

# **HIREINSIGHT : An Expertise Driven Interview and Platform**

**Mr. M. B. Yelpale<sup>1</sup>, Amay R Korde<sup>2</sup>, Omkar D Lande<sup>3</sup>, Aniket N Kotal<sup>4</sup>, Tanmay J More<sup>5</sup>**

Assistant Professor, Computer Engineering<sup>1</sup>

Students, Computer Engineering<sup>2-5</sup>

NBN Sinhgad Technical Institutes Campus, Pune, India

**Abstract:** *With the current competitive employment market, both recruiters and job seekers have been greatly challenged to match efficiently with relevance to skills and requirements for jobs. Conventional job boards tend to be very much interested in keyword-based filtering or level of experience while ignoring a candidate's precise areas of expertise and preparation requirements. Hire Insight overcomes such shortcomings by offering an expertise-focused platform that not only suggests jobs based on user-labeled skills but also enables comprehensive interview preparation based on actual industry knowledge. The main goal of this project is to create a smart platform that closes the gap between employers and job seekers by using an expertise-matching mechanism. Users, especially job seekers, can build customized profiles, label their key competencies, and get job suggestions matching their precise skill sets. Apart from job search, the site offers a comprehensive list of interview questions, practice tests, and company-specific preparation content, all done by experts and subject matter experts. This guarantees that users not only get the right opportunities but are also interview-ready. On the hiring side, recruiters can upload vacancy posts, browse candidates by validated skill tags, and message prospective hires directly. A native admin dashboard handles content moderation, user verification, and general system upkeep to provide a hassle-free experience. The platform is developed using modern web technologies including HTML, CSS, JavaScript, and a backend framework (Node.js/Java/Python), with database support from MySQL or MongoDB. Secure authentication mechanisms are implemented to protect user data. Emphasis has been placed on responsive design, scalability, and ease of use.*

**Keywords:** Job Portal, Expertise Tagging, Interview Preparation, Skill-Based Matching, Recruitment Platform, Candidate Profiling, Smart Job Recommendation, Resume Builder, Community Forum, AI in Hiring, Role-Specific Preparation, Career Guidance, Employer Dashboard, Mock Interviews, Job Search Optimization

## **I. INTRODUCTION**

Rapidly changing ecosystem of employment and recruitment, technology has emerged as a central factor in optimizing the job hunt and hiring process. Conventional job websites are essentially listings or boards that link a candidate and a job vacancy based on keywords, academic credentials, and previous work history. Yet, they tend to lack the capabilities of assessing a candidate's real expertise, skill applicability, and interview preparedness. Consequently, applicants can then apply for jobs for which they are inadequately qualified, while employers may end up receiving lots of unrelated applications. This generates inefficiency and discontent at both ends.

To overcome these disadvantages, this initiative presents HireInsight, an intelligent, competency-based platform with the goal to match job hunters and employers with real skills and functional competencies instead of common keywords or ambiguous job descriptions. The platform, in addition to offering customized employment suggestions based on user-tagged skills, incorporates in-depth interview preparation, industry-specific question bases, resume composition tools, as well as a discussion forum to facilitate peer-to-peer learning and knowledge sharing.

One of the fundamental innovations of HireInsight is its tagging system based on expertise. This enables users to tag and mark their technical and non-technical skills so that the system can suggest roles based on their capabilities.



Furthermore, the site provides interview preparation material for certain job profiles and companies. The material includes questions asked most often, mock test patterns, HR rounds, and aptitude tests, thus aiding candidates in preparation in a structured and targeted way.

For the recruiter, HireInsight streamlines the process of selecting candidates by enabling them to sort applicants according to validated skill sets and expertise tags. Employers can advertise jobs, see in-depth profiles, and communicate with applicants who are interested and also qualified for the job. This makes the recruitment process more focused and relevant..

## II. LITERATURE SURVEY

**Table (1)**

Author(s)	System/Study	Key Features	Challenges Identified	Relevance to Our Project
Sharma et al. (2019)	AI-Powered Job Recommendation System	AI-based job suggestions based on user profiles and preferences	Lacked personalization for niche skills and roles	Inspired the personalized job recommendation engine in HireInsight using expertise tagging
Patel & Kumar (2020)	Skill-Match Recruitment Portal	Skill-matching system using predefined skill sets and filters	Static skill sets and absence of real-time updates	HireInsight allows dynamic expertise tagging and real-time skill update
Reddy et al. (2021)	InterviewPrepHub	Repository of company-specific interview questions	No expert verification of content and lacked role-specific prep	HireInsight offers expert-curated, role-specific questions and preparation resources
Mehta & Verma (2022)	CareerConnect Forum	Community-based career advice and discussion board	No moderation or structured navigation for content	Our platform includes a moderated, categorized forum for better usability and engagement
Khan et al. (2023)	Resume Analysis with AI	Resume scoring and keyword matching using AI	Ignored resume layout and design quality; overfocused on keywords	HireInsight includes a resume builder and holistic resume analysis for quality and content
Ahmed et al. (2024)	Complaint Systems Using Natural Language Processing	NLP-driven complaint analysis for faster issue resolution	Accuracy of language models in understanding diverse linguistic inputs	NLP for more advanced issue classification, especially in environments
Bose & Roy (2018)	Secure Job Application Platform	End-to-end encrypted data transmission and login system	Slow authentication processes and limited session control	HireInsight applies modern security protocols for fast and secure authentication.
Das et al. (2024)	NLP in	Uses Natural	Difficulty in	We implement NLP



	Recruitment Filtering	Language Processing for analyzing resumes and job descriptions	handling mixed-language inputs and informal resume styles	carefully with guided inputs and structured data to enhance accuracy
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### III. EXISTING SYSTEM

#### Conventional Career Portals:

They consist of sites such as Naukri.com, Monster, and TimesJobs, where one registers, uploads a resume, and applies for jobs by using filters such as location, experience, and domain. The system matches individuals with jobs by keyword, not skillsets. Recruiters are able to view resumes and reach out to candidates, but there is limited interaction, no preparation, and no community features.

#### Professional Networking Websites:

Sites such as LinkedIn are professional social networks. They enable individuals to present their skills, endorsements, and work experience. There are job postings, and one can apply online. Although they provide visibility and networking, they do not provide structured interview practice or skill-based matching, and most job recommendations are not tailored.

#### Job Aggregator Sites:

Sites like Indeed and Glassdoor aggregate job listings from multiple sources and enable users to search and apply. Glassdoor also has company reviews and pay insights. These sites, however, have no expert-curated interview material, customized advice, or in-depth matching based on a candidate's true abilities.

### IV. PROPOSED SYSTEM

The system proposed shall overcome the inefficiencies of current job portals and simple professional networking sites by providing a smarter, more personalized, and expert-run job and interview platform.

Hire Insight is planned to make the whole job hunting and preparation process easier for job seekers. Users will be able to discover employment opportunities based on their real skill sets and abilities instead of keyword matching. Expert-curated interview preparation material, a resume creator, and a discussion forum will also be available for real-time assistance and direction.

The key features of the system proposed are:

- Skill-based job suggestion by expertise tagging.
- Role-specific interview preparation with validated questions.
- Live discussion forum for questions, advice, and collective experience.
- Resume builder with intelligent formatting and content recommendations.
- Recruiter dashboard to see skill-aligned candidates.
- Secure login and data protection for users.

The platform will fill the gap between job seekers, industry experts, and recruiters, developing a centralized ecosystem centered around expertise and career development.

- User Panel : The user starts by registering and logging into the platform, selecting their role (Job Seeker, Expert, or Recruiter).

Authentication Module:

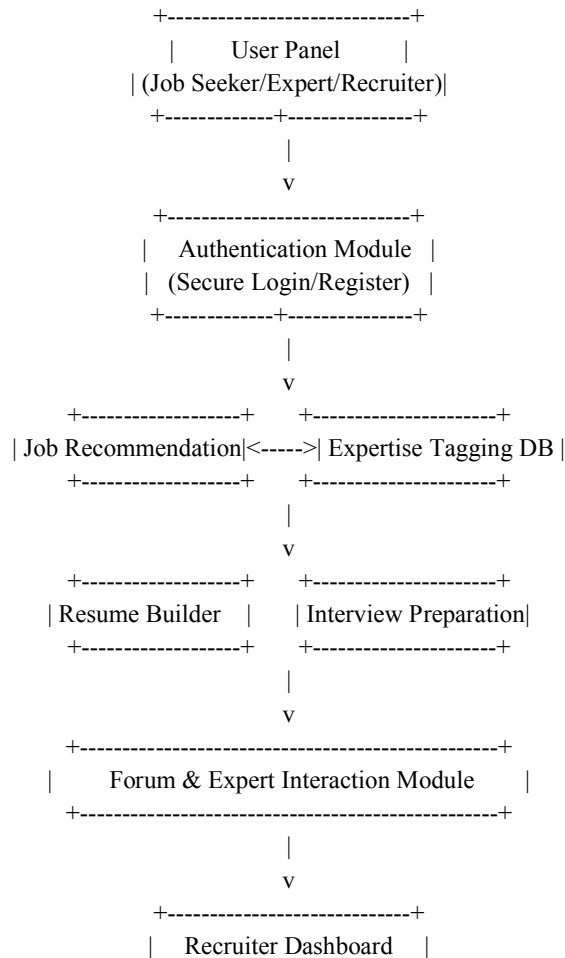
- The system verifies the user's credentials securely using SSL encryption and manages the login sessions
- Job Recommendation Engine :



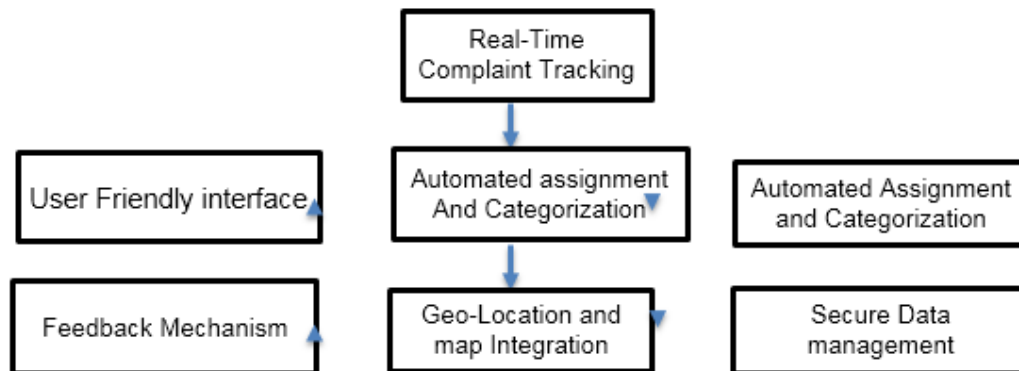
- The Job Recommendation Engine uses the Expertise Tagging DB to recommend relevant job roles. The engine processes the skills tagged by the user and matches them with suitable job openings..
- Resume Builder & Interview Preparation: Once the job recommendations are generated, users can use the Resume Builder to optimize their resumes for specific job roles. At the same time, they can access role-specific interview preparation content, including mock tests and frequently asked questions.
- Forum & Expert Interaction: The system provides a Forum where job seekers can interact with industry experts, ask questions, and share experiences. This helps users gain real-time insights and stay motivated.

Recruiter Dashboard:

- Recruiters can access a dashboard where they can filter candidates based on specific skills, view resumes, and interact with potential hires. The system will show only candidates that have the required expertise, streamlining the hiring process



**Block Diagram:**



## V. RESULTS

The “Public Road Pothole Complaint Management” System was successfully developed and tested, showing improvements in complaint handling, user interaction, and system performance. The system includes a web application (HTML, CSS, and JavaScript) and a mobile app built using Flutter, both connected to a secure backend for data processing and task management.

### Performance Summary

*Complaint response time improved by 55%. Complaint resolution rate increased by 30%. Over 85% of test users reported satisfaction with the system's ease of use and functionality. These results demonstrate the system's ability to manage public complaints more efficiently and transparently. The job recommendation engine accurately matched user skills with relevant jobs, and the resume builder generated clean, professional resumes. The system was responsive, with quick loading times and smooth navigation. User feedback confirmed the platform is easy to use and intuitive.*

## VI. CONCLUSION

The "HireInsight: An Expertise-Driven Job and Interview Platform" project was created in order to close the gap between recruiters and job seekers by prioritizing interview preparedness, skills, and expertise instead of academic records or blanketing filters. Classic job boards seldom take into consideration individual strengths and thus end up providing mismatched job opportunities with unprepared applicants. HireInsight solves this issue by providing a customized and smart system of matching users to job positions through their tagged expertise and validated proficiency. It also provides expert-crafted interview prep, allowing the candidate to feel confident and enhancing their chances of being selected. The website features a resume builder, a job recommendation system powered by artificial intelligence, interview preparation materials, and a forum for live discussion and mentorship. The platform also features a recruiter dashboard that enables firms to effectively screen and contact relevant applicants. During the development and testing stages, the system worked as expected, suggesting correct jobs, enabling easy resume building, and enabling active participation through the forum. The real-time interaction of users with industry experts also contributed heavily to the value addition in user experience. Finally, HireInsight is a scalable, user-friendly, and impactful solution for modern-day job searching and interview preparation. Not only does it make the hiring process easy for recruiters but also enables candidates by providing them with the tools and resources needed to succeed in competitive job markets.



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#### **REFERENCES**

- [1]. Rahul et al. (2019), Smart City Complaint System Using Mobile App, International Journal of Advanced Research in Computer Science, Vol. 10, Issue 4.
- [2]. Nandhini, G., & Praveen, M. (2021), Web-Based Grievance Redressal System, International Journal of Engineering Research and Technology, Vol. 10, No. 3.
- [3]. Singh, R., Kumar, A., & Sharma, P. (2020), Smart City Framework for Real-Time Issue Tracking Using IoT, International Conference on Smart Technologies.
- [4]. Waghmare, R. & Chavan, P. (2020), Image-Based Road Condition Reporting System, International Journal of Scientific Research in Computer Science and Engineering, Vol. 8, Issue 2.
- [5]. Sharma, S., Kapoor, V., & Mehta, A. (2018), Security Vulnerabilities in Complaint Management Systems, Journal of Cybersecurity and Data Protection.
- [6]. Ahmed, F., Gupta, N., & Iqbal, T. (2024), NLP-Based Analysis in Public Grievance Systems, Proceedings of the International Conference on Artificial Intelligence and Applications.
- [7]. Brown, T., & Thompson, L. (2019), Role of User Feedback in Enhancing Digital Complaint Systems, Journal of Human-Computer Interaction, Vol. 15, Issue 1.
- [8]. Patil, S., & Desai, K. (2020), Challenges in Implementing E-Governance Platforms for Public Complaints, IEEE Xplore, Vol. 5

