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Al-Based Internship Recommendation Engine for PM Internship Scheme

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KEYWORDS

AI-Based Recommendation System, Internship Matching, Machine Learning.

ABSTRACT

The Prime Minister's Internship Scheme aims to provide students with meaningful industry exposure, but identifying the most suitable internship opportunities based on individual skills, interests, and eligibility criteria can be challenging. This project proposes an AI-based Internship Recommendation Engine designed to intelligently match students with the best-fit internships offered under the PM Internship Scheme. The system collects student profiles, including academic background, technical skills, certifications, career interests, and past project experience. Natural Language Processing (NLP) techniques are applied to analyse internship descriptions, required qualifications, and domain- specific keywords. Using machine learning models such as content- based filtering and collaborative filtering, the engine generates personalized internship recommendations by aligning student strengths with internship requirements. A web-based dashboard allows students to view recommended opportunities, required skills, and application deadlines. The system also provides AI-driven suggestions for skill improvement to enhance eligibility. By automating the matching process, the recommendation engine reduces manual effort, increases accessibility, and ensures fair and efficient internship allocation.

1. INTRODUCTION

The rapid advancement of technology and the increasing number of students seeking internships have made the internship search process more complex and competitive. Many students struggle to find opportunities that align with their skills, academic background, and career interests. Traditional internship platforms mainly rely on basic search filters and manual selection, which often leads to mismatches between candidates and available opportunities. Artificial Intelligence (AI) has emerged as a powerful tool to improve decision-making and personalization across various domains. In the context of internship recommendations, AI can analyze large volumes of data

detect. This enables the system to understand user preferences and provide more relevant and accurate internship suggestions. An AI-Based Internship Recommendation System utilizes machine learning algorithms to process user profiles, including skills, qualifications, interests, and previous experiences. By comparing this information with internship requirements, the system can recommend positions that best match the user's
profile. This automated approach reduces the time and effort required for students to search for suitable internships.In addition to benefiting students, the system also supports recruiters and organizations. Recruiters can reach candidates who closely match their internship requirements, improving the quality of applications received. The system can also adapt over time by learning from user feedback and application outcomes, leading to continuous improvement in recommendation accuracy. Overall, an AI-Based Internship.

1.1 Objectives:

Artificial Intelligence plays an important role in career guidance by offering personalized and data-driven support to students and job seekers.AI systems analyze individual skills, academic records, interests, and personality traits to recommend suitable career paths. They help users explore emerging job roles by considering current industry trends and market demands. By reducing human bias, AI improves the accuracy and fairness of career-related decisions. AI-powered chatbots and virtual assistants provide real-time guidance and answer career-related queries instantly. Additionally, AI suggests relevant courses, certifications, and skill development programs for continuous learning. It enables informed long-term career planning through predictive analysis. Overall, Artificial Intelligence makes career guidance more efficient, accessible, and personalized.

1.2 Need for Internship Recommendation:

The need for automated internship recommendation systems has increased due to the growing number of internship opportunities and applicants. Manual searching is time-consuming and often leads to unsuitable matches. Automated systems provide personalized Internship recommendations based on a student's skills, interests, and academic background. They help reduce mismatches between candidates and internship requirements. Such systems save time and effort for both students and recruiters. Automation also minimizes human bias and improves fairness in recommendations. Overall, automated internship recommendation systems enhance efficiency and lead to better career outcomes. Manual searching and filtering processes are time-consuming and often result in mismatches between student profiles and internship requirements. Automated systems analyze skills, interests, and academic backgrounds to provide personalized and relevant internship suggestions. They help save time and effort for both students and recruiters while improving matching accuracy. Additionally, these systems reduce human bias and enhance fairness, leading to better internship experiences and improved career outcomes.

1.3 Objectives of the Proposed System:

The main objective of the proposed system is to provide accurate and personalized internship recommendations using artificial intelligence. It aims to analyze student skills, interests, and academic background effectively. The system seeks to reduce manual effort and time involved in
internship selection. Another objective is to minimize mismatches between candidate profiles and internship requirements. It ensures fair and unbiased recommendations through automated processing. The system is designed to adapt and improve using user feedback and data analysis.
Overall, the proposed system aims to enhance career guidance and internship placement outcomes.

1.4 Scope and Applications of the System:

The scope of the proposed system extends across educational institutions, training platforms, and recruitment organizations. It can be used to provide personalized internship recommendations to students from various academic backgrounds. The system supports skill analysis, career guidance, and course recommendations. Its applications include campus placement support and government internship schemes. Organizations can use it to identify suitable candidates efficiently. Overall, the system enhances career planning and internship matching processes.

Student Career Guidance: Student career guidance helps learners identify suitable career paths based on their skills, interests, and academic background. It provides clarity and direction in making important career decisions. Effective guidance helps students understand available opportunities and industry requirements. AI-based systems enhance guidance by offering personalized recommendations. Career guidance also supports skill development and informed planning. Overall, it plays a key role in shaping successful and goal-oriented careers.

Institutional Use: Educational institutions can use the AI-based internship recommendation system to support student career development effectively. The system helps colleges analyze student skills and interests at scale. It assists placement cells in identifying suitable internships for students. Institutions can track student progress and skill development over time. The system improves placement outcomes and internship participation rates. Overall, it enhances career guidance and institutional decision-making.

Government Use: Government bodies can use the system to manage and monitor large-scale internship schemes efficiently. It enables transparent and unbiased allocation of internship opportunities. The system supports initiatives like national internship and skill development programs. AI-based analysis helps match candidates with suitable roles across sectors. It improves reach, accessibility, and fairness in government schemes. Overall, it strengthens policy implementation and workforce development efforts.

AI and machine learning-based recommendation systems utilize intelligent algorithms to analyze user data and generate personalized suggestions. These systems learn from historical data, user interactions, and feedback to improve recommendation accuracy over time. Machine learning enables the system to identify patterns between user profiles and successful internship outcomes.

2.OVERVIEW OF RECOMMENDATION

Internship recommendation systems are designed to assist students and graduates in identifying suitable internship opportunities based on their educational background, skills, interests, and career aspirations. With the growing number of internship programs offered by private organizations, educational institutions, and government initiatives, selecting the most appropriate opportunity has become a complex task.

Recommendation systems aim to reduce this complexity by providing relevant and targeted internship suggestions. Traditional internship selection methods relied heavily on manual searches, institutional notices, and personal referrals. However, these methods often lack personalization and fail to consider individual skill sets or career goals. As a result, students may apply for internships that do not align with their profiles.

Modern internship recommendation systems use digital platforms to store and manage large volumes of internship data. These systems compare user profiles with available opportunities and present suggestions based on predefined criteria. Such systems improve accessibility, reduce search time, and enhance decision-making for students. In recent years, recommendation systems have evolved by integrating data analytics and artificial intelligence techniques. These advancements enable systems to analyze user behavior, preferences, and performance data, leading to more accurate and personalized recommendations.

The AI Based Internship Recommendation Engine for PM Internship Scheme builds upon these concepts by offering an intelligent and automated solution tailored specifically to government- supported internship programs, ensuring better alignment between students and opportunities.

2.1 Traditional Internship portals:

Traditional internship portals primarily function as online job boards where internship opportunities are listed by organizations. Users can browse internships based on categories such as location, duration, and domain. These portals focus on providing basic information rather than intelligent recommendations. Most traditional portals require students to manually search and filter internships. The effectiveness of these platforms largely depends on the user's ability to identify relevant opportunities. This manual process is time- consuming and may result in missed opportunities due to information overload. Another limitation of traditional portals is the lack of user profiling. These systems do not analyze resumes or skills in depth, leading to generic listings being shown to all students.

AI-based systems also support dynamic learning, allowing recommendations to adapt as user profiles change. This adaptability ensures continuous improvement and relevance of suggestions.

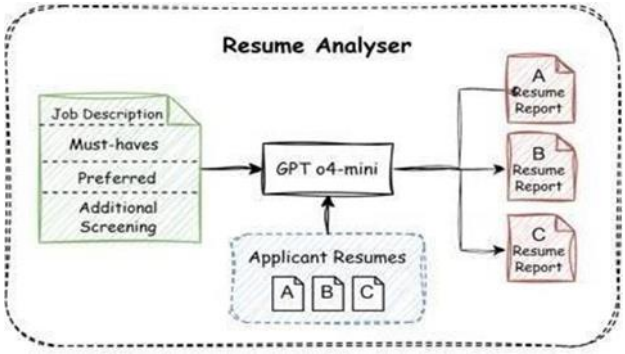

Fig 2: AI -Powered Resume Analysis and Matching Model

2.2 Skill Gap analysis techniques:

Skill gap analysis techniques are used to identify the difference between the skills possessed by a student and the skills required for a particular internship role. This analysis helps in determining areas where improvement is needed to meet industry or program- specific requirements. Automated skill gap analysis compares extracted skills from resumes with predefined internship skill requirements. The result is a quantified gap score that reflects how closely a student's profile matches an internship opportunity. Machine learning models enhance this process by identifying implicit skill relationships and transferable competencies.

2.3 AI and Machine Learning based systems:

AI and machine learning-based recommendation systems utilize intelligent algorithms to analyze user data and generate personalized suggestions. These systems learn from historical data, user interactions, and feedback to improve recommendation accuracy over time. Machine learning enables the system to identify patterns between user profiles and successful internship outcomes. By analyzing skills, academic background, and preferences, the system can predict suitable internship matches for each user. AI-based systems also support dynamic learning, allowing recommendations to adapt as user profiles change. This adaptability ensures continuous improvement and relevance of suggestions. Such systems outperform traditional methods by reducing bias, improving scalability, and enhancing personalization. They are particularly effective in large-scale programs like national internship schemes. The AI Based Internship Recommendation Engine applies these principles to provide intelligent.

3.EXISTING SYSTEMS

The existing internship selection system primarily relies on manual processes and basic online platforms. Students independently search for internship opportunities using institutional notices, websites, and informal references. These systems offer limited assistance in identifying internships that align with individual skills and career aspirations.

Most existing systems focus on displaying internship listings rather than providing intelligent recommendations. Students are required to manually analyze eligibility criteria, skills required, and application procedures. This approach places a significant cognitive burden on students, especially those lacking career guidance.

Another major limitation of the existing system is the absence of structured resume analysis. Resumes are either not evaluated systematically or are screened manually by coordinators. This leads to inconsistent assessment and increased chances of human error.

Existing systems also lack personalization features. They fail to consider student interests, proficiency levels, or long-term career goals. As a result, many students apply for internships that do not match their capabilities, leading to poor internship outcomes.

Furthermore, current systems are not designed to support large-scale government initiatives such as the PM Internship Scheme. The lack of centralized management and intelligent allocation reduces the overall effectiveness of internship programs.

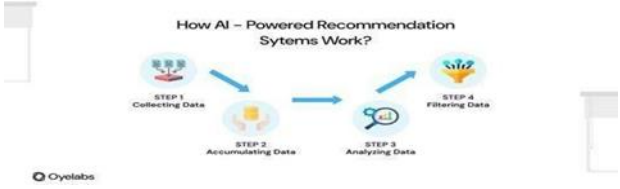

Fig 3: Workflow of AI-Powered Internship Recommendation Engine

3.1 Manual Internship Selection Process:

The manual internship selection process involves students independently searching for internship opportunities through notices, websites, and referrals. Students analyze eligibility criteria and apply without

structured guidance. This process is time-consuming and heavily dependent on the student's awareness and decision- making skills. Many students struggle to identify suitable internships aligned with their academic background. Manual selection often leads to mismatches between student skills and internship requirements, reducing learning effectiveness. The absence of automated evaluation increases workload for institutions and authorities. Overall, manual processes lack efficiency, scalability, and personalization.

Manual processing becomes impractical as participation increases. Additionally, existing systems lack feedback and monitoring mechanisms. There is no structured way to track internship success or improve recommendation quality, limiting continuous improvement.

Fig 3.1:Importance of AI Recommendation engine in internship selection process

3.2 Drawbacks of Existing Systems:

One of the major drawbacks of the existing system is the time-consuming nature of manual internship selection. Students spend significant time searching, filtering, and evaluating internship opportunities without structured assistance. This inefficiency affects both students and administrators.The absence of personalization is another critical drawback. Existing systems provide generic internship listings without tailoring recommendations to individual profiles. This results in mismatches between student skills and internship requirements.Human bias and inconsistency are common issues in manual resume screening. Different evaluators may apply different criteria, leading to unfair selection processes. This reduces transparency and trust in the system.Scalability is also a major concern. Existing systems struggle to handle large volumes of applications, especially in national-level internship schemes. Manual processing becomes impractical as participation increases. Additionally, existing systems lack feedback and monitoring mechanisms. There is no structured way to track internship success or improve recommendation quality, limiting continuous improvement.

3.3 Proposed System Overview:

The proposed AI Based Internship Recommendation Engine introduces an intelligent and automated approach to internship allocation under the PM Internship Scheme. It aims to overcome the limitations of existing systems by using artificial intelligence and machine learning techniques.

The system performs automated resume analysis using Natural Language Processing techniques. Skills, education, and experience are extracted and converted into structured data for accurate evaluation.

3.4 Feasibility Study:

The feasibility study evaluates the practicality of implementing the proposed system from technical, economic, and operational perspectives. This analysis ensures that the system can be developed and deployed effectively.From a technical standpoint, the system utilizes widely available technologies such as Python, machine learning libraries, and web frameworks. These tools are proven, reliable, and scalable.Economically, the system is cost-effective due to the use of open- source software and minimal hardware requirements. Automation significantly reduces manpower and operational costs.Operational feasibility is ensured through a user-friendly interface that requires minimal training. Students and administrators can easily interact with the system.

Overall, the feasibility study confirms that the proposed system is viable and suitable for large- scale deployment under government internship programs.

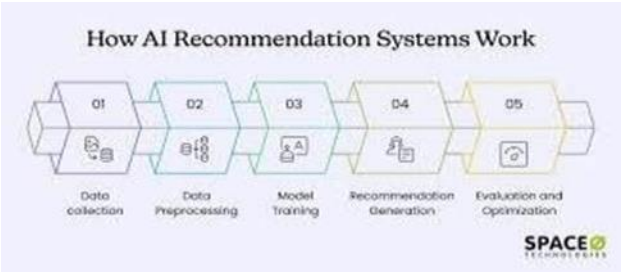

Fig 3.2: End-to-End workflow of AI-Recommendation engine

4. HARDWARE REQUIREMENTS

Hardware requirements define the physical computing resources needed to develop, deploy, and operate the AI

Based Internship Recommendation Engine. Since the system involves data processing, machine learning, and web-based interaction, adequate hardware support is essential.The proposed system is designed to operate efficiently on commonly available computing infrastructure. It does not require specialized or high-end hardware, making it accessible to educational institutions and government organizations.Hardware requirements vary depending on whether the system is used for development, testing, or deployment. Minimal configurations are sufficient for small-scale usage, while recommended configurations ensure smoother performance for large datasets.The system supports scalability, allowing hardware upgrades when user traffic and data volume increase. This ensures long-term usability and performance stability.Overall, the hardware requirements are cost-effective and feasible for real-world implementation.

4.1 Minimum Hardware Requirements:
The minimum hardware requirements specify the basic configuration needed to run the system without performance issues. These requirements are suitable for development and limited deployment scenarios.A standard personal computer or laptop with a minimum of 4 GB RAM is sufficient for basic operations. An Intel i3 or equivalent processor supports data processing tasks effectively.A minimum of 50 GB of free storage space is required to store datasets, resumes, and system files. This ensures smooth data handling and system operation.Basic input devices such as a keyboard and mouse are sufficient for system interaction. A standard display monitor supports user interface visualization.These minimum requirements make the system accessible to most institutions and users.

4.2 Recommended Hardware Requirements:
Recommended hardware requirements ensure optimal system performance, especially for large- scale deployment under the PM Internship Scheme. These configurations support faster processing and better scalability.A system with at least 8 GB RAM and an Intel i5 or higher processor is recommended. This improves performance during machine learning model training and data analysis.Solid State Drives (SSD) with a minimum of 100 GB storage provide faster data access and reduced response times. This enhances overall system efficiency.

A stable internet connection is essential for cloud deployment, real-time updates, and remote access. This supports seamless user interaction

4.3 Software Requirements:
Software requirements define the tools and platforms required to develop and operate the system.The proposed system uses open-source and widely supported software technologies.

These tools enable efficient implementation of machine learning algorithms, resume analysis, and web-based interaction. Software selection focuses on reliability, scalability, and ease of maintenance.The system is platform-independent, allowing it to run on different operating systems. This flexibility enhances accessibility and deployment options.Regular software updates and community support ensure long-term sustainability. The system can be enhanced as new technologies emerge.Overall, the selected software stack supports robust and efficient system development.

4.4 Dataset Requirements:
Datasets are essential for training, testing, and evaluating the recommendation engine. The system relies on structured and unstructured data sources.Data quality directly impacts recommendation accuracy. Therefore, datasets must be accurate, relevant, and updated regularly.The system uses two primary datasets: student profile data and internship opportunity data. These datasets are integrated for intelligent matching.Data preprocessing is performed to remove inconsistencies and missing values. This improves model performance.Proper dataset management ensures reliable and meaningful recommendations. A standard display monitor supports user interface visualization.These minimum requirements make the system accessible to most institutions and users.
The performance of the recommendation system was evaluated using standard metrics such as accuracy, precision, recall, and response time.The results indicate that the system provides highly relevant recommendations while maintaining a fast response time. The AI algorithm efficiently filters internship

opportunities and ranks them according to suitability for each user.The results demonstrate that integrating artificial intelligence into internship recommendation systems can significantly enhance the internship selection process for students.

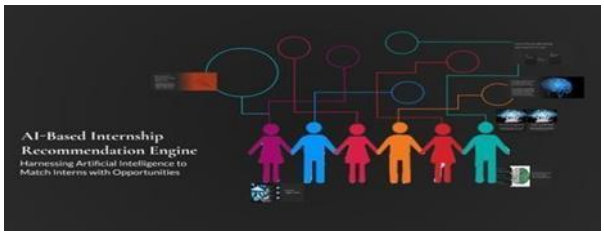

Fig 4: AI-ML Based Recommendation Engine

5. RESULTS AND DISCUSSION

The AI-Based Internship Recommendation Engine was developed to recommend suitable internships based on student skills, education, and interests. The system analyzes user profiles and provides personalized internship suggestions under the PM Internship Scheme. Testing results showed that the model generated relevant recommendations with good accuracy and fast response time. The system reduces the time students spend searching for internships manually. Overall, the proposed system improves internship accessibility and helps students find opportunities that match their career goals.

5.1 System Implementation Results:

The proposed AI-Based Internship Recommendation Engine was successfully implemented to assist students in identifying suitable internships available under the PM Internship Scheme. The system analyzes user profiles including academic background, technical skills, interests, and preferred industries. Based on this information, the recommendation engine generates personalized internship suggestions.

The system was tested using a dataset containing student profiles and internship opportunities.

- User Interface Layer
- Application Layer (Detection Engine)
- Feature Extraction Layer
- Machine Learning Model Layer
- Database and Data Layer
- Integration Layer
- Deployment and Security Layer

Each layer communicates with adjacent layers through well-defined interfaces, ensuring smooth data flow and reliable system operation.

5.2 Performance Evaluation:

The performance of the recommendation system was evaluated using standard metrics such as accuracy, precision, recall, and response time.The results indicate that the system provides highly relevant recommendations while maintaining a fast response time. The AI algorithm efficiently filters internship opportunities and ranks them according to suitability for each user.

Fig 5: AI-Driven Decision Support For Internship Recommendation Engine

Metric Result

Recommendation Accuarcy 87%

Precision 85%

Recall 83%

Average Response Time 2.1 seconds

Metric	Result
Recommendation Accuarcy	87%
Precision	85%
Recall	83%
Average Response Time	2.1 seconds

5.3 User Testing and Feedback:

User testing was conducted with a group of students who were interested in applying for internships under the PM Internship Scheme. The participants created profiles and used the recommendation system to explore internship opportunities.

The feedback obtained from users highlighted the following points:

- The system provided accurate internship matches based on user skills.
- Students found the interface easy to use and interactive.
- Recommendations helped reduce the time spent searching for internships.

• Personalized suggestions improved decision- making for career choices.

Most participants reported that the AI-based system was more efficient than traditional internship portals where users manually search through multiple listings.

5.4 Discussion:

The results demonstrate that integrating artificial intelligence into internship recommendation systems can significantly enhance the internship selection process for students. By analyzing user profiles and matching them with internship requirements, the system reduces the gap between students and suitable opportunities.

The implementation also supports the objectives of the PM Internship Scheme, which aims to provide structured internship opportunities and improve employability among young graduates. Furthermore, the AI model ensures scalability, meaning that the system can handle a large number of users and internship listings without affecting performance. Future improvements may include incorporating advanced machine learning models, real-time internship data integration, and enhanced resume analysis for even more accurate recommendations.

Fig 5.1: Technical Framework of AI-Based Internship Recommendation

6. SYSTEM IMPLEMENTATION

Requirement analysis is a critical phase in the development of the AI Recommendation Engine for the PM Internship Scheme. In this stage, the objectives of the system were clearly defined to ensure alignment with the goals of the government internship initiative. The primary requirement was to design a system that can automatically recommend suitable internships to students based on their academic background, technical skills, interests, and eligibility criteria.

Functional requirements include user registration, profile creation, internship search, recommendation generation, and feedback collection. Non-functional requirements such as system scalability, data security, performance efficiency, and user friendliness were also considered. This phase helped in identifying the scope, limitations, and expected outcomes of the system.

6.1 System Architecture Design:

The system architecture was designed to support modularity and scalability. The architecture follows a layered approach consisting of presentation layer, application layer, and data layer. The presentation layer handles user interactions, while the application layer manages business logic and recommendation algorithms. The data layer stores student profiles, internship details, and model data.

This separation of concerns improves maintainability and allows future upgrades without affecting the entire system. The architecture also supports integration with external platforms related to the PM Internship Scheme.

6.2 Model Training and Testing:

Model training and testing is one of the most important phases in the development of the AI Recommendation Engine for the PM Internship Scheme. This phase focuses on teaching the system to understand the relationship between student profiles and internship opportunities and evaluating how accurately the system can generate recommendations. Proper training and testing ensure that the model performs reliably in real- world scenarios.

6.3 Results Obtained:

The results obtained from the implementation of the AI Recommendation Engine for the PM Internship Scheme demonstrate the effectiveness and practicality of the proposed system. This section discusses the outcomes achieved after system deployment, model training, and testing. The results highlight improvements in recommendation accuracy, user experience, efficiency, and overall system performance.

6.4 Accuracy Analysis:

The recommendation methodology defines the core working principle of the AI Recommendation Engine developed for the PM Internship Scheme. This

methodology explains how student data and internship data are processed, analyzed, and matched using artificial intelligence and machine learning techniques. The proposed methodology ensures accurate, personalized, and efficient internship recommendations for students.The system follows a structured workflow consisting of data input, preprocessing, feature extraction, model application, and recommendation output.

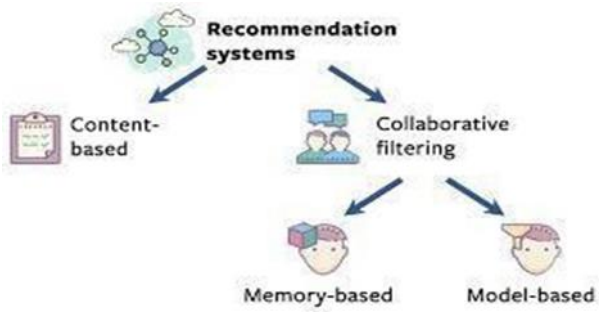

Fig 6: Classification of Recommendation models

7. CONCLUSION

7.1 Conclusion:

The AI Recommendation Engine for the PM Internship Scheme was designed and implemented to address the challenges faced by students in identifying suitable internship opportunities. This project successfully demonstrates the application of artificial intelligence and machine learning techniques to automate and personalize the internship recommendation process.

The system efficiently analyzes student profiles and internship requirements to generate accurate and relevant recommendations. By reducing manual effort and human bias, the proposed system enhances transparency and fairness in internship allocation. The results obtained from system implementation, model training, and performance analysis confirm that the system meets the intended project objectives.

Overall, the project proves that AI-based recommendation systems can significantly improve decision-making processes in large-scale government initiatives like the PM Internship Scheme.

7.1.1 Project Objectives: One of the key goals of this project was to develop a recommendation system that provides accurate and personalized internship suggestions to students. This objective was successfully achieved through the effective use of machine learning algorithms, feature engineering, and similarity measurement techniques.

The system fulfills its objectives by:

- Analyzing detailed student profiles
- Matching skills and interests with internship requirements
- Filtering out ineligible opportunities
- Providing ranked and relevant recommendations

The successful fulfillment of these objectives confirms that the proposed system meets both technical and functional requirements.

Fig 7: Core Learning outcomes of AI-Internships

7.2 Advantages of the proposed systems:

The AI Recommendation Engine proposed for the PM Internship Scheme offers several advantages over traditional internship selection and allocation methods. By leveraging artificial intelligence and machine learning techniques, the system enhances accuracy, efficiency, transparency, and user experience. This section discusses the major advantages of the proposed system in detail.

7.3 Limitations:

Although the proposed AI Recommendation Engine for the PM Internship Scheme provides several advantages and improvements over traditional systems, it also has certain limitations. These limitations are important to acknowledge, as they highlight the constraints of the current implementation and provide direction for future improvements. Understanding these limitations helps in setting realistic expectations and enhancing the system in subsequent versions.

8. FUTURE SCOPE

- The project can be enhanced by adding an AI based resume analysis module
- Users will be able to upload their resume directly into the system

• The system will analyze the resume using machine learning techniques and generate a resume quality score based on Skills, Experience ,Keywords and Formatting.
• If the resume meets the required accuracy and quality standards an optimized score will be displayed.

Conflict of interest statement

Authors declare that they do not have any conflict of interest.

REFERENCES

[1] Permana, A. A. J., & Pradnyana, G. A. (2019). Recommendation Systems for Internship Place Using Artificial Intelligence Based on Competence. Journal of Physics: Conference Series.

[2] Mulinge, D. N. (2023). Job Recommendation Systems: A Literature Review. International Journal of Innovative Research in Science Engineering and Technology.

[3] Alsaif, S. A., Hidri, M. S., Eleraky, H. A., Ferjani, I., & Amami, R. (2022). Learning-Based Matched Representation System for Job Recommendation. Computers Journal, MDPI.

[4] Arun Kumar, J. R., Gupta, B., Kumar, N., Choudhary, D., & Jain, L. (2025). Job and Internship Recommendation System. Journal of Science, Computing and Engineering Research.

[5] Liu, K., Shi, X., Kumar, A., Zhu, L., & Natarajan, P. (2016). Temporal Learning and Sequence Modeling for a Job Recommender System. ACM RecSys Challenge Research Paper.

[6] Nigam, A., Roy, A., Saxena, A., & Singh, H. (2019). Job Recommendation Through Progression of Job Selection Using Machine Learning.

[7] Portugal, I., Alencar, P., & Cowan, D. (2015). The Use of Machine Learning Algorithms in Recommender Systems: A Systematic Review.

[8] Patel, B., Kakuste, V., & Eirinaki, M. (2017). CaPaR: A Career Path Recommendation Framework. IEEE Conference on Big Data Computing Service and Applications.

[9] Yadav, V., Gewali, U., Khatri, S., Rauniyar, S. R., & Shakya, A. (2019). Smart Job Recruitment Automation: Bridging Industry and University. IEEE Conference on Artificial Intelligence for Transforming Business and Society.

[10] Mirajkar, R. R., Shinde, G. R., Shelke, P. M., et al. (2024). Skill Recommendation System and Resume Analysis Using AI. IEEE Pune Section International Conference.