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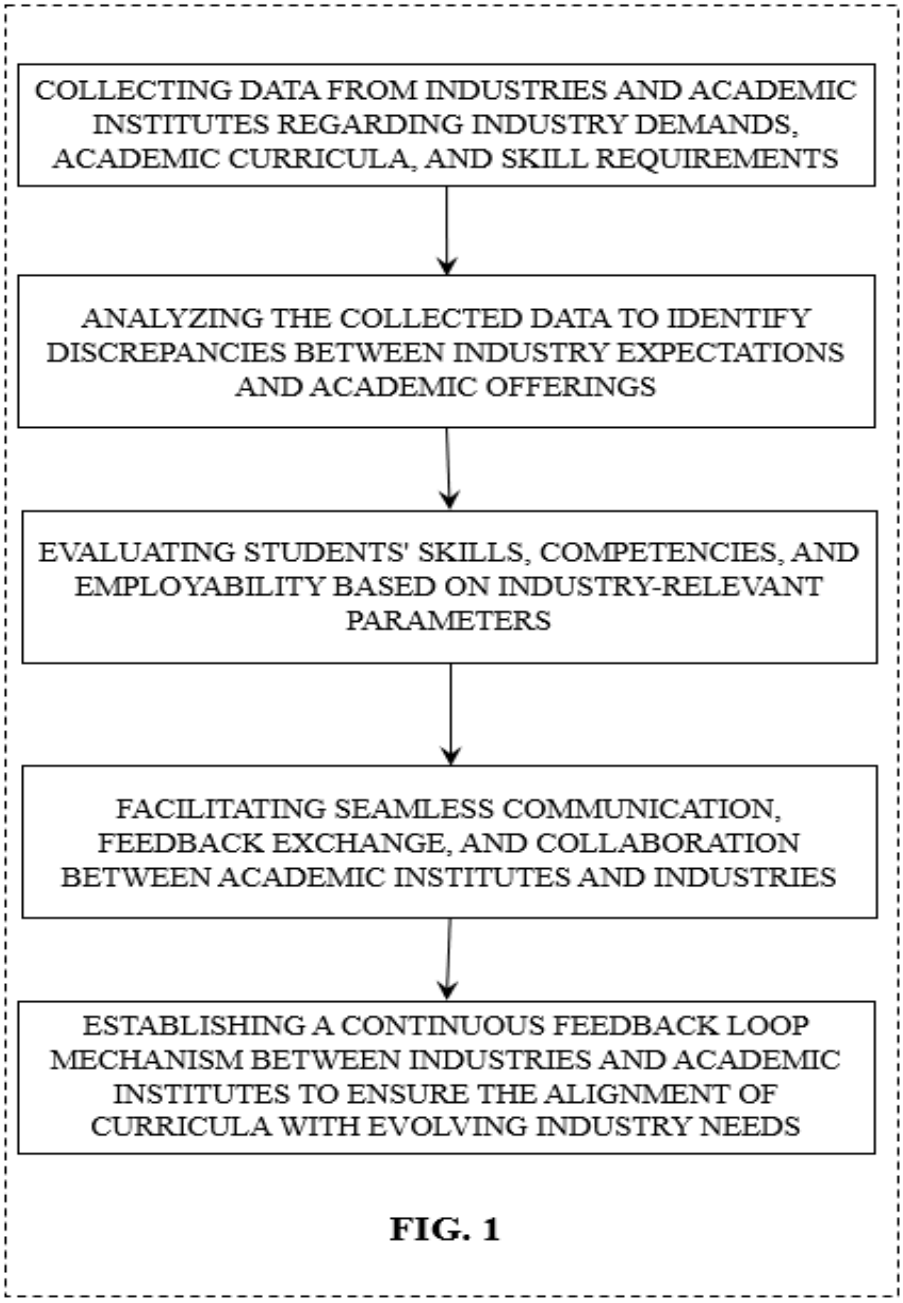

FIG. 1

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FORM 2

THE PATENTS ACT, 1970

(39 of 1970)

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THE PATENTS RULES, 2003

COMPLETE SPECIFICATION

(See Section 10; rule 13)

Title of the Invention

"SYSTEM FOR MAPPING THE INDUSTRY ACADEMIA GAP IN THE ACADEMIC INSTITUTES"

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The following specification particularly describes the invention and the manner in which it is performed.

TECHNICAL FIELD

[0001] The present invention relates to the field of education technology, specifically focusing on systems and methods for assessing, rectifying, and collaborating to bridge the gap between academic curricula and industry needs.

BACKGROUND ART

[0002] Background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[0003] In the ever-evolving landscape of education and industry, the synergy between academia and the real-world job market has gained significant prominence. The industry-academia gap, however, continues to persist as a formidable challenge, impacting both students and industries. This gap arises from the disparity between the skills and knowledge imparted within academic institutions and the dynamic demands of industries. As industries rapidly evolve to meet the demands of globalization, technological advancements, and changing consumer preferences, academic curricula often struggle to keep pace. This incongruity has far-reaching implications, affecting the employability of graduates, hindering economic growth, and impeding innovation.

[0004] The industry-Academia gap manifests in various ways. Graduates often find themselves underprepared for the practical challenges posed by industries due to a lack of relevant skills and hands-on experience. Employers frequently report that fresh graduates lack the necessary skill sets, problem-solving abilities, and adaptability to seamlessly integrate into the workforce. Conversely, academic institutions might not have the latest industry insights to update their curricula effectively, leading to a misalignment between what is taught and what is demanded by employers.

[0005] In the context of the educational landscape, a pressing need has emerged to bridge this gap and create a symbiotic relationship between academia

and industries. This requires innovative solutions that facilitate communication, understanding, and collaboration between these two crucial pillars of society.

[0006] Current approaches to addressing the industry-Academia gap often involve sporadic interactions, such as guest lectures or internships, which may not lead to a holistic and systematic transformation. Moreover, there is a lack of effective methods to assess students' readiness for the workforce in terms of skills and competencies. Traditional academic assessment metrics might not capture the full range of abilities needed for success in today's job market.

[0007] To address these challenges comprehensively, a novel and integrated approach is needed, combining accurate identification of the gap, skills evaluation, and robust collaboration mechanisms. This approach will empower students with the right skills, enhance their employability, and enable industries to acquire a talent pool that aligns with their requirements.

[0008] The present invention aims to revolutionize this paradigm by introducing a comprehensive system that not only identifies the industry-Academia gap but also evaluates students' skills and fosters effective collaboration between these two spheres. By leveraging cutting-edge data analysis, skills assessment, and collaboration tools, the invention seeks to create a well-rounded educational experience that equips graduates with the skills and knowledge needed to excel in their careers. Furthermore, it endeavors to facilitate a continuous feedback loop between industries and academic institutions, ensuring that curricula remain relevant and up-to-date.

[0009] In conclusion, the industry-academia gap is a critical issue that necessitates immediate attention to ensure the success of students and industries alike. The proposed invention aims to be a transformative force in bridging this gap, offering a solution that leverages technology, data analysis, and collaboration to create a harmonious relationship between academia and industries. This approach holds the potential to revolutionize education, workforce development, and economic growth by fostering a seamless transition from classroom to career.

[0010] All publications herein are incorporated by reference to the same extent as if each individual publication or patent application were specifically and individually indicated to be incorporated by reference. Where a definition or use of a term in an incorporated reference is inconsistent or contrary to the definition of that term provided herein, the definition of that term provided herein applies and the definition of that term in the reference does not apply.

OBJECTS OF THE INVENTION

[0011] The principal object of the present invention is to overcome the disadvantages of the prior art.

[0012] Another object of the present invention is to provide a system for mapping the industry academia gap in the academic institutes.

[0013] Another object of the present invention is to empower students with the right skills, enhance their employability, and enable industries to acquire a talent pool that aligns with their requirements.

[0014] Another object of the present invention is to revolutionize this paradigm by introducing a comprehensive system that not only identifies the industry-Academia gap but also evaluates students' skills and fosters effective collaboration between these two spheres.

[0015] Another object of the present invention is to provide an elegant, reliable and precise approach towards the system for mapping the industry academia gap in the academic institutes.

[0016] Yet another object of the present invention is to provide a process of improving functionalities of the system for mapping the industry academia gap in the academic institutes.

SUMMARY

[0017] The present invention relates to the field of education technology, specifically focusing on systems and methods for assessing, rectifying, and

collaborating to bridge the gap between academic curricula and industry needs.

[0018] The system for mapping the industry-academia gap in academic institutes, includes a data collection module configured to collect data from industries and academic institutes regarding industry demands, academic curricula, and skill requirements, a data analysis module configured to process the collected data and identify disparities between industry expectations and academic offerings, a skills evaluation module configured to assess students' skills, competencies, and readiness for employment based on industry-relevant parameters, and a collaboration platform configured to facilitate real-time communication, feedback exchange, and collaboration between academic institutes and industries.

[0019] According to an aspect, the data collection module further includes an industry feedback interface enabling industries to provide insights into the skills and qualities required from graduates, academic curriculum interface allowing academic institutes to input details of their curriculum, courses, and teaching methodologies, and job market trends interface collecting information on emerging job roles, technological advancements, and market demands.

[0020] According to an aspect, the data analysis module employs machine learning algorithms to identify patterns, trends, and gaps within the collected data, generating comprehensive reports highlighting areas of misalignment. The skills evaluation module utilizes a combination of online assessments, practical exercises, and industry-relevant simulations to gauge students' proficiency in technical and soft skills.

[0021] According to an aspect, the skills evaluation module employs machine learning techniques to dynamically adapt assessments based on individual student performance, ensuring accuracy and personalized feedback. The collaboration platform facilitates the exchange of real-world case studies, industry projects, and interactive workshops between academic institutes and industries. The system further comprising a feedback loop mechanism connecting the collaboration

platform to the data analysis module, enabling continuous refinement of curricula based on industry inputs and changing demands.

[0022] A method for mapping the industry-academia gap in academic institutes, includes collecting data from industries and academic institutes regarding industry demands, academic curricula, and skill requirements, analyzing the collected data to identify discrepancies between industry expectations and academic offerings, evaluating students' skills, competencies, and employability based on industry-relevant parameters, facilitating seamless communication, feedback exchange, and collaboration between academic institutes and industries, and establishing a continuous feedback loop mechanism between industries and academic institutes to ensure the alignment of curricula with evolving industry needs.

[0023] These and other features will become apparent from the following detailed description of illustrative embodiments thereof, which is to be read in connection with the accompanying drawings. While the invention has been described and shown with reference to the preferred embodiment, it will be apparent that variations might be possible that would fall within the scope of the present invention.

BRIEF DESCRIPTION OF DRAWINGS

[0024] The accompanying illustrations are incorporated into and form a part of this specification in order to aid in comprehending the current disclosure. The pictures demonstrate exemplary implementations of the current disclosure and, along with the description, assist to clarify its fundamental ideas.

[0025] Fig. 1 illustrates flow diagram for the system for mapping the industry academia gap in the academic institutes.

[0026] It should be noted that the figures are not drawn to scale, and the elements of similar structure and functions are generally represented by like reference numerals for illustrative purposes throughout the figures. It should be

noted that the figures do not illustrate every aspect of the described embodiment sand do not limit the scope of the present disclosure.

[0027] Other objects, advantages, and novel features of the invention will become apparent from the following detailed description of the present embodiment when taken in conjunction with the accompanying drawings.

DETAILED DESCRIPTION OF THE INVENTION

[0028] While the present invention is described herein by way of example using embodiments and illustrative drawings, those skilled in the art will recognize that the invention is not limited to the embodiments of drawing or drawings described and are not intended to represent the scale of the various components. Further, some components that may form a part of the invention may not be illustrated in certain figures, for ease of illustration, and such omissions do not limit the embodiments outlined in any way. It should be understood that the drawings and the detailed description thereto are not intended to limit the invention to the particular form disclosed, but on the contrary, the invention is to cover all modifications, equivalents, and alternatives falling within the scope of the present invention as defined by the appended claim.

[0029] As used throughout this description, the word "may" is used in a permissive sense (i.e. meaning having the potential to), rather than the mandatory sense, (i.e. meaning must). Further, the words "a" or "an" mean "at least one" and the word "plurality" means "one or more" unless otherwise mentioned. Furthermore, the terminology and phraseology used herein are solely used for descriptive purposes and should not be construed as limiting in scope. Language such as "including," "comprising," "having," "containing," or "involving," and variations thereof, is intended to be broad and encompass the subject matter listed thereafter, equivalents, and additional subject matter not recited, and is not intended to exclude other additives, components, integers, or steps. Likewise, the term "comprising" is considered synonymous with the terms "including" or "containing" for applicable legal purposes. Any discussion of documents acts,

materials, devices, articles, and the like are included in the specification solely for the purpose of providing a context for the present invention. It is not suggested or represented that any or all these matters form part of the prior art base or were common general knowledge in the field relevant to the present invention.

[0030] In this disclosure, whenever a composition or an element or a group of elements is preceded with the transitional phrase “comprising”, it is understood that we also contemplate the same composition, element, or group of elements with transitional phrases “consisting of”, “consisting”, “selected from the group of consisting of, “including”, or “is” preceding the recitation of the composition, element or group of elements and vice versa.

[0031] The present invention is described hereinafter by various embodiments with reference to the accompanying drawing, wherein reference numerals used in the accompanying drawing correspond to the like elements throughout the description. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiment set forth herein. Rather, the embodiment is provided so that this disclosure will be thorough and complete and will fully convey the scope of the invention to those skilled in the art. In the following detailed description, numeric values and ranges are provided for various aspects of the implementations described. These values and ranges are to be treated as examples only and are not intended to limit the scope of the claims. In addition, several materials are identified as suitable for various facets of the implementations.

[0032] The present invention relates to the field of education technology, specifically focusing on systems and methods for assessing, rectifying, and collaborating to bridge the gap between academic curricula and industry needs.

[0033] The system for mapping the industry-academia gap in academic institutes, includes a data collection module configured to collect data from industries and academic institutes regarding industry demands, academic curricula, and skill requirements, a data analysis module configured to process the

collected data and identify disparities between industry expectations and academic offerings, a skills evaluation module configured to assess students' skills, competencies, and readiness for employment based on industry-relevant parameters, and a collaboration platform configured to facilitate real-time communication, feedback exchange, and collaboration between academic institutes and industries.

[0034] According to an aspect, the data collection module further includes an industry feedback interface enabling industries to provide insights into the skills and qualities required from graduates, academic curriculum interface allowing academic institutes to input details of their curriculum, courses, and teaching methodologies, and job market trends interface collecting information on emerging job roles, technological advancements, and market demands.

[0035] According to an aspect, the data analysis module employs machine learning algorithms to identify patterns, trends, and gaps within the collected data, generating comprehensive reports highlighting areas of misalignment. The skills evaluation module utilizes a combination of online assessments, practical exercises, and industry-relevant simulations to gauge students' proficiency in technical and soft skills.

[0036] According to an aspect, the skills evaluation module employs machine learning techniques to dynamically adapt assessments based on individual student performance, ensuring accuracy and personalized feedback. The collaboration platform facilitates the exchange of real-world case studies, industry projects, and interactive workshops between academic institutes and industries. The system further comprising a feedback loop mechanism connecting the collaboration platform to the data analysis module, enabling continuous refinement of curricula based on industry inputs and changing demands.

[0037] A method for mapping the industry-academia gap in academic institutes, includes collecting data from industries and academic institutes regarding industry demands, academic curricula, and skill requirements, analyzing

the collected data to identify discrepancies between industry expectations and academic offerings, evaluating students' skills, competencies, and employability based on industry-relevant parameters, facilitating seamless communication, feedback exchange, and collaboration between academic institutes and industries, and establishing a continuous feedback loop mechanism between industries and academic institutes to ensure the alignment of curricula with evolving industry needs.

[0038] The system is designed to bridge the gap between academic institutions and industries by identifying and addressing disparities between the skills, competencies, and knowledge imparted by academic curricula and the actual requirements of the industry. The invention provides a comprehensive solution that integrates data collection, analysis, skills evaluation, and collaboration to enhance the alignment of education with the demands of the job market.

[0039] The system incorporates a robust data collection module that serves as the foundation of its functionality. This module comprises various interfaces that enable the collection of pertinent information from both industries and academic institutes. Industries can provide valuable insights into the skills and qualities they seek in potential employees, along with details about emerging job roles, technological trends, and market demands. On the other hand, academic institutes can input comprehensive details about their curriculum, courses, teaching methodologies, and other educational offerings.

[0040] The collected data is then processed through the data analysis module, which employs advanced machine learning algorithms to identify patterns, trends, and gaps within the data. This module systematically compares the industry's requirements and expectations with the offerings of academic institutions. It generates detailed reports that highlight areas of misalignment, providing a clear overview of the industry-academia gap.

[0041] One of the key features of the system is the skills evaluation module.

This module focuses on assessing students' skills, competencies, and readiness for employment based on industry-relevant parameters. It utilizes a combination of online assessments, practical exercises, and industry-relevant simulations to gauge students' proficiency in technical skills, problem-solving abilities, critical thinking, communication skills, and other competencies. Machine learning techniques are employed to adapt assessments based on individual student performance, ensuring personalized feedback and accurate evaluation.

[0042] To facilitate real-time collaboration and communication, the system incorporates a collaboration platform. This platform serves as a dynamic interface between academic institutes and industries. It enables the exchange of real-world case studies, industry projects, interactive workshops, and feedback loops. Academic institutes can gain insights into the practical challenges faced by industries, while industries can contribute their expertise to enhance students' skill development.

[0043] A critical component of the system is the feedback loop mechanism. This mechanism establishes a continuous exchange of information between the collaboration platform and the data analysis module. Industry inputs and changing demands are constantly incorporated into the academic curricula, ensuring the alignment of educational offerings with evolving industry needs. This dynamic feedback loop ensures that graduates are equipped with the skills and knowledge required to excel in their chosen careers.

[0044] The present system offers several advantages and innovative features. It addresses the industry-academia gap by providing a comprehensive solution that combines data collection, analysis, skills evaluation, and collaboration. The system's unique features include its ability to adapt assessments based on individual student performance, the integration of real-time collaboration tools, and the establishment of a feedback loop mechanism for continuous improvement. By providing accurate insights into the needs of the job market and enhancing students' employability, the system contributes to the growth and development of

both academic institutions and industries.

[0045] While the foregoing describes various embodiments of the invention, other and further embodiments of the invention may be devised without departing from the basic scope thereof. The scope of the invention is determined by the claims that follow. The invention is not limited to the described embodiments, versions or examples, which are included to enable a person having ordinary skill in the art to make and use the invention when combined with information and knowledge available to the person having ordinary skill in the art.

[0046] Thus, the scope of the present disclosure is defined by the appended claims and includes both combinations and sub-combinations of the various features described hereinabove as well as variations and modifications thereof, which would occur to persons skilled in the art upon reading the foregoing description.

CLAIMS

I/We Claim:

1. A system for mapping the industry-academia gap in academic institutes, comprising:

a data collection module configured to collect data from industries and academic institutes regarding industry demands, academic curricula, and skill requirements;

a data analysis module configured to process the collected data and identify disparities between industry expectations and academic offerings;

a skills evaluation module configured to assess students' skills, competencies, and readiness for employment based on industry-relevant parameters; and

a collaboration platform configured to facilitate real-time communication, feedback exchange, and collaboration between academic institutes and industries.

2. The system of claim 1, wherein the data collection module further comprises:

industry feedback interface enabling industries to provide insights into the skills and qualities required from graduates;

academic curriculum interface allowing academic institutes to input details of their curriculum, courses, and teaching methodologies; and

job market trends interface collecting information on emerging job roles, technological advancements, and market demands.

3. The system of claim 1, wherein the data analysis module employs machine learning algorithms to identify patterns, trends, and gaps within the collected data, generating comprehensive reports highlighting areas of misalignment.

4. The system of claim 1, wherein the skills evaluation module utilizes a combination of online assessments, practical exercises, and industry-relevant simulations to gauge students' proficiency in technical and soft skills.

5. The system of claim 1, wherein the skills evaluation module employs machine learning techniques to dynamically adapt assessments based on individual student performance, ensuring accuracy and personalized feedback.

6. The system of claim 1, wherein the collaboration platform facilitates the exchange of real-world case studies, industry projects, and interactive workshops between academic institutes and industries.

7. The system of claim 1, further comprising a feedback loop mechanism connecting the collaboration platform to the data analysis module, enabling continuous refinement of curricula based on industry inputs and changing demands.

8. A method for mapping the industry-academia gap in academic institutes, comprising:

collecting data from industries and academic institutes regarding industry demands, academic curricula, and skill requirements;

analyzing the collected data to identify discrepancies between industry expectations and academic offerings;

evaluating students' skills, competencies, and employability based on industry-relevant parameters;

facilitating seamless communication, feedback exchange, and collaboration between academic institutes and industries; and

establishing a continuous feedback loop mechanism between industries and academic institutes to ensure the alignment of curricula with evolving industry needs.

Dated this 24th day of August, 2023



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ABSTRACT

“SYSTEM FOR MAPPING THE INDUSTRY ACADEMIA GAP IN THE ACADEMIC INSTITUTES”

The present invention relates to the field of education technology, specifically focusing on systems and methods for assessing, rectifying, and collaborating to bridge the gap between academic curricula and industry needs. The system for mapping the industry-academia gap in academic institutes, includes a data collection module configured to collect data from industries and academic institutes regarding industry demands, academic curricula, and skill requirements, a data analysis module configured to process the collected data and identify disparities between industry expectations and academic offerings, a skills evaluation module configured to assess students' skills, competencies, and readiness for employment based on industry-relevant parameters, and a collaboration platform configured to facilitate real-time communication, feedback exchange, and collaboration between academic institutes and industries.

Dated this 24th day of August, 2023



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