

# InTalentify Build a FullStack with MERN Stack(MongoDB, Express, ReactJs, Node Js)

Aamir Sohail, Alok Gupta, Mohd Faiz Khan, Fazle Imam, Mohammad Munasib  
Department of Computer Science and Engineering VCTM ALIGARH

**Abstract-** InTalentify is a dynamic platform designed to assist students from Tier 3 colleges in search internships and job placements. Many students face difficulties due to limited industry exposure in india, fewer recruitment drives, and a lack of networking opportunities. InTalentify bridges this gap by connecting students with recruiters and industry professionals, providing them with valuable career opportunities.

The platform features AI-driven resume analysis, skill-based assessments, and tailored job recommendations to enhance students employability. It also offers internship listings, training modules, and mentorship programs to help students develop industry-relevant skills. Recruiters benefit from easy access to a diverse pool of skilled candidates, streamlining the hiring process.

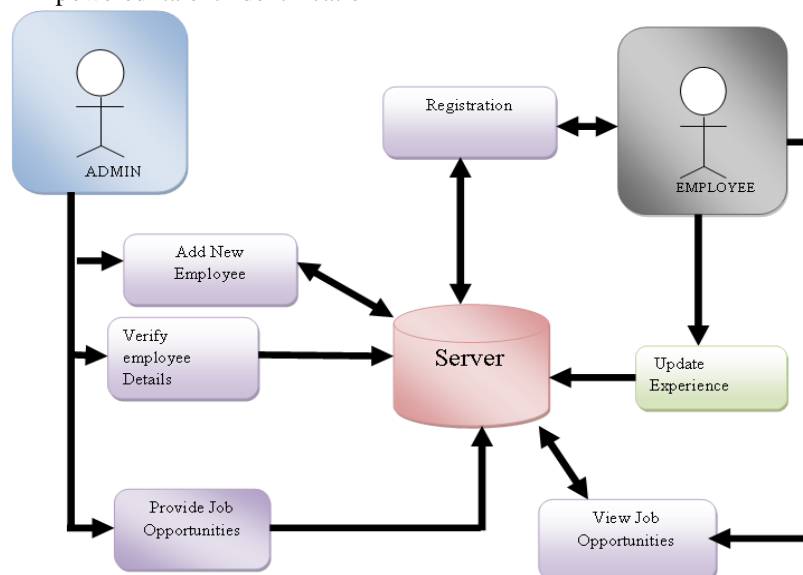
InTalentify is structured into multiple modules, including student profiles, recruiter dashboards, an AI-powered recommendation system, and an administrative panel for efficient management. By integrating technology, the platform fosters a fair and transparent hiring process.

platform designed to help students from Tier 3 colleges access better placement and internship opportunities. Many students face challenges such as limited exposure to recruiters, fewer campus hiring drives, and inadequate professional networking. InTalentify bridges this gap by connecting students with potential employers, providing them with the necessary tools to enhance their career prospects.

The platform utilizes artificial intelligence to analyze resumes, assess candidates' skills, and recommend job opportunities that align with their strengths. It also features career guidance, mentorship programs, and technical training to improve employability. Additionally, recruiters benefit from a structured database of skilled candidates, making the hiring process more efficient. So, this java based health care system contains four modules for managing the problems occur in healthcare industries. This system is designed by remembering all the current scenarios and past scenarios of healthcare industries.

## I. INTRODUCTION

InTalentify is an AI-powered talent identification



InTalentify consists of multiple modules, including student profiles, recruiter dashboards, AI-driven job recommendations, and an administrative panel for seamless management. By integrating smart technology with career development, InTalentify

promotes a fair and transparent recruitment system, empowering students with equal opportunities to excel in their careers.



The platform leverages artificial intelligence to assess student profiles, analyze resumes, and provide personalized job recommendations based on their skills and qualifications.

Additionally, it offers mentorship programs, technical training and career guidance to help students develop industry-relevant skills. Companies and recruiters can benefit from an extensive talent pool, enabling them to discover and hire candidates who best match their requirements.

InTalentify is divided into four primary modules:

1. **Student Module** – This module allows students to create profiles, upload resumes, participate in skill assessment tests, and receive job recommendations.
2. **Recruiter Module** – Companies can post job openings, search for candidates, and schedule interviews based on AI-driven candidate shortlisting.
3. **AI Recommendation Engine** – The system intelligently matches students with job opportunities based on their skill sets, academic backgrounds, and industry trends.
4. **Administrative Module** – This module oversees user management, monitors platform activities, and ensures transparency in the hiring process.

## II. LITERATURE REVIEW

InTalentify is an AI-powered talent identification platform designed to help 3rd grade college students secure placements and internship opportunities. Sheds light on some of the challenges existing literature on semi-structured hiring and skill-based hiring sheds on many of the challenges other small organizations face, including limited industry risk,

the need for professional networking, and the possibility of less competitive hiring. The goal of InTalentify is to bridge the gap by leveraging artificial intelligence to create and efficiently connect readers.

- Studies indicate that Tier 3 college students often struggle to reach job opportunities due to lack of space and corporate connections. Traditional recruitment practices benefit the leaders of top legacy institutions, creating an uneven playing field. AI-driven India platforms like InTalentify are aimed at enabling skill-based India by breaking barriers, ensuring that candidates are evaluated on the basis of their performance alone, rather than on institutionalized requests.

1. Artificial intelligence has transformed India by streamlining automated data screening, candidate matching and efficient scheduling. Research has shown that these automated systems improve Indian performance by focusing attention on real skill values rather than manual shortlisting and reduce rejection. InTalentify uses machine learning algorithms to analyze customer profiles, evaluate business data, and recommend suitable job opportunities based on an individual skill set. This is a continuation of the current research which gives more information to India and sheds light on its challenges in transparent plains.

## III. METHODOLOGY

InTalentify refers to the concepts and models used to identify, evaluate, and evaluate functional skills. At the base of the project environment, InTalentify probably follows a hybrid AI-powered Indian model that combines machine learning (ML), natural language processing (NLP) and predictive analytics to match candidates with suitable job opportunities.

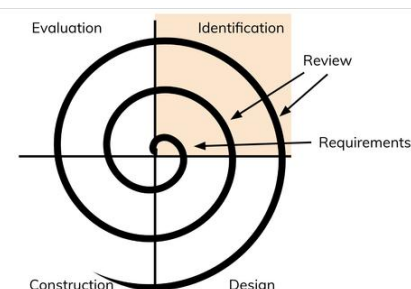


Figure: Spiral model

### Spiral Model

- The Spiral Model is a software development methodology that combines elements of both iterative and waterfall models. It is designed to manage risks by allowing repeated refinement through multiple development cycles. The model was introduced by Barry Boehm in 1986 and is particularly useful for complex and high-risk projects.
- Phases of the Spiral Model
- Planning
- Requirements are gathered, and objectives, constraints, and risks are analyzed.
- An initial plan is created for the development process.
- Risk Analysis
- Potential risks are identified, evaluated, and mitigation strategies are developed.
- Prototyping may be used to reduce uncertainty.
- Engineering (Development and Testing)
- The actual software is developed in incremental versions, followed by testing.
- Each iteration results in a refined version with improvements based on previous feedback.
- Evaluation and Review
- The progress is reviewed with stakeholders to ensure requirements are met.
- Changes and improvements are incorporated before moving to the next cycle.
- Advantages of the Spiral Model
- Well-suited for high-risk projects.

**Machine Learning-Based Matching Model:** It uses classification algorithms (for example, designed trees, rainstorm forests) to match candidates with job opportunities based on their skills, academic performance, and interests. Example: If someone goes to the field and has experience in the test, then the system gives information to the candidates who need to know about the skills.

### Key Steps in the Flowchart:

**User Registration/Login** - Students and recruiters sign up or log in.

**Profile Creation** - Students upload resumes and add skills, while recruiters post job openings.

**Job Matching Process**- The system uses AI to match students with relevant job opportunities.

**Job Application Submission** – Students apply for matched jobs.

**Employer Shortlisting** – Recruiters review applications and shortlist candidates.

**Interview Scheduling** – Employers schedule interviews with selected candidates.

**Final Selection & Job Offer** – Candidates receive job offers based on interview performance.

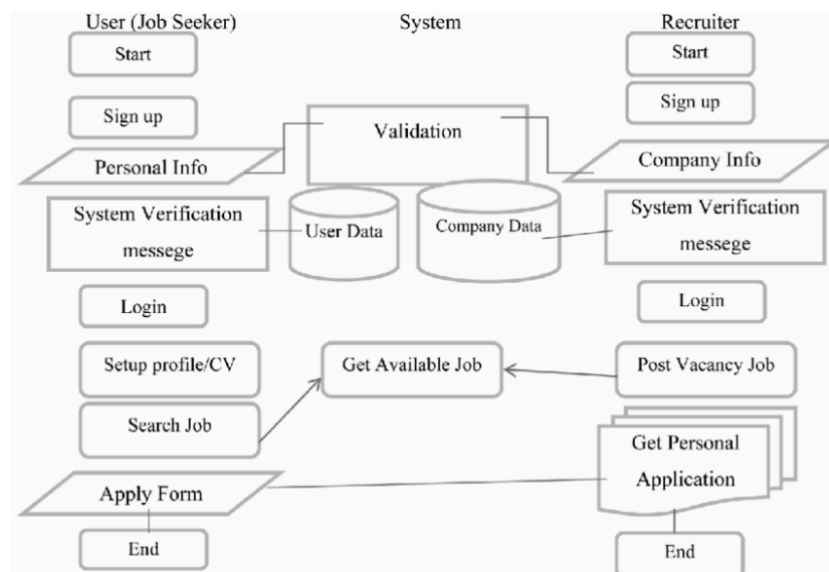


Figure: Data flow diagram

### Key Entities & Their Relationships:

1. Student (Candidate):

Attributes: Unique Student ID, Name, Email, Contact Number, Resume, Skills, College, Degree, Work Experience, and Certifications.

2. Recruiter:

Attributes: Unique Recruiter ID, Name, Company Name, Email, Contact Number, and Job Listings.

3. Job Listing:

Attributes: Unique Job ID, Job Title, Description, Required Skills, Salary, Location, and Application Deadline.

4. Job Application:

Attributes: Unique Application ID, Application Status (Pending, Shortlisted, Rejected, Hired), and Submission Date.

Relationships:

Belongs to a specific student.

Is associated with a particular job listing

5. Interview:

Attributes: Unique Interview ID, Date, Time, and Status (Scheduled, Completed, Canceled).

Relationships:

Is assigned to a shortlisted candidate.

Is scheduled and managed by a recruiter.

6. Admin

Attributes: Unique Admin ID, Name, Email, and Role

Relationships:

Oversees students and recruiters.

Verifies job postings and system activities

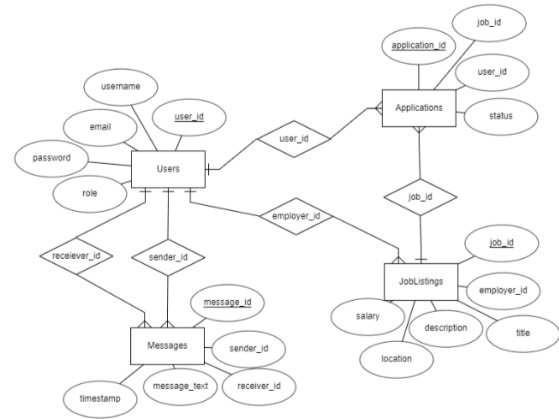


Figure: ER Diagram

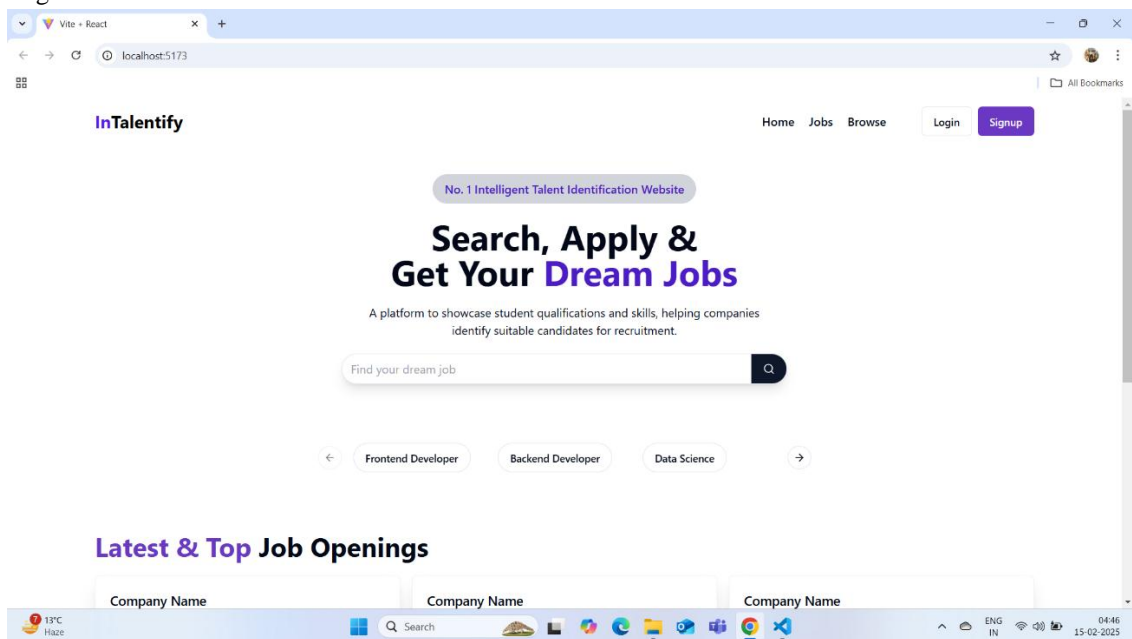


Figure: Home Page

The home page of InTalentify is designed to help students and professionals find job opportunities easily. At the top, there is a search bar where users can enter job-related keywords to find relevant positions. Below it, users can explore different job categories such as Frontend Developer, Backend Developer, and Data Science, making it easier to find jobs based on their skills.

The page features a clear and bold heading that says, "Search, Apply & Get Your Dream Jobs,"

emphasizing the platform's goal. Below the search section, there is a list of the latest and top job openings, helping users quickly see available opportunities.

1. The navigation menu at the top provides quick access to different sections like Home, Jobs, and Browse, along with Login and Signup buttons for easy account access. The homepage highlights InTalentify as a platform that helps students

showcase their skills and qualifications, making it easier for companies to find the right candidates.

2. The sign-up page allows users to create an account on InTalentify. It includes a simple form

where users need to enter their full name, email, phone number, and password. Users must also select whether they are a Student or a Recruiter before signing up.

Figure: Sign up Page

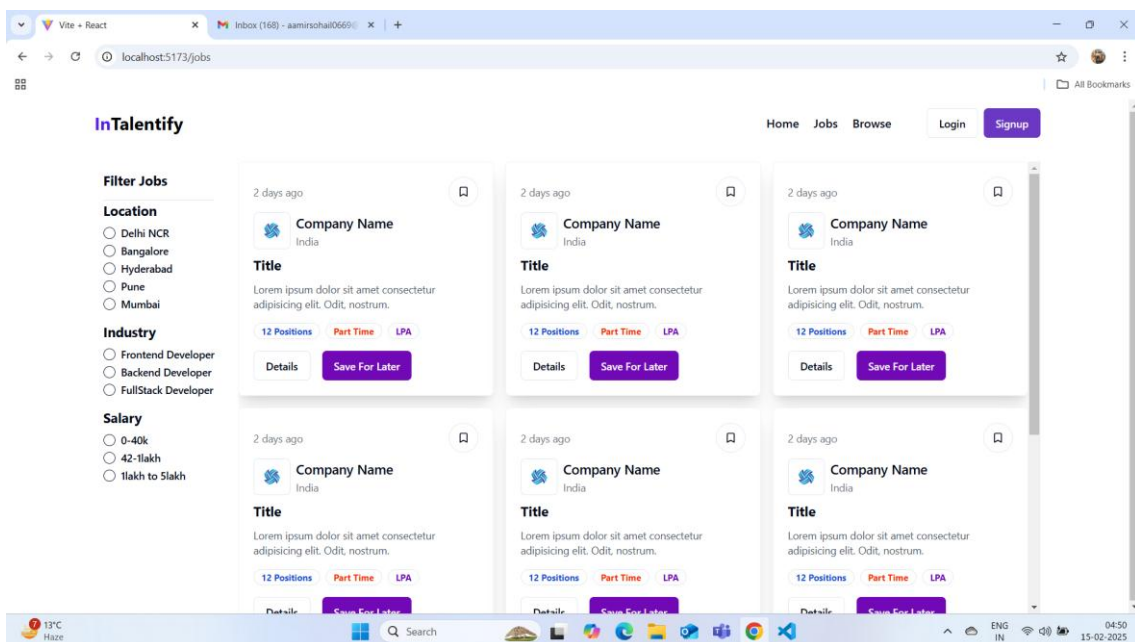
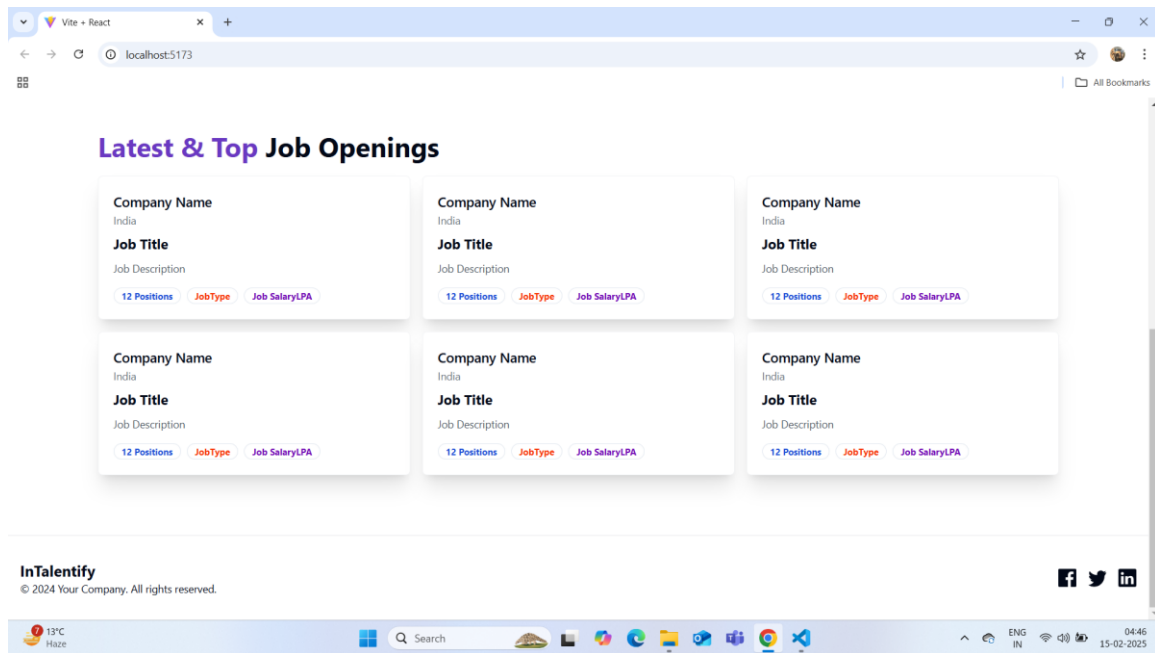


Figure: Apply for Job

Include When you find a job that matches your skills and interests, click on the "Apply" button. This will take you to the application page, where you can upload your resume, fill in your details, and submit your application. Make sure your profile is updated to increase your chances of getting shortlisted.

If you come across a job but aren't ready to apply right away, use the "Save for Later" button. This will store the job in your saved list, so you can easily find and apply for it when you're ready. You can access your saved jobs anytime from your profile dashboard...





#### IV. CONCLUSION

The InTalentify project aims to bridge the gap between talented students from Tier-3 colleges and recruiters looking for skilled professionals. Throughout the development of this platform, we focused on solving the challenges that many students face when seeking internships and job placements. Limited industry connections, lack of proper guidance, and fewer opportunities in smaller institutions often prevent students from showcasing their full potential. InTalentify addresses these issues by providing an intelligent job-matching system that connects students with recruiters based on their skills, experience, and interests.

One of the key achievements of our project is its ability to automate the hiring process using AI-powered recommendations. This feature helps both students and recruiters by filtering job opportunities based on relevant parameters, ensuring that companies receive applications from the most suitable candidates. For students, this eliminates the frustration of applying to jobs that may not match their qualifications, saving time and effort.

The user-friendly interface of InTalentify makes it easy for students to create profiles, upload resumes, and browse job listings. The platform provides clear filters to help users refine their job search based on location, industry, job type, and salary range. This ensures that students can find relevant job opportunities quickly. Recruiters also benefit from a

structured hiring dashboard where they can manage job postings, track applications, and communicate with candidates efficiently.

Throughout this project, we faced several challenges, including designing an efficient job-matching algorithm, ensuring a smooth user experience, and optimizing the platform for performance. However, through teamwork, research, and continuous testing, we were able to overcome these hurdles and create a platform that effectively meets its objectives.

Moving forward, we envision further improvements and enhancements to InTalentify. Future updates could include AI-driven career counseling, real-time interview scheduling, and skill assessment tests to help students prepare for their careers even more effectively. We also plan to expand our database to include more companies and recruiters, thereby increasing the variety and number of opportunities available. In conclusion, InTalentify is not just a job portal—it is a career empowerment tool designed to help students from Tier-3 colleges achieve their professional dreams. By combining technology with practical career support, we have created a solution that simplifies the job search process and improves the recruitment experience. With continuous innovation and user feedback, InTalentify has the potential to become a leading platform in bridging the gap between talent and opportunity.

#### V. REFERENCES

- Job Market Research & Employment Trends

- LinkedIn Job Reports –  
<https://www.linkedin.com/jobs>
  - Naukri Hiring Trends –  
<https://www.naukri.com>
  - Indeed Job Market Insights –  
<https://www.indeed.com>
  - Glassdoor Industry Reports –  
<https://www.glassdoor.com>
  - AI and Machine Learning in Recruitment
    - AI-Driven Job Recommendation Systems –  
IEEE Research Papers  
<https://ieeexplore.ieee.org>
    - Machine Learning for Resume Screening –  
Springer Journals  
<https://link.springer.com>
    - AI-Based Hiring: A Review –  
ResearchGate  
<https://www.researchgate.net>
  - UI/UX Design & Frontend Development
    - ReactJS Documentation – <https://react.dev>
    - Tailwind CSS Documentation –  
<https://tailwindcss.com>
    - Material UI Components – <https://mui.com>
  - Resume Building & ATS Optimization
    - Zety Resume Guidelines –  
<https://zety.com/resume>
    - Novoresume Templates –  
<https://novoresume.com>
    - Resume Writing for ATS Compatibility –  
Harvard Business Review  
<https://hbr.org>
  - Security & Data Protection
    - OWASP Web Security Guide –  
<https://owasp.org>
    - JWT Authentication – <https://jwt.io>
- GDPR and Data Privacy Guidelines – <https://gdpr.eu>