## VI. CONCLUSION

The suggested InternSprint internship management platform successfully tackles the challenges posed by the current disjointed and ineffective internship search systems by offering a centralized, smart, and transparent solution for students and companies, and educational institutions. By integrating modern web technologies and AI-driven components, the system ensures a streamlined and reliable internship discovery and management process.

The incorporation of key modules such as user authentication, internship management, AI-based matching, skill gap detection, notification services, and administrative verification enables an end-to-end workflow—from student registration and profile creation to internship application, tracking, and selection. This significantly reduces manual effort, improves communication, and enhances fairness and efficiency in internship allocation.

Furthermore, the platform empowers students by providing personalized internship recommendations and skill development guidance, while enabling companies to efficiently identify suitable candidates through verified and structured profiles. Administrative oversight ensures authenticity, transparency, and accountability, thereby building trust across all stakeholders.

In conclusion, this project demonstrates how web technologies and artificial intelligence can transform traditional internship management into a scalable, data-driven, and student-centric system. InternSprint not only enhances accessibility and transparency but also contributes to improved employability, industry-academia collaboration, and overall workforce readiness in a digitally evolving ecosystem.

## REFERENCES

- [1] A. Kumar, R. Sharma, and P. Verma, “A Web-Based Internship Management System for Academic Institutions”, International Journal for Research in Applied Science & Engineering Technology (IJRASET), vol. 9, no. 5, pp. 1120–1125, 2021.
- [2] S. Patel and N. Desai, “Design and Implementation of an Online Internship Portal”, International Journal of Computer Applications, vol. 176, no. 12, pp. 15–20, 2020.
- [3] J. Smith and K. Johnson, “AI-Based Recommendation Systems for Career Guidance”, IEEE International Conference on Artificial Intelligence and Data Engineering (AIDE), pp. 245–250, 2021.
- [4] M. Brown, L. Wang, and R. Taylor, “Skill Gap Analysis Using Machine Learning Techniques”, International Journal of Advanced Computer Science and Applications, vol. 11, no. 8, pp. 310–316, 2020.
- [5] P. Gupta and S. Mehta, “Role-Based Authentication and Authorization in Web Applications”, IEEE International Conference on Computing, Communication and Automation (ICCCA), pp. 678–683, 2019.
- [6] T. Nguyen and A. Khosla, “Design of Scalable Three-Tier Web Architecture Using React and Spring Boot”, International Journal of Engineering and Technology, vol. 7, no. 4, pp. 92–98, 2021.
- [7] Oracle Corporation, “MySQL 8.0 Reference Manual”, Oracle Documentation, 2022.
- [8] I. Goodfellow, Y. Bengio, and A. Courville, Deep Learning, MIT Press, Cambridge, MA, USA, 2016.

