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Internship and Skill Matcher Platform

Tamanna Tiwari[1], Aarchie[2], Himanshi[3], Deepanshi Sharma[4], Ms. Swati Nagar[5]
Department of Computer Science & Engineering
Sunder Deep Engineering College, Ghaziabad, India
[1]tamannatiwari@gmail.com, [2]varchieverma@gmail.com, [3]rajputhimanshi2003@gmail.com,
[4]deepanshisharma072@gmail.com, [5]swatinagar@sunderdeep.ac.in

Abstract: *This is a paper which presents a web- based "Internship and Skill Matcher Platform" designed to provide personalized internship recommendations based on user skills. Traditional internship platforms rely on manual searching, which is time-consuming and inefficient., The proposed system automates the process by allowing users to upload their resumes, extracting skills using intelligent techniques, and matching them with relevant internship opportunities. The system improves accuracy, saves time, and enhances user experience. Future improvements include AI- based recommendations and real-time updates. This paper presents the design and implementation of an Internship and Skill Matcher Platform that analyzes user resumes to extract relevant skills and matches them with suitable internship opportunities.*

Keywords: Internship Matching, Resume Analysis, Skill Extraction, Web Application, Recommendation System

I. INTRODUCTION

In today's competitive world, students face significant challenges in finding relevant internship opportunities that align with their skills and career goals. Traditional internship platforms often require manual searching, where users browse through multiple listings without receiving personalized recommendations. This process is time-consuming, inefficient, and often results in mismatched opportunities. With the rapid growth of the IT industry and skill-based hiring trends, companies now prefer candidates who possess specific technical and soft skills such as programming languages, communication abilities, and domain knowledge. However, many students are unaware of how their skills match industry requirements, which creates a gap between job seekers and recruiters. To address this issue, this project proposes an Internship and Skill Matcher Platform, a web-based system that automates the process of internship recommendation. The system allows users to register, log in, and upload their resumes. The uploaded resume is then analyzed to extract relevant skills using text processing techniques. These extracted skills are compared with internship requirements stored in the database to i d e n t i f y t h e b e s t p o s s i b l e m a t c h e s .

This system plays an important role in improving employability among students by aligning their skills with industry demands. It also helps organizations find suitable candidates efficiently. The proposed system follows a structured workflow that includes user authentication, resume parsing, skill extraction, and internship matching. Based on the matching results, the system displays personalized internship recommendations on the user dashboard. This approach not only reduces manual effort but also improves accuracy and efficiency in finding suitable internships.

Unlike traditional platforms, the proposed system focuses on skill-based matching rather than keyword searching, ensuring that users receive more relevant and targeted opportunities. The system can also be extended in the future by integrating advanced technologies such as Machine Learning and Artificial Intelligence to further enhance recommendation accuracy.

Overall, the Internship and Skill Matcher Platform aims to bridge the gap between students and industry requirements by providing an intelligent, efficient, and user-friendly solution for internship discovery. It not only simplifies the internship search process but also increases the chances of selecting the right candidate for the right opportunity.

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Additionally, the system ensures better utilization of user data by transforming unstructured resume content into meaningful information. This helps in generating more precise recommendations and improves the overall user experience. The platform can also be useful for organizations, as it helps them reach candidates whose skills closely match their requirements.

II. LITERATURE REVIEW

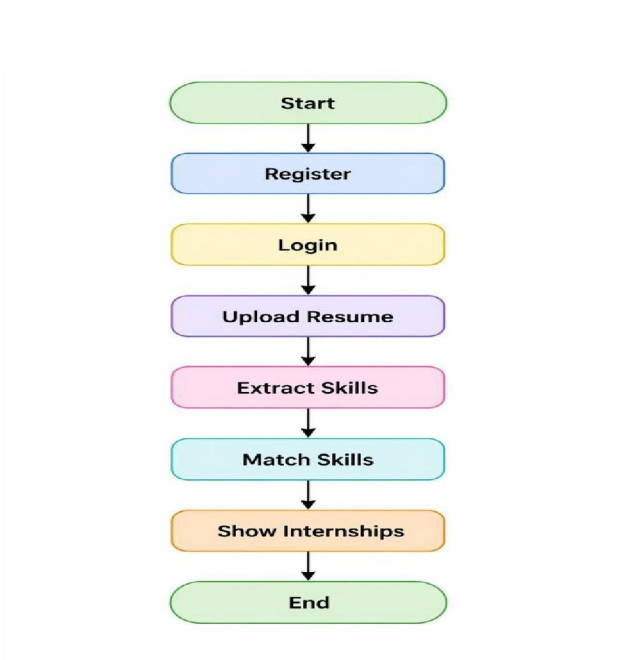
Existing systems include :

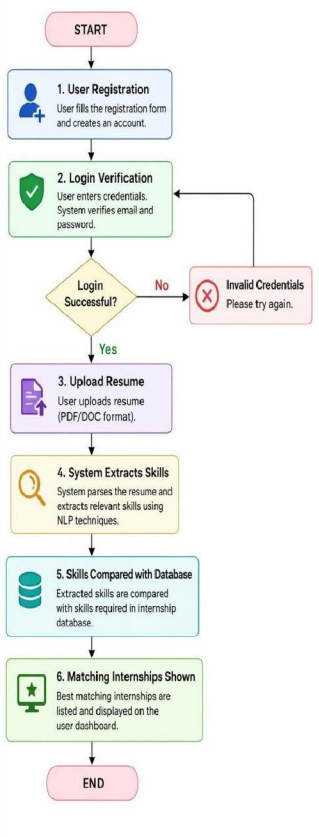
- Manual internship search platforms.
- Job portals without proper skill
- Basic recommendation systems

The literature review focuses on analyzing existing systems and research related to internship recommendation and skill-based matching platforms. Various approaches have been studied to understand how current systems operate and what limitations they have.

III. METHODOLOGY

Internship and Skill Matcher Platform describes the step-by-step process used to design and implement the system. The system follows a structured approach to collect user data, extract relevant information, and provide accurate internship recommendations.





The overall working of the system is divided into multiple stages, including user interaction, data processing, skill extraction, and matching.

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IV. SYSTEM MODULES

The proposed Internship and Skill Matcher Platform, is divided into several functional modules, each responsible for performing a specific task in the system., These modules work together to ensure smooth operation and accurate internship recommendations.

1. RESUME UPLOAD MODULE:

This module allows users to upload their resumes in formats such as PDF or DOC files. Once uploaded, the system stores the resume and prepares it for further processing.

The module ensures proper file handling and validation, such as checking file type and size. It acts as the primary input source for extracting user skills and other relevant information.

2. RESUME PARSING AND SKILL EXTRACTION MODULE:

This is one of the core modules of the system. It processes the uploaded resume and extracts meaningful information from it.

Important keywords such as programming languages (Java, Python), tools, and technical skills. The extracted data is then structured and stored for further use.

3. SKILL MATCHING MODULE:

The Skill Matching Module compares the extracted skills of the user with the internship requirements stored in the database.

A skill-based matching algorithm is used to identify the most relevant internships. The system checks how closely the user's skills match the required skills for each internship and calculates a relevance score.

4. DATABASE MODULE:

The Database Module is responsible for storing and managing all system data. This includes user details, resumes, extracted skills, and internship listing.

The Dashboard Module provides an interactive interface where users can view their recommended internships.

It displays:

- List of matched internships
- Internship details (role, skills required, company)
- User profile information

The dashboard enhances usability by presenting all relevant information in a structured and user- friendly manner.

It ensures efficient data retrieval and supports the matching process. A well-structured database improves system performance and scalability.

Existing users can log in using their credentials. Authentication mechanisms ensure that only authorized users can access the platform. This module plays a crucial role in maintaining security and managing user sessions.

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Problem Statement:

In today's digital era, students face significant challenges in finding suitable internship opportunities that match their skills and career goals. Most existing internship platforms require users to manually search through a large number of listings using basic filters such as location, job title, or company name. This process is time-consuming and often leads to irrelevant results.

Another major issue is the lack of personalization in traditional systems. These platforms do not analyze the user's actual skills, qualifications, or interests in depth. As a result, students may apply for internships that do not align with their abilities, leading to low selection rates and wasted effort.

Additionally, resumes are usually unstructured documents, making it difficult for systems to extract meaningful information. Without proper analysis of resume data, it becomes challenging to provide accurate recommendations. This creates a gap between the skills possessed by students and the requirements expected by organizations.

Traditional internship and job portals mainly rely on manual search and filtering techniques. Users are required to browse multiple listings based on keywords, location, or job titles. However, these platforms do not provide personalized recommendations based on individual skills, which often leads to inefficient results and increased user effort.

V. WORKING PROCESS

The working of the Internship and Skill Matcher Platform follows a systematic sequence of steps to provide accurate internship recommendations to the user. Each step plays an important role in transforming user input into meaningful results.

1. User Registration:

The process begins with user registration. New users are required to create an account by providing basic details such as name, email ID, and password.

2. Login Verification:

After registration, the user logs into the system using their credentials. The system verifies the entered email and password with the stored data.

3. Resume Upload:

Once logged in, the user uploads their resume in a supported format such as PDF or DOC.

The system accepts the file and stores it temporarily for processing.

4. Skill Extraction:

In this step, the system analyzes the uploaded resume using text processing techniques. It identifies and extracts important skills such as programming languages, tools, and technologies (e.g., Java, Python, HTML).

5. Skills Compared with Database:

After extracting the skills, the system compares them with the internship requirements stored in the database. Each internship listing contains a set of required skills.

6. Matching Internships Shown:

Based on the comparison, the system selects and displays the most relevant internships to the user. The results are usually ranked according to how well the skills match.

VI. DISCUSS

The system provides a simple and user-friendly interface, making it easy for users to register, upload resumes.

1. This skill-based matching approach ensures that users receive accurate and personalized internship recommendations according to their abilities and interests

2. The platform significantly reduces the time and effort required for searching internships, while also improving the chances of finding suitable opportunities. It enhances user experience by providing a structured and user-friendly interface through which users can easily explore and apply for internships.

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3. Additionally, the system helps bridge the gap between students and industry requirements by aligning user skills with market demands. It can also assist organizations in identifying suitable candidates efficiently.
4. Overall, the system demonstrates how automation and basic text processing techniques can be effectively used to improve internship recommendation systems. With further enhancements such as integration of advanced technologies and expansion of the database, the platform can become more accurate, scalable, and widely applicable.
5. Further more, many students are unaware of which internships best suit their skill set. They often lack guidance in identifying opportunities that match their profile. This not only affects their learning experience but also reduces their chances of career growth.
6. Therefore, there is a need for an intelligent system that can automatically analyze user resumes, extract relevant skills, and match them with appropriate internship opportunities. The system should reduce manual effort, improve accuracy, and provide personalized recommendations.

VII. CONCLUSION

Internship and Skill Matcher Platform provides an efficient and intelligent solution for internship searching by matching user skills with available opportunities. Unlike traditional methods that rely on manual searching, the system automates the entire process, making it faster and more reliable.
By allowing users to upload their resumes, the system extracts relevant skills and compares them with internship requirements stored in the database. This skill-based matching approach ensures that users receive accurate and personalized internship recommendations according to their abilities and interests

Summary:
The system is designed as a web-based application that focuses providing internship recommendations based on user skills. The primary input to the system is the user's resume, which is uploaded and processed to extract relevant skills. These skills are then compared with internship requirements stored in the database using a skill-based matching approach.
The output of the system is a list of personalized internship opportunities displayed on the user dashboard. The platform offers several advantages such as ease of use, time efficiency, and improved accuracy in recommendations. However, it also has certain limitations, including dependency on resume format and availability of internship data.
Overall, the summary table reflects the structure, functionality, and effectiveness of the system in a simplified form.

REFERENCES

[1] J. Smith and A. Kumar, "Resume Parsing and Skill Extraction using NLP Techniques," International Journal of Computer Applications, 2021.
[2] R. Sharma and P. Gupta, "A Study on Job Recommendation Systems using Learning," IEEE Conference on Data Science, 2020.
[3] S. Mehta, "Web-Based Internship Recommendation System," International Journal of Engineering Research & Technology (IJERT), 2022.
[4] A. Verma and N. Singh, "Skill-Based Job Matching using Data Mining Techniques," Springer Journal of Computing, 2021.
[5] P. Jain et al., "Natural Language Processing for Resume Analysis," Elsevier Procedia Computer Science, 2020.
[6] M. Brown, "Recommendation Systems: Principles and Applications," ACM Computing Surveys, 2019.
[7] D. Lee and K. Park, "Efficient Job Matching using Rule-Based Algorithms," IEEE Access, 2021.
[8] S. Gupta, "Design of Web-Based Recruitment Systems," International Journal of Advanced Research in Computer Science, 2022.
[9] T. Nguyen, "Skill Extraction from Unstructured Data using NLP," Springer LNCS, 2021.
[10] A. Patel, "Internship Recommendation Platform using Web Technologies," IJCRT Journal, 2023.