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Retraction

Retracted: Research on the Quality Improvement of Ideological and Political Teaching in the Internet of Things Environment

Wireless Communications and Mobile Computing

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1].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] X. Zhang, "Research on the Quality Improvement of Ideological and Political Teaching in the Internet of Things Environment," *Wireless Communications and Mobile Computing*, vol. 2022, Article ID 6600786, 10 pages, 2022.

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Research Article

Research on the Quality Improvement of Ideological and Political Teaching in the Internet of Things Environment

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The research of Internet of Things (IOT) network and deep learning has gradually become a hot research topic for academic researchers. As a typical form of IoT networks and deep learning, it is of great significance to study the IOT and ideological and political education. In view of the drawbacks of the ideological and political course, such as boring teaching content and rigid teaching methods, strengthening teaching construction with the help of intelligent teaching assistant system has become the focus of attention in the field of education. The continuous improvement of IOT technology has brought certain changes to people's society and students' lifestyle. At present, the teaching aids and systems on the market focus on one aspect of the teaching process, not all aspects of the teaching process. According to the problem that the ideological and political course is a required course but its teaching efficiency is not high, this paper will combine the basic characteristics of the Internet of Things and deep learning to design the ideological and political teaching system, improve the drawbacks of the traditional system with an intelligent system, which will involve the method and calculation method of the edge matching algorithm, so as to improve the efficiency of ideological and political teaching and student learning. In addition, the image feature algorithm (ORB algorithm) is used to process images, and the improved surf feature processing algorithm is combined to explore how to improve the teaching quality of the course with the help of intelligent algorithms. The studies in this paper provide an important guidance to the application of both IoT networks and deep learning.

1. Introduction

The research of Internet of Things (IOT) network and deep learning has gradually become a hot research topic for academic researchers. As a typical form of IoT networks and deep learning, it is of great significance to study the Internet of Things and ideological and political education. As an important subject in the teaching task of colleges and universities, the ideological and political course, as a required course, is a subject that every student must master. However, in any school, the classroom effect and student achievements feedback by the ideological and political course are not very ideal. In view of the shortcomings of the ideological and political teaching content, such as the dullness and the rigidity of the teaching methods, it has become the focus of attention in the field of education to strengthen the teaching construction with the help of the intelligent teaching assistant system. Teaching objectives, teaching contents, teaching methods, and teaching attitudes have become factors affecting the quality of Ideological and Political Science teaching in colleges and universities. The whole Ideological and Political Course process is a form of testing teaching quality embodied in the teaching system. As human society enters the network era, the network is rapidly changing the production, life and thinking mode of human society. The resulting network culture is flooding into the classroom with an overwhelming momentum; it has comprehensively improved the classroom efficiency and students' learning efficiency of ideological and political courses in colleges and universities.

The demand of various industries for the Internet is gradually increasing. The concept of IOT was first formally proposed by the International Telecommunication Union (ITU) in its "2005 Internet Report of the International Telecommunication Union: the Internet of things" [1]. IOT is a network environment used for information exchange, communication, and intelligence according to agreed protocols.

It connects any object with the Internet through some information sensing devices, such as global positioning system, infrared sensor, etc., which is mainly manifested in identification, positioning, tracking, monitoring, and management network [2–5]. Using advanced information methods such as application recognition technology and sensing technology, the Internet of things can enable various objects to actively exchange information through the Internet. According to the above introduction, it can be clearly understood that the core foundation of the Internet of things is still the Internet, which is an extension and expansion of the Internet, but it extends the traditional communication connection between people to the communication connection between objects, so as to realize the information exchange and communication between objects [6–8]. Nowadays, the IOT has become a necessary trend in the development of information networks [9–12].

It can be seen that the IOT platform plays an important role in the ideological and political classroom in colleges and universities and provides a broad space for the development of ideological and political education. Relying on the IOT technology to build a teaching quality monitoring system can effectively improve the final classroom efficiency and can realize the digital campus. This paper combines IOT technology and deep learning to build an ideological and political teaching system, which cannot only make traditional teaching intelligent but also increase the interaction rate between teachers and students to a certain extent. In addition, the image feature algorithm (ORB algorithm) is used to process images, and the improved surf feature processing algorithm is combined to explore how to improve the teaching quality of the course with the help of intelligent algorithms. The studies in this paper provide an important guidance to the application of both IoT networks and deep learning.

2. Contribution

In the Internet of Things environment, based on traditional teaching methods and traditional camera monitoring equipment, the quality of teaching cannot be improved. In order to solve this problem, the main contributions of this paper are as follows:

(i) using the combination of edge feature matching and ideological and political classroom monitoring image monitoring calculation formula, the image light reflection angle is calculated

(ii) the ORB algorithm is used to process the image quickly, and the feature points can be obtained quickly and effectively

(iii) the improved SURF algorithm uses Manhattan distance instead of Euclidean distance, to perform the final feature location, feature matching, and other steps

(iv) designed a new-type ideological and political teaching monitoring system under the framework of the Internet of Things, and realized the effect of improving classroom efficiency in the application of Ideological and political classroom education

3. Related Work

From the IoT networks and deep learning, in view of the shortcomings of the ideological and political teaching content, such as the dullness and the rigidity of the teaching methods, it has become the focus of attention in the field of education to strengthen the teaching construction with the help of the intelligent teaching assistant system. We keep up with the pace of network development, and our life is becoming more and more intelligent. The Internet of Things can be widely popularized in intelligent transportation, environmental protection, public security, smart home, medical care, and other fields. It cannot be said that the Internet of Things is one of the important factors that affect our human society's progress towards a more efficient and intelligent information society [13–15]. Teachers often play the role of knowledge imparters, and students become "containers" for receiving knowledge [16, 17]. If you want to break the traditional ideological and political teaching methods, you must fundamentally break the boring and stereotyped teaching contents and methods. Using intelligent monitoring to record the students' class situation is one of the important means. Because infrared sensors cannot record images; because the classroom belongs to a special place, it is difficult to achieve real-time monitoring, so it is easy to cause a high false detection rate, which will have some errors [18]. Compared with infrared sensors, more accurate methods are needed to detect each ID card, and intelligent detection is essential. However, there are still some problems in the method of detecting student ID cards, because each ID card will read everyone's personal information [18].

In our daily campus study and life, the traditional way is that cameras are more commonly used. The traditional camera recording method is to directly transmit the pictures to the background server, then use the algorithm of relative processing image information, such as server computing algorithm. However, this method also has some problems, such as high requirements for communication links and large bandwidth for transmitting picture information [19, 20], which invisibly creates greater costs. With the progress of the times, intelligent cameras play a more important role in intelligent teaching. It can accurately identify students, collect the overall scene of the classroom, and identify the classroom attendance rate and attendance rate [21–23]. Since student attendance plays an important role in teaching quality, the images collected by smart cameras can be used to calculate student attendance of a course in a certain period of time [24]. Specifically, changes in student attendance throughout the semester can reflect changes in teachers' teaching quality and students' examination results in the course [25–27]. At the same time, the intelligent camera sends the detected image to the students through various ways. In order to reasonably use the school's resources, reasonably use the classroom resources, count according to the

occupancy, so that the classroom seats can be reasonably arranged [28–30].

4. Research Design Based on IoT Networks and Deep Learning

The research of Internet of Things (IOT) network and deep learning has gradually become a hot research topic for academic researchers. As a typical form of IoT networks and deep learning, it is of great significance to study the IOT and ideological political education. As a college teacher, teaching and scientific research are essential skills. Therefore, according to the current situation, the school also has many departments related to teacher management, such as the science and technology office, the academic affairs office and the personnel office. We need to have contacts with many people and corresponding management departments to achieve a relatively complete teaching quality monitoring system. Therefore, the main goal of building a teaching quality monitoring system is to establish a complete teaching management department and a complete theoretical teaching plan, so as to improve the shortcomings of traditional teaching methods and ultimately improve classroom efficiency. The specific objectives of the system design are as follows:

(1) *Realize the system of regular and irregular inspection of teaching quality*. The focus is on checking the teaching order and whether various teaching links are carried out smoothly, which belongs to the work content of daily teaching management. With the help of the inspection results, a fair and objective judgment can be made on the quality of teachers' teaching.

(2) *Supervise teaching work*. The so-called teaching supervision is mainly the daily work and main work of the principal in charge of the school, as well as the management department and leaders. According to the intelligent monitoring system, the leader's lectures can be converted from offline to online to realize digital teaching, which cannot only provide convenience but also understand the basic situation of front-line teaching at any time. Reasonable suggestion to make positive comments.

(3) *Develop a teaching evaluation feedback system*. In order to keep abreast of the information on both sides of the teaching, achieve benign dynamic management, and promote the construction of teaching and learning atmosphere The management work is continuously improved and upgraded.

(4) *Teaching inspections between faculties*. In combination with relevant document management requirements, each department continuously refines the teaching inspection work to keep up with the teaching progress. At the same time, it also urges the standardization of teaching management, strengthens the daily management work, improves the teaching quality, and so on.

In addition, the image feature algorithm (ORB algorithm) is used to process images, and the improved surf feature processing algorithm is combined to explore how to improve the teaching quality of the course with the help of intelligent algorithms. The studies in this paper provide an important guidance to the application of both IoT networks and deep learning. The specific flow of the edge feature algorithm is shown in Figure 1.

From the deep learning, in view of the problems existing in the traditional ideological and political teaching system, an intelligent teaching monitoring system is constructed. In order to reduce the noise in the whole system, the color image is processed by means of Gaussian low-pass filtering. Then, calculate the gradient and amplitude, obtain the high and low thresholds by Otsu method, determine the edges according to the thresholds, and extract the edge features of the ideological and political class monitoring image string. Finally, the corresponding quadrants are obtained by using the coordinates of both ends of the image detected by video surveillance, and the corresponding reflection angle is calculated. Due to different image acquisition time, the accuracy is different, and the edge detection accuracy is relatively low. Considering the difference of image features between different positions, filter processing is performed first. Similar to the median filter and the average filter, Gaussian low-pass filter first defines a fixed size window, then calculates the value size of each point of the template through Formula (1), and then processes each pixel of the image through iteration.

$$h(x, \mathrm{y}, \sigma) = \frac{1}{2\pi\sigma^2} \exp\left(-\frac{x^2 + y^2}{2\sigma^2}\right). \tag{1}$$

In the Formula (1), x and y are the coordinates of the pixel points, respectively, and σ is the standard deviation of the normal distribution. The size of σ directly affects the final processing result. The larger the value, the more obvious the processing effect on noise, but the image is also blurry.

From the deep learning, the method of adaptively obtaining the segmentation threshold value Otsu algorithm is used to binarize the difference image. Degree feature, which divides the image into background and foreground parts, so that the segmentation with the largest variance between classes means the smallest probability of misclassification.

Since most of the collected images are color images, the R, G, and B components need to be processed separately during processing, which increases the complexity of the entire process. Therefore, according to Formula (2), the RGB image is converted into a grayscale image.

$$L = 0.299 * R + 0.587 * G + 0.114 * B \tag{2}$$

In the given formula, L represents the image brightness, that is, the grayscale value of the grayscale image, where R,

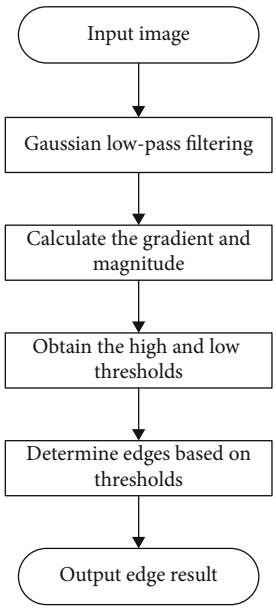

Figure 1: IoT and deep learning based flow of edge feature matching algorithm.

G, and B are the red, green, and blue components of the color image, respectively.

From the deep learning, the ORB algorithm is used to detect feature points, and the feature of the ORB algorithm is to use the FAST algorithm to find those points that stand out from the group, and compare this point with other surrounding points. If it is different from most of the other points, it is considered as a feature. The biggest feature of ORB is its fast calculation speed. Taking Figure 2 as an example, the specific calculation process is as follows.

Step 1: select a pixel point P from the image and set its gray value to Ip.

Step 2: select an appropriate threshold T, if the absolute value of the difference between the gray values of the two points is greater than t, the two points are considered to be different.

Step 3: consider the 16 pixels around the pixel.

Step 4: build a pyramid and select feature points.

For any feature point $p(x, y)$, the moment defining the neighborhood pixels of $p(x, y)$ is as follows:

$$L_{i,j} = \sum_{x=-r}^{r} \sum_{y=-r}^{r} x^i y^j I(\mathrm{x}, y) \tag{3}$$

In the formula: $I(x, y)$ is the gray value at the point (x, y), $i, j \in (0, 1)$; $r = 3$ is the neighborhood radius. The centroid of the image is as follows:

$$C = \left(\frac{m_{10}}{m_{00}} \frac{m_{01}}{m_{00}}\right). \tag{4}$$

In the considered IoT networks, in view of the problems existing in the traditional ideological and political teaching system, an intelligent teaching monitoring system is constructed. In the whole system, use the improved surf is used to match the edge features of the monitoring images of Ideological and political class. The traditional SURF method realizes the matching process by calculating the Euclidean distance between the feature points in the image. In order to reduce the amount of calculation and improve the efficiency of the matching stage, the Manhattan distance is first used to replace the Euclidean distance as a standard to measure the similarity of feature point descriptors, and then the nearest neighbor to next nearest neighbor ratio is cited to reduce the number of times in the similarity comparison process of feature points, thus reducing the time complexity.

For the considered IoT network based on deep learning, SURF is used for feature point filtering and precise positioning. The SURF operator forms a pyramid-like scale space through box filters of different sizes. First, all adjacent points of the obtained feature points are compared in the image domain and scale domain. If it is greater than all adjacent points, the point is an extreme point. As shown in Figure 3, the detection point in the middle is compared with the other 8 pixels in the neighborhood of the image where it is located, and 18 pixels in the adjacent upper and lower neighborhoods, which are compared with 26 pixels in total. After the feature points are initially located, the final feature points are screened out by eliminating the key points with weak energy and the wrongly positioned key points.

After the feature points are screened, in the considered IoT networks, the main direction of the feature points should be determined, and the statistical gradient histogram in the feature point field should be used. The direction represented by the component is used as the main direction of the feature point, and the specific representation is shown in Figure 4.

IoT-based SURF operator constructs the descriptor of the feature point through the circular area around the feature point. Taking the pixel position of the located feature point as the vertex, within a 60° sector, the sum of the Haar wavelet on the vertical and horizontal coordinates is calculated. Rotate the sector by 60°, and set the sector where the maximum value of the vertical and horizontal sum is located as the main direction of the feature point. Rotate along the main direction to get specific regions and calculate the Haar wavelet eigenvalues of each subregion to form descriptors.

5. Results and Analysis

Based on the IoT networks and deep learning, this paper tests and compares images with scales of 20%, 50%, and 70%. The feature point matching adopts the method of nearest neighbor and second nearest neighbor matching, and the specific number of feature point detection is 600. The comparison results are shown in Tables 1–3, respectively.

According to the above test results, in the considered IoT networks when the scale is 20%, the method uses the traditional ORB algorithm, and the accuracy is increased by 40.75%. Compared with the Gaussian image pyramid ORB method, the accuracy is increased by 11.83%. Compared with the traditional SURF algorithm, the accuracy is improved by 10.87. In terms of running time, although the

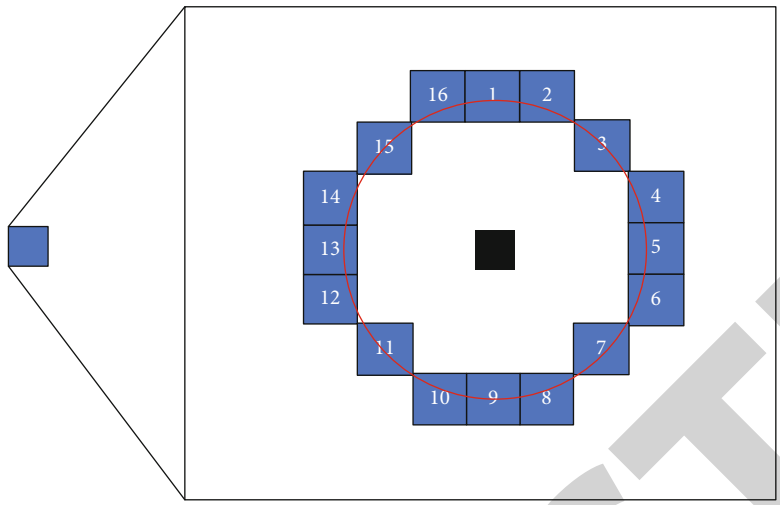

Figure 2: IoT and deep learning based schematic diagram of FAST extraction of feature points.

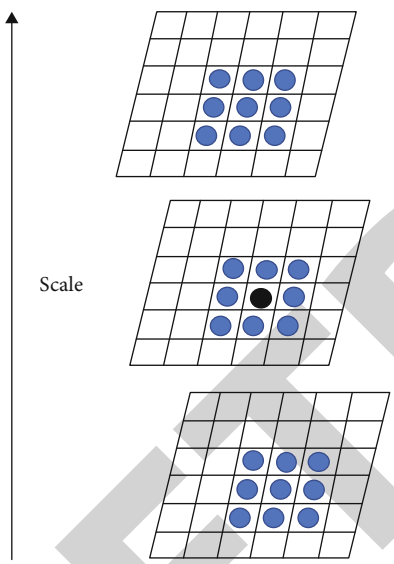

Figure 3: IoT and deep learning based feature point location map.

traditional ORB method has a short time, the accuracy is low. Compared with the Gaussian image pyramid, the traditional SURF algorithm has a relatively reduced running time and an improved accuracy. When the scale is 50%, the accuracy of the method proposed in this paper is improved by 7.3% compared with the Gaussian image pyramid, and the running time is relatively reduced; compared with the single SURF method, the accuracy is improved by 9.13%. When the scale is 70%, the accuracy is improved by 10.5% compared with the Gaussian image pyramid and 10.32% compared with the method using only SURF. With the increase of the scale percentage, the accuracy of each method decreases, but the method in this paper still has a high accuracy rate compared with several other baseline models, this shows that the proposed method has good stability.

In the Internet of Things network considered, the monitoring system is designed based on feature extraction algorithm and feature matching algorithm. Its main components include Internet communication system, teaching organization and management subsystem, teaching quality management subsystem, education teaching research, the teaching quality supervision subsystem, subsystems of the quality of teaching information, teaching quality improvement, etc.; the specific design is shown in Figure 5.

From the IoT networks and deep learning, as a completely independent system, the research subsystem of ideological and political teaching mainly undertakes the theoretical scientific research, discipline construction and discipline training of ideological and political teaching. In order to achieve the ultimate goal, the Internet of Things will connect communication equipment with ideological and political teaching management, so the Internet of Things communication system is the basis for realizing other systems. Among them, the teaching quality organization and management subsystem is the leader and working organization of teaching quality monitoring. The organization is directly led by the party committee of the university and has a teaching quality monitoring committee. The teaching quality monitoring subsystem reports directly to the teaching quality monitoring, and its main responsibilities include recording the teaching information, students' learning attitudes and effects, and students' opinions on teaching work in the classroom. The teaching quality monitoring and evaluation subsystem is committed to using a variety of monitoring methods, such as monitoring videos, lectures, questionnaires, and so on. In terms of the evaluation system, a good evaluation index is established from various internal and external factors affecting the teaching quality. The system design establishes a comprehensive evaluation system, such as peer evaluation, teacher self-evaluation, student evaluation, and teacher-student joint evaluation management. The teaching quality information subsystem is an information management organization that collects and feeds back teaching quality information in time. The teaching quality information subsystem realizes the timely collection and feedback of teaching information, which is conducive to

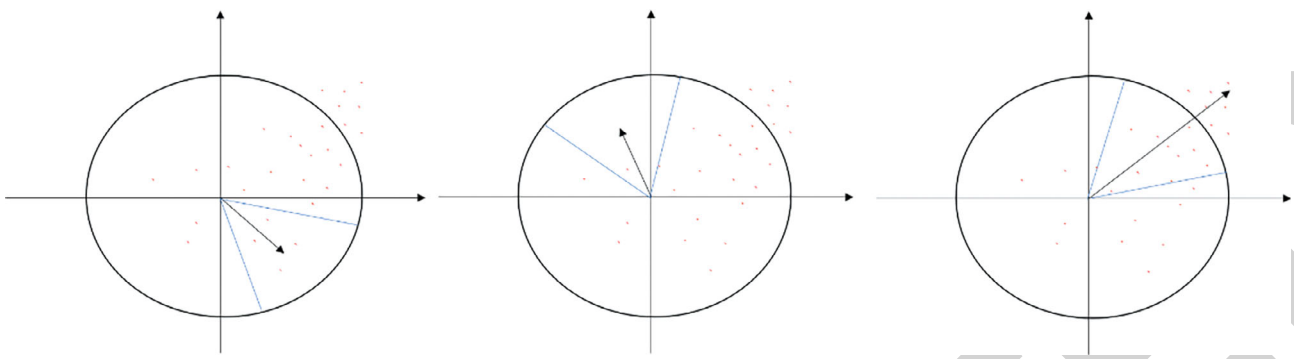

Figure 4: IoT and deep learning based schematic diagram of the selection of the main direction of the feature point.

Table 1: IoT and deep learning based performance comparison of three algorithms with 20% image scale change.

Method	Operation time	Number of matches	Number of correct matches	Accuracy
Traditional ORB	166	362	115	31.77%
Gaussian image pyramid ORB	468	435	264	60.69%
Traditional SURF	387	487	301	61.81%
OURS	324	524	380	72.52%

Table 2: IoT and deep learning based performance comparison of three algorithms with 50% image scale change.

Method	Operation time	Number of matches	Number of correct matches	Accuracy
Traditional ORB	152	341	55	16.13%
Gaussian image pyramid ORB	442	410	213	51.95%
Traditional SURF	361	447	224	50.12%
OURS	307	508	301	59.25%

Table 3: IoT and deep learning based performance comparison of three algorithms with 70% image scale change.

Method	Operation time	Number of matches	Number of correct matches	Accuracy
Traditional ORB	134	334	41	12.28%
Gaussian image pyramid ORB	420	411	194	47.2%
Traditional SURF	354	420	199	47.38%
OURS	287	487	281	57.70%

the real-time monitoring of teaching quality and promotes the efficient operation of teaching quality management. The teaching quality correction subsystem may be a system for debugging the operation of five systems other than the Internet of Things communication system. This system can solve the problems that cannot be solved in time in the pre-control, process control, and postcontrol of teaching quality. In short, in order to improve teaching quality and lay a foundation for improving teaching efficiency, seven subsystems must be interconnected and coordinated.

The monitoring system designed above is evaluated, and the evaluation results are shown in Table 4.

In order to illustrate that the ideological and political teaching system based on IOT technology proposed in this paper has good simulation teaching effect. To sum up, the improvement of the teaching quality of Ideological and political courses will be reflected in the following aspects.

5.1. Realize Intelligent Teaching Methods. The introduction of the IOT technology transforms the traditional teaching mode where teachers are the leaders of the classroom, and turns students into the leaders of the classroom. At the same time, it can also guide students to systematically reflect on problems and deal with the problems in their minds., to achieve the educational goal of ideological political teaching.

(1) *Teaching Mode*. In the traditional teaching mode, the focus of ideological and political teaching mainly lies in the indoctrination class teaching of teachers. In the Internet of Things environment, the teaching

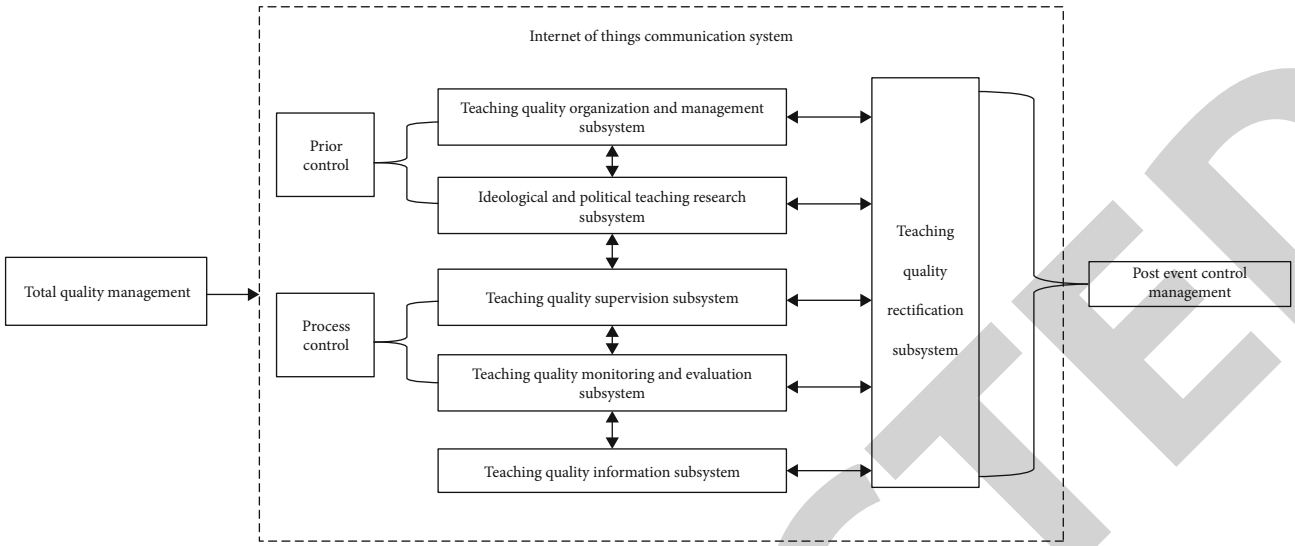

Figure 5: Overall system architecture diagram.

mode is improved more advanced. Teachers can use smart devices and smart monitoring to achieve equal and free exchange and communication with students. Teachers are no longer the masters of the classroom, but an equal interlocutor who can communicate with students very sincerely. As students, they can also learn with the help of a variety of multimedia means, make the best use of the advantageous resources in the Internet of Things, teach them to reflect and refine content anytime and anywhere, mobilize the ability to think deeply, and exercise the ability to think independently. In addition, teachers can also use remote monitoring to realize the organic integration of online education and classroom education.

(2) *Interactive Feedback*. The interactive feedback in the traditional mode lacks dynamics, and the rigid mode can easily lead to students' rebellious emotions. IOT teaching mode realized by sensor chips can be realized to a large extent. Intelligent interaction in the teaching environment. For example, wear special sensors for students, investigate students' nervousness and brain state, etc. With the help of these feedbacks, teachers can improve teaching plans and teaching activities in a timely manner, and find out the dynamic changes in students' thinking at any time, and at the same time conduct systematic assessments, and guide and educate students when necessary. The Internet of Things technology transforms traditional classrooms into interactive digital classrooms, which can not only effectively improve students' attention and participation, but also use webcams to communicate between teachers and students, making education more effective and targeted.

(3) *Management Evaluation*. In the ideological and political teaching monitoring system under the background of the Internet of things and deep learning, ideological and political education can use special identification tags to automatically monitor students' identities and class attendance, and it also saves teachers' time spent on naming. In addition, students can also evaluate teaching anytime and anywhere, helping teachers to improve the speed and schedule of teaching in time, so as to improve teaching methods and so on.

5.2. Implementing Diversified Learning Methods. In the Internet of Things environment, students can use personal terminals as the main carrier to realize a digital learning platform, fully express their opinions and ideas, and respect their subjectivity. At the same time, students who cannot attend classes due to special reasons can pass. This way, self-study is carried out, which eliminates the trouble of students helping to take notes and so on. In addition, most of the traditional campus network is more obvious in the political color, and students are often not interested. Today, the introduction of the Internet of Things technology has made the ideological and political educators in colleges and universities intentionally transform the campus network into a service-oriented website, which greatly enriches the way students learn. For example, on the basis of the existing education network, some platforms for communication and communication should be appropriately set up to guide students to participate more; Conditional learning can also complete the test through the network platform to achieve "paperless test"; some unique competition platforms can also be set up, and some quizzes with prizes can be set up, which can be appropriately included in the students' usual performance.

The construction of the Internet of Things in colleges and universities can provide better and more advanced technical support for students' learning methods, so that students' terminal devices can be connected to the network at any time, and realize resource sharing, broaden their

Table 4: Evaluation of ideological and political teaching based on Internet of Things technology.

Number	Simulation teaching	Number	Simulation teaching	Number	Simulation teaching
1	87.5	34	91.2	67	81.4
2	87.6	35	90.6	68	82.6
3	82.9	36	91.4	69	84.6
4	90.2	37	89.5	70	88.4
5	84.6	38	88.6	71	85.6
6	86.4	39	87.6	72	90.4
7	82.9	40	84.6	73	88.6
8	84.7	41	85.4	74	89.7
9	85.6	42	82.6	75	90.6
10	86.4	43	84.9	76	88.1
11	84.4	44	88.7	77	84.5
12	83.9	45	90.6	78	83.6
13	83.9	46	87.4	79	85.4
14	87.2	47	89.6	80	90.4
15	87.0	48	92.1	81	88.8
16	81.6	49	90.6	82	92.1
17	84.5	50	88.7	83	86.7
18	85.6	51	92.6	84	85.1
19	86.1	52	89.6	85	84.3
20	85.3	53	93.1	86	88.0
21	84.6	54	84.6	87	90.3
22	89.7	55	82.5	88	82.6
23	91.6	56	90.6	89	84.1
24	90.6	57	88.6	90	85.6
25	92.8	58	84.1	91	88.4
26	89.7	59	82.6	92	90.5
27	88.5	60	82.9	93	84.7
28	84.3	61	84.6	94	85.8
29	87.7	62	87.1	95	87.6
30	88.2	63	89.0	96	88.1
31	89.0	64	90.6	97	90.4
32	91.3	65	92.4	98	91.6
33	92.6	66	88.1	99	87.5

learning time and space, and exercise their learning. The ability to inquire independently, with students at the center of the classroom, enriches the way of learning.

5.3. Realized an Excellent Humanistic Learning Environment. Whether the classroom environment is safe and warm is likely to have an impact on students' mood and learning efficiency from a certain point of view. Multiple different sensors can be installed in the classroom to detect the humidity, temperature, light intensity, and other conditions in the classroom at anytime and anywhere and adjust the temperature and brightness according to the ideal values that have been set. You can also use the Internet of Things lighting settings to make the lights in the classroom bright or dim and warm or cool, and these subtle changes help redirect students' attention. In addition, the proper use of IOT technology can also avoid various potential security incidents on campus to a certain extent, and ensure that students can complete their studies in a safer, more harmonious and intelligent environment. Internet of Things devices such as colored lights and electronic displays are used in libraries or classrooms. Once an intruder occurs, devices such as sensors will automatically alert students, teaching staff, and local police. Different settings will trigger different alarms throughout the school, providing a safer learning environment for students and teachers on the basis of not infringing on students' privacy.

6. Conclusion and Suggestion

The research of Internet of Things (IOT) network and deep learning has gradually become a hot research topic for academic researchers. As a typical form of IoT networks and deep learning, it is of great significance to study the IOT

and ideological political education. In view of the drawbacks of the ideological and political course, such as boring teaching content and rigid teaching methods, strengthening teaching construction with the help of intelligent teaching assistant system has become the focus of attention in the field of education. It shows strong vitality in the process of education. Therefore, ideological and political educators can only improve the quality of ideological and political teaching if they actively respond, change their ideas, keep pace with the times, and innovate their working methods and modes. The research in this paper provides an important reference for edge feature matching algorithm and image feature algorithm.

Although the system design proposed in this paper is innovative and novel, it also has limitations. Building a complete system requires more manpower and material resources. For example, the process of designing, developing, and maintaining the system is quite complex. In addition, it will also face the maladjustment of individual students and the transformation from traditional teaching methods to intelligent teaching. Although it does not involve security issues such as invasion of privacy, it will also face certain public opinion pressure. The studies in this paper provide an important guidance to the application of both IoT networks and deep learning.

Data Availability

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

Conflicts of Interest

The author declared no conflicts of interest regarding this work.

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