Retraction

Retracted: Construction of Innovation and Entrepreneurship Platform Based on Deep Learning Algorithm

Scientific Programming

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

(1) Discrepancies in scope

(2) Discrepancies in the description of the research reported

(3) Discrepancies between the availability of data and the research described

(4) Inappropriate citations

(5) Incoherent, meaningless and/or irrelevant content included in the article

(6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

[1] J. Li and Y. Zhao, "Construction of Innovation and Entrepreneurship Platform Based on Deep Learning Algorithm," *Scientific Programming*, vol. 2021, Article ID 1833979, 7 pages, 2021.

Research Article

Construction of Innovation and Entrepreneurship Platform Based on Deep Learning Algorithm

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As the national economy has entered a stage of rapid development, the national economy and social development have also ushered in the "14th Five-Year Plan," and the country has also issued support policies to encourage and guide college students to start their own businesses. Therefore, the establishment of an innovation and entrepreneurship platform has a significant impact on China's economy. This gives college students great support and help in starting a business. The theory of deep learning algorithms originated from the development of artificial neural networks and is another important field of machine learning. As the computing power of computers has been greatly improved, especially the computing power of GPU can quickly train deep neural networks, deep learning algorithms have become an important research direction. The deep learning algorithm is a nonlinear network structure and a standard modeling method in the field of machine learning. After modeling various templates, they can be identified and implemented. This article uses a combination of theoretical research and empirical research, based on the views and research content of some scholars in recent years, and introduces the basic framework and research content of this article. Then, deep learning algorithms are used to analyze the experimental data. Data analysis is performed, and relevant concepts of deep learning algorithms are combined. This article focuses on exploring the construction of an IAE (innovation and entrepreneurship) education platform and making full use of the role of deep learning algorithms to realize the construction of innovation and entrepreneurship platforms. Traditional methods need to extract features through manual design, then perform feature classification, and finally realize the function of recognition. The deep learning algorithm has strong data image processing capabilities and can quickly process large-scale data. Research data show that 49.5% of college students and 35.2% of undergraduates expressed their interest in entrepreneurship. Entrepreneurship is a good choice to relieve employment pressure.

1. Introduction

IAE education, as a new international education concept and model trend, has attracted the attention of countries all over the world and has gradually become an important content of modern education, especially higher education. Innovation is the source of entrepreneurship and the essence of entrepreneurship. Entrepreneurs need to have a consistent and strong spirit of innovation in the business process to produce creative ideas or designs. The value of innovation lies in transforming potential knowledge, technology, and market opportunities into real productivity, realizing the development of social wealth, and benefiting mankind. Therefore, it is of great significance to actively promote the development of IAE education in our country's colleges and universities, and it is also the general trend. This article aims to use deep learning algorithm technology to help the construction of innovation and entrepreneurship platforms and provide a feasible solution.

In recent years, many researchers have conducted research on this and have achieved good results in exploring the structure and realization of the IAE education platform. For example, Phillips believed that entrepreneurship education and entrepreneurship education do not last long, and the teaching platform of business education is not perfect. Without the support of a scientific teaching platform, it is

impossible to achieve the expected teaching goals. A scientific teaching platform not only needs platformatic theory as a support but also must play a role in practice [1]. Li *L* believed that Chinese research on student business education has not yet entered a real stage. The vast majority of scholars have conducted a series of investigations on their field of experience in combination with entrepreneurship education. There are no recognized hot spots in the academic world and in various research directions [2]. At present, there are many research studies on the construction and realization of the IAE education platform. These predecessors' theories and experimental results provide a theoretical basis for the research of this article.

This article explains the relevant theories and characteristics of the education platform under the deep learning algorithm through the analysis of the IAE education platform. The deep learning algorithm is derived from the research of artificial neural networks. The artificial neural network evaluation model is based on self-learning, self-adaptive ability, and powerful neural network fault tolerance, to create a comprehensive evaluation model that is closer to the combination of qualitative and quantitative standards of human thinking. This article uses the deep learning algorithm model and scoring platform to rationally evaluate the construction and implementation of the IAE education platform in colleges and universities.

2. Deep Learning Algorithm-Related Technologies and Theories

2.1. Deep Learning Algorithm-Related Technologies. The operation of the innovation and entrepreneurship education platform requires different theoretical foundations at different stages, as well as the support of a large number of key technologies [3]. In recent years, the rapid development of the deep learning algorithm has significantly expanded its scope in natural language processing technology and has also made it possible to create more complex applications.

2.1.1. Deep Neural Network. The basic deep neural network usually consists of three parts: input layer, hidden layer, and output layer. Generally speaking, the first layer is the input layer, the last layer is the output layer, and the number of layers in the middle is all hidden layers. These layers are fully connected; that is, every neuron in the ith layer must be connected to any neuron in the $i + th$ layer. The linear relationship between the output and the input is learnt, and the intermediate result of the output is obtained. For linearly separable data sets, a simple linear classifier can usually be used to solve the classification problem. However, data in real life are usually not linearly separable. For this situation, there are generally two methods: introducing nonlinear functions and linear transformations. The nonlinear function here is the activation function [4, 5], usually sigmoid, tanh, ReLu, and so on. If you want to train a DNN, it usually combines exercise optimizers.

2.1.2. Tensorflow. Google is not only a leader in big data and cloud computing but also has good practice and accumulation in machine learning and deep learning algorithm. At the end of 2015, Google opened the TensorFlow deep learning algorithm framework [6, 7]. Compared with frameworks such as Caffe, Theano, Torch, and MXNet, TensorFlow has the most Forks and Stars on Github. It is also used for graph sorting, audio editing, recommendation platforms, physical language, and other scene editing. For the innovation and entrepreneurship education platform, its main goal is to provide accurate answers to users' questions in this field. Therefore, information retrieval has become the main method used by many specific question answering platforms. The similarity between the question submitted by the user and all the candidate questions in the Q&A library is calculated, and finally the answer corresponding to the question with the greatest similarity is selected. And the feedback result is matched according to the similarity between the question submitted by the user and the information database.

2.2. Deep Learning Algorithm-Related Theories

2.2.1. Word Frequency-Document Inverse Frequency. TF-IDF is used to evaluate the meaning of words in a set of documents or a document in the main text and is often used in information retrieval and data mining. After a certain transformation, it can be used to calculate the similarity between sentences. Among them, TF refers to the word frequency; that is, the number of times a word appears in the document; IDF is the reverse frequency of the document. The main idea of TF is that if a word appears more often in one text, but rarely appears in other texts, it can be considered that the word has a good resolution [8, 9]. The main idea of IDF is that if the number of documents containing a word is less, it means that the word has a good sorting ability, and the IDF value will be higher. The numerator represents the number of times a word appears in the file, and the denominator represents the sum of the number of times all words appear in the file.

2.2.2. Levinstein Distance. Levenshtein distance refers to the minimum number of processing operations required to convert one string to another and is usually used to compare the similarity of two strings. It mainly refers to the minimum number of processing functions required to convert two strings from one string to another. If more times are required, the similarity is lower [9, 10]. The basic steps of the algorithm are as follows:

(1) A table is initialized with the number of rows $m + 1$ and the number of columns $n + 1$, which is used to store the number of functions required to complete a processing operation and convert the string s1 [1, ..., n] into characters [1, ..., m]. The number of functions required is the value of the table [n] [m].

(2) The first row of the matrix is set to 0 in *n*, and the first column is set to 0 in *m*. Table [0][*j*] represents the value of the *j*-1th column in the first row. This value represents that it takes *n* processing operations to convert the string s1[1, ..., 0] to s2[1, ..., *j*]. Obviously, to convert an empty string to a string of length *j*, only the input operation *j* is required, so the value of table [0][*j*] must be *j*, and the values in other places can be deduced by analogy.

(3) Each character of string s1 and string t2 is compared in pairs; if they are equal, set temp = 0; if they are not equal, set temp = 1.

(4) If we can convert s1[1, ..., *i* − 1] to s2[1, ..., *j*] in step *k*, then the total number of operations we need to perform is *k* + 1; if we can convert s1 [1, ..., *i* − 1] to s2 [1, ..., *j*] in step *k* operation, convert s1 [1, ..., *i*] into 8 in s2 [1, ..., *j* − 1], that is, matrix [*i*, *j* − 1] = *k*, then we can add s2[*j*] to s1[1, ..., *i*], so a total of *k* + 1 functions are needed; if we can convert s1[1, . . ., *i* − 1] to s2[1, . . ., *J* − 1]] in *k* operations, then we can convert s1 [*i*] to s2 [*j*], which satisfies s1 [1, ..., *i*] = = s2 [1,...,*j*]; here, in total, the function *k* + temp is required (because if s1 [*i*] = = s2 [*j*], no processing is required; if it is different, just add the calculated temperature value directly). The final value of the table [*i*, *j*] is the minimum matrix [*i*, *j* − 1] + 1, matrix [*i* − 1, *j*] + 1, and matrix [*i* − 1, *j* − 1] + temp.

(5) Steps (3) and (4) are repeated; the final matrix value [*n*, *m*] is the minimum processing distance. Once the minimum processing distance is found, the similarity can be calculated.

3. Research on Experimental Preparation of IAE Platform

3.1. Experimental Method. With the rise of the deep learning algorithm wave, in practical applications, the deep learning algorithm technology is more suitable for IAE education platform. Compared with the usual shallow neural network, the deep neural network used in the deep learning algorithm has many hidden layers in addition to an input layer and an output layer. Each layer is composed of many neurons. The input of the input layer is the external input of the neural network, the input of the output layer and the hidden layer is the input of the previous layer of neurons, and the output of the output layer is the output of the neural network.

(1) Sigmoid function:

$$\sigma(z) = \frac{1}{1 + e^{-z}}. \tag{1}$$

(2) The mathematical expression of neuron $a_{i,j}$ is as follows:

$$a_{i,j} = \sigma\left(\sum_k w_{ijk}a_{i-1k} + b_{ij}\right). \tag{2}$$

Suppose the neural network has a total of I layer, the jth neuron of the ith layer is a_{ij}, the bias of this neuron is b_{ij}, the distance from the jth neuron of the *i* layer to the kth neuron of the −1 the weight is W_{ijk}, and σ is the activation function. The function of the activation function is to make nonlinear changes in the input of the neuron. e^{-z} is an exponential function. In the definition expression of the exponential function, the coefficient before e^{-z} must be the number 1, and the independent variable is −z.

3.2. Experimental Data Collection. This paper establishes a neural network model under the deep learning algorithm to achieve balanced results. In order to understand the status quo of college students' IAE education, this paper conducts investigations in the form of in-depth interviews and questionnaires. "Awareness of IAE Education," "Courses of IAE Education," "IAE Education Teaching Staff," "Methods and Models of IAE Education," and "Support and Guarantee of IAE Education" are selected to conduct surveys. The purpose of the survey is to fully understand the innovation and entrepreneurship education of college students and the existing problems.

4. Research on Experimental Preparation for IAE Platform

4.1. Distribution of Entrepreneurial Interest under Different Educational Backgrounds. The main subjects of this study are undergraduates, and a small number of junior college students and graduate students also participated in the survey. The survey collected 558 questionnaires; the details are shown in Table 1. The effective questionnaires describe the basic situation of the respondents, and the samples are relatively representative.

As shown in Figure 1, 49.5% of junior college students and 35.2% of undergraduates said that they are very interested in entrepreneurship. It can be seen that 60% of respondents have entrepreneurial intentions. In further investigation, it is found that junior college students are more interested in entrepreneurship than undergraduates, and undergraduates are more interested in entrepreneurship than graduate students. This is because the academic level of graduate students is higher than that of undergraduates and junior colleges. Professional planning is stronger, but about one-quarter of graduate students are still interested in entrepreneurship. Undergraduate and junior colleges are more competitive in employment. Entrepreneurship is a good choice to alleviate the pressure on employment.

4.2. Analysis on the Evaluation Method of IAE Course. The investigators conducted a survey on the "IAE course assessment method," and the results of the survey are shown in Table 2.

As shown in Figure 2, 282 people's choices indicate that IAE courses are assessed through curriculum design, accounting for 50.54% of the total number. If IAEs are only assessed through courses, the practical experience that students can improve is very limited. More practical activities should be carried out to help students assess

TABLE 1: Distribution map of entrepreneurial interest for different educational backgrounds (%).

Education	Very interested	More interested	Generally	Not very interested	Not interested
Specialist	49.5	11.3	22.5	10.2	6.5
Undergraduate	35.2	28.4	18.9	7.4	10.1
Postgraduate	25.4	16.6	34.5	12.2	11.3
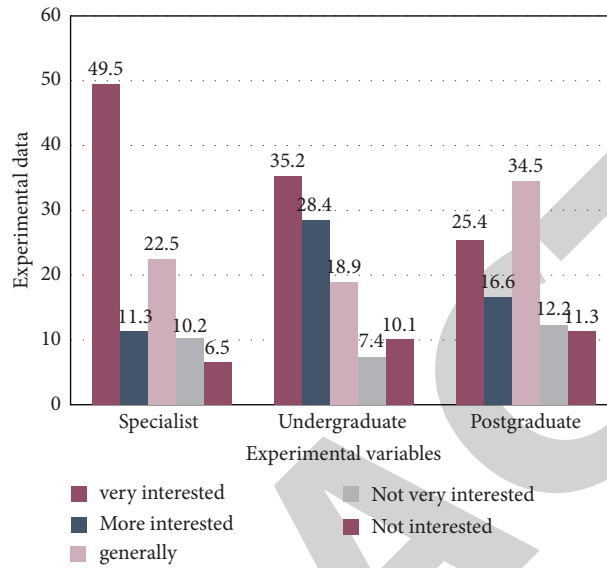
FIGURE 1: Distribution of interest in entrepreneurship of different educational backgrounds (%).

TABLE 2: Evaluation methods of IAE courses.

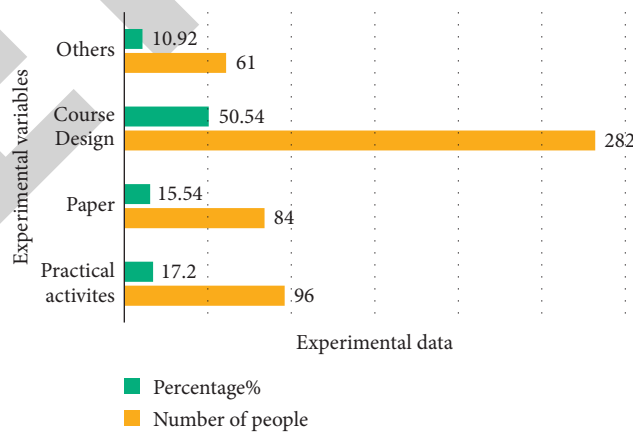| Category	Practical activities	Paper	Course design	Others
Number of people	96	84	282	61
Percentage (%)	17.20	15.54	50.54	10.92

FIGURE 2: Analysis of the assessment methods of IAE courses.

innovative courses. Only 96 people, 17.2% of students said that innovative and entrepreneurial courses are assessed through practical activities, which is obviously not enough. Thesis design and curriculum design have great limitations in improving the ability of IAE. Through practical activities, students can get started in person, and only when they empathize with each other can they quickly improve.

TABLE 3: Analysis of IAE teachers (%).

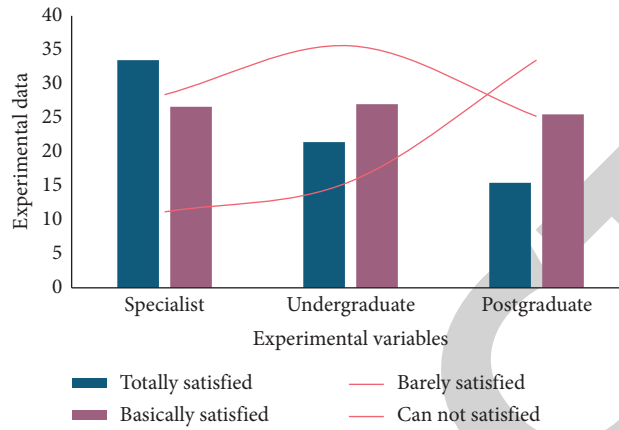| Education	Totally satisfied	Basically satisfied	Barely satisfied	Not satisfied
Specialist	33.6	26.7	28.5	11.2
Undergraduate	21.5	27.1	35.7	15.7
Postgraduate	15.5	25.6	25.3	33.6

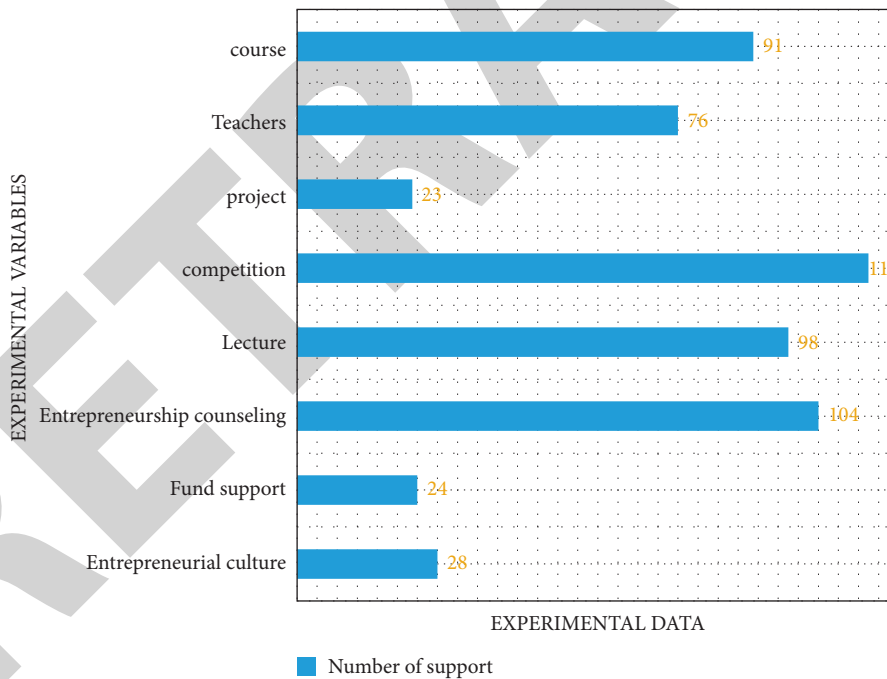FIGURE 3: Analysis of IAE teaching staff (%).

FIGURE 4: Analysis of support and guarantee of IAE education.

4.3. Analysis of the Faculty Allocation for IAE. An analysis of "IAE Education Teachers' Evaluation" on 558 investigators is conducted, and statistics on four indicators of "fully satisfied," "basically satisfied," "barely satisfied," and "unsatisfied" is conducted. The results are shown in Table 3.

As shown in Figure 3, it can be seen that 33.6% of the surveyors of junior college students are more satisfied with the provision of teachers for IAE education. The reason may be that the junior college is more biased towards practical talent training for students. Among the graduate students, only 15.5 respondents were satisfied with the faculty, and 33.6 respondents were dissatisfied, about 1/3 of them. Analysis of the main reasons for the low satisfaction of graduate students may be based on the following two aspects: one is that there is less IAE education specifically for graduate students and the other is that graduate students

have higher requirements for teachers, but in reality, the teachers fail to meet expectations.

4.4. Analysis of Support and Guarantee of IAE Education. In the analysis of the surveyors' support and guarantee for IAE education, 558 surveyors selected the most important factors based on the options that are most satisfied with their help. The analysis results are shown in Figure 4.

As shown in Figure 4, financial support and entrepreneurial atmosphere are the places most dissatisfied with student support. 24 and 28 people chose these two, respectively. A good entrepreneurial atmosphere and financial support are essential. In colleges and universities, a good entrepreneurial atmosphere is very lacking. Many students face heavy test pressure and life pressure, which prevents them from integrating into a good atmosphere. At this time, the school needs to provide students with relevant conditions and provide a certain amount of financial support with entrepreneurs to help them; some entrepreneurs have good business ideas and do not have enough funds to carry out projects, so the school should give sufficient support.

5. Conclusions

According to the deep learning data model, this article analyzes the objects that the entrepreneurial education platform needs to focus on. According to the research results of this article, it is concluded that the IAE education platform must pay attention to practical teaching. The data in this article show that 49.5% of college students and 35.2% of undergraduates expressed their interest in entrepreneurship. Through entrepreneurship, college students can greatly reduce the competitive pressure brought about by employment and also help them find a path that is more suitable for them. Cultivating students' comprehensive quality ability in IAE is the key to IAE education. First of all, it must conform to the student development legislation, proceed step by step, and reflect the levels. Second, IAE training should run through the entire process of IAE training and reflect integrity. The third is that universities should integrate practical resources, win government support, unite enterprises, and create a comprehensive collaborative platform. Colleges and universities should actively carry out IAE competitions, set up expert groups to comment and explain, and answer questions and answers for some problems encountered by entrepreneurs, so as to better improve the comprehensive ability of entrepreneurs. Therefore, it is very meaningful to build a platform for college students' IAE education practice. Only when students participate in practical activities and empathize with each other can they give full play to the significance of practical education. At the same time, the government should give entrepreneurs a certain amount of support to help. They implement their own projects.

Data Availability

The experimental data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest to report regarding the present study.

Acknowledgments

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