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Research Article

Technical Composition and Creation of Interactive Installation Art Works under the Background of Artificial Intelligence

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Interactive installation art is a kind of art that uses specific software and computer hardware as a platform, a platform for interaction between humans and machines or different people through computer hardware. It is an interactive art that uses material installations in nature as a medium. Traditional interactive installation art is not safe and convenient, in order to solve the shortcomings of traditional interactive installation art. This article introduces artificial intelligence technology by studying the overview, development, and application of artificial intelligence. The encryption algorithm for artificial intelligence data protection and the BP neural network prediction model under artificial intelligence are also introduced to ensure the safety of interactive installation art works. The part also introduces the creation tools and creation process of interactive installation art works. Finally, in the analysis part, a questionnaire analysis of the World Expo is carried out. The results of this article show that the art of connecting inserts is the most complete and open design era. Advances in science and technology, the development of digital art, and the needs of human life have led to the development of interconnected input technologies. In addition, in the survey of people's satisfaction with artificial intelligence, we can conclude that 89% of people think that the security of artificial intelligence technology is very high. Yes, 92% of people think that artificial intelligence technology has a fast computing speed, 86% of people think that artificial intelligence technology is low in cost.

1. Introduction

1.1. Background of Topic Selection. The rise of installation art in the twentieth century, Duchamp's finished products, Picasso' cubist artwork, surrealism, and other contemporary collage art played an important role in the development of installation art. Interactivity is the biggest difference between installation art and other art forms. Public participation and interaction have become an important part of interactive installation art. There are a wide range of creative tools for interactive installation art, such as computers, digital products, various sensors, displays, projectors, editing software, and integrated hardware. In particular, the collection and design of software and hardware programs is the key to the completion of interactive installation art. The input, processing, and output of signals, the creation and conversion of images, graphics, and sounds, and actions are basically based on writing and editing computer programming languages. Interactive installation art allows the public to personally participate in touch, sound, and spatial movement with the help of electronic testing equipment and interactive device input, interacting with computer programs, and at the same time, interacting with works of art. Different from traditional installation works, the roles of participants change. Some projects even require public participation to complete. The reactions of different audiences also make the works of art have different effects and present special meanings.

1.2. Significance of the Research. Interactive installation art works are composed of image symbols, and cultural concepts that people can understand and feel through visual intuition are incorporated into the field of visual culture. The

visual language of the installation must conform to the public's cultural consensus and aesthetics and must have its own complete semantics. There is a view in academia that there is an aesthetic trend from classical art to modernism art to contemporary art. Now, he is in an aesthetic state of "shocked" and "integrated." Combined with the continuous deconstruction of the previous installation standards, a typical postmodern aesthetic model has been formed. Modern facilities use more common objects and familiar things to visually present people and try to use contemporary media to give people a sense of being integrated into modern life. The shocking thing is the alternative layout and layout. This fusion is also reflected in the interaction between the author and the viewer, allowing the viewer to be completely immersed in the work. The emergence of interaction allows the audience to better interpret and understand the relationship between the work and the image. The focus of installation thinking is to transplant means into works, effectively transform the spiritual world of the artist, relying on contemporary times, starting with the most well-known cultural phenomena and the most controversial events, for in-depth thinking.

1.3. Related Work. Interactive installation art is a very complete and open design era. The development of technology, the development of digital art, and the needs of people's lives have created the development of interactive installation art. Balthazar P provides application methods and design strategies for interactive installation art to intervene in urban commercial spaces. Based on the summary of the urban commercial space and the case study of interactive installation art in the urban commercial space, the application method and design strategy are proposed. Promote the integration of interactive installation art into urban commercial space and create a new situation in the development of interactive installation art and urban commercial space [1]. Dblm A explores visual abstract presentation technology as an intermediary form to manage publicly generated content in order to maintain respectful discourse. Identify technology and social mediation as two dimensions in the content mediation space and discuss different solutions based on public interactive displays and related work in art installations. By describing the "objective meaning" of our interactive artwork, we further discussed a new method of technical mediation, a device that invites the audience to express themselves through anonymous text messages. The design of the system visually abstracts the presentation of the message on the display to regulate the discourse by decomposing the message into decontextualized words. The public reaction during the one-month installation and deployment in the library environment was briefly discussed [2]. Boulay BD believes that interactive art installations evoke responses from residents of nursing homes with dementia, demonstrating the potential of interactive art in nursing home environments. Often observed responses are naming, identifying, or asking questions about what is depicted and how the installation works. The body points or taps the screen and taps or sings to the music. When VENSTER is used in routine care, the choice of content type is critical to the expected experience/use in practice. In this study, recognition seems to trigger memory and language responses, while ambiguity leads to requests for more information [3]. However, the research did not use artificial intelligence methods, so the research content is insufficient.

1.4. Innovation Points of This Research

(1) Intelligence can make the design of technology and the construction of usable installation technology much easier, safer, and more reliable [4]

(2) The questionnaire survey method used in this article is mainly carried out in the World Expo. The World Expo is used to promote interactive installation art works under the background of artificial intelligence to improve the awareness and privacy of interactive installation art works.

(3) Compared with traditional interactive installation art, artificial intelligence interactive installation art can make the content form more intelligent, which is more conducive to being accepted and absorbed by people

1.5. Weaknesses of This Study

(1) The research on the application methods and design strategies of interactive installation art in urban commercial space is not thorough enough in this article

(2) The basic system structure of interactive installation art works can be improved

2. Method of Creating Interactive Installation Art Works under the Background of Artificial Intelligence

2.1. Overview of Artificial Intelligence. Artificial intelligence can be explained from two aspects: on the one hand, artificial intelligence comes from the continuous growth and development of human beings and is the crystallization of human wisdom and culture [5]. On the other hand, artificial intelligence is the imitation of certain individuals through computers or other electronic devices, functions, and behaviors. Artificial intelligence is about how to use computers to simulate certain human thought processes and intelligent behaviors [6]. This is the development of human consciousness and thinking mode constructed artificially, which can replace human beings to complete certain tasks [7].

2.2. Basic Composition of Interactive Installation Art Works. Collaborative input technology has four subcomponents: media-media system, data retrieval and data acquisition system, transfer system, and multimedia processing subsystem [8]. And the structural design frame of the interactive installation artwork is shown in Figure 1.

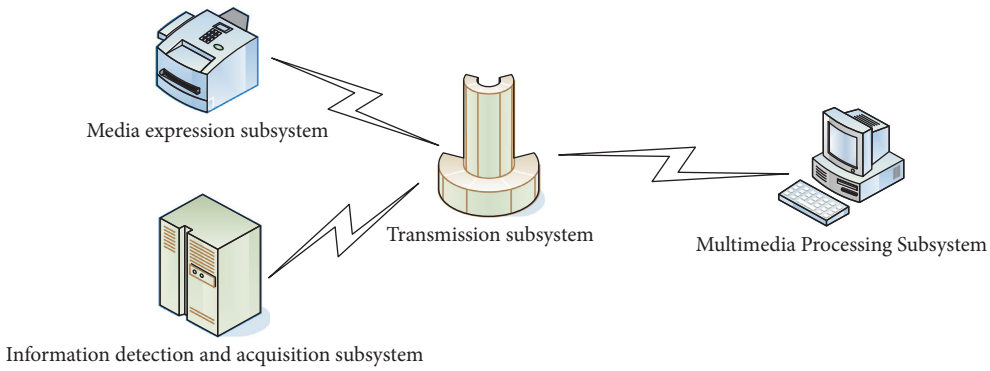

Figure 1: Interactive installation art structure design framework.

(1) Media expression subsystem

It is a window for displaying works of art and a display platform based on technological means to infect people. Use modern information technology to show the various sensory touches of art works [9]. In this subsystem, there are many interactive information feedback devices, including audio switches and audio players, video switches and video projection devices, and environmental control devices. These devices are external interactions between people and devices [10].

(2) Information retrieval and data collection subsystem

Interaction is mainly the interaction between interactive devices and people [11]. Therefore, the main task of this subsystem is to detect and collect human sensory information. In the process of detecting and collecting information, we will use many types of sensors. These sensors are important perceptual channels for human-computer interaction, and only their existence can realize the interaction of installation art [12]. The choice of sensors will directly determine the creative style of the work, and different information collections can design projects with different manifestations to complete the interaction requirements to be achieved [13].

(3) Transmission subsystem

The main function is to transfer the collected information to the computer or output the data processed by the computer to the multimedia performance subsystem [14]. The design and implementation of this subsystem mainly depend on the interface technology provided by the acquisition subsystem, the interface technology of the multimedia presentation subsystem, and the interface technology of the multimedia processing subsystem [15]. From the current technical means, data transmission can be completed through wired and wireless media [16].

(4) Multimedia processing subsystem

It is the core of the entire interactive installation art and the basis for the interaction of art works. It mainly includes the establishment of a database, the processing and calculation of the received information, and the creation of graphics and images [17]. The system is a combination of computer programs, computer control, multimedia technology, and data processing, and it is the core of a unified and collaborative work of art [13].

2.3. Development and Application of Artificial Intelligence. The research of artificial intelligence began in 1956, starting with the so-called problem solving. The first problem is mainly limited to simple areas, such as chess, conjecture, and the proof of mathematical theorems [15]. The current research on artificial intelligence covers almost all fields, mainly including the following aspects:

(1) Expert system: let the computer simulate the decision-making process of human experts and solve practical problems that cannot be determined by mathematical models but must be based on expert experience [18].

(2) Decision support system: through reasoning and computer judgment, it helps to make decisions on some diverse, inaccurate, or uncertain issues [19].

(3) Natural language understanding system: enables computers to understand human language and improves the connection between humans and computers [20].

(4) Knowledge base system: the knowledge that people learn is expressed through certain rules, that is, it is stored on the computer after formal comparison and processing to provide users with knowledge exchange [21].

(5) Intelligent computer: it is a new generation computer that can recognize sounds and images, design automatic programs, and have reasoning and learning functions under the support of the knowledge base [22].

In addition, there are some other research fields, such as pattern recognition, machine vision, combination, and programming, which will not be introduced here [23]. The composition of the expert system is shown in Figure 2.

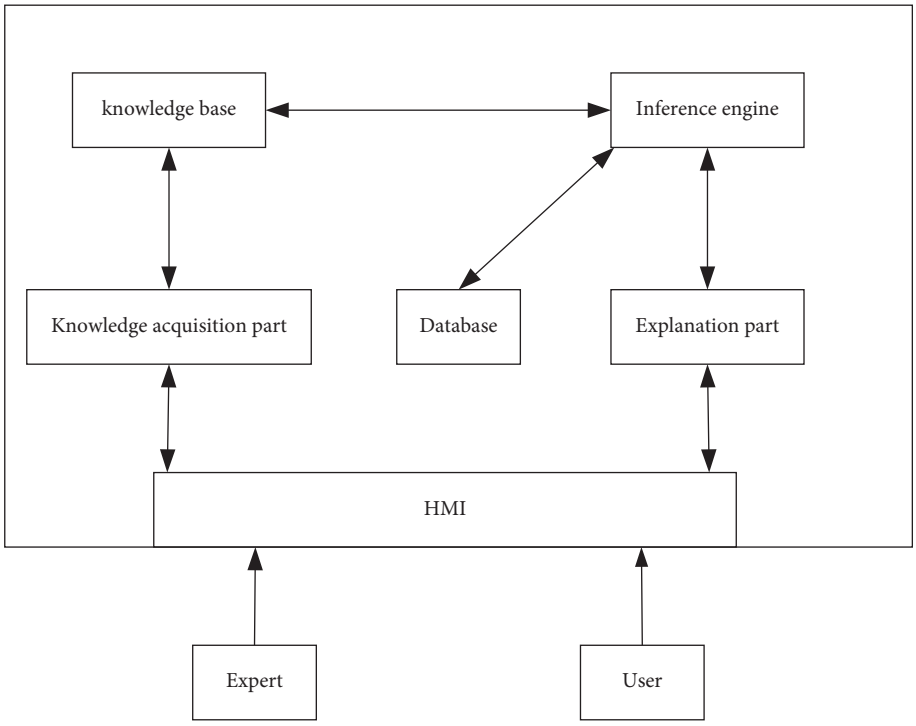

Figure 2: The composition of the expert system.

2.4. Encryption Algorithm for Artificial Intelligence Data Protection. When data security becomes a hot topic, when worms destroy the world, and when laws and regulations focus on data security, imagine that ordinary people will worry about their privacy and data security and hope to get protective measures [24]. This is also a storm, sweeping the data security field at home and abroad, and it has also become a defensive battle that completely changes data security [25]. Transparent artificial intelligence encryption PK and possible superior data security protection are no longer the focus. Security innovations in areas such as user experience, data security, and intelligence will be an important direction for future data security development [26, 27]. The schematic diagram of artificial intelligence is shown in Figure 3.

Definition of encryption algorithm function for artificial intelligence data protection:

(1) P_j = PKeyGen. This function is used to generate a public parameter P_j function. At the initial stage, a bilinear group G with a prime number p and a generator g will be selected, and the bilinear pairing operation e: $G \times G \longrightarrow G_l$ will be performed. Attribute space $V = \{V_1, V_2, \ldots, V_n\}, V_i \in V\,(1 \le i \le n)$, y_i c $d \in Z_p$ is randomly selected. The function PkeyGen is given in the following formula:

$$\left\{G_l, g, g_d, e(g,g)^c, \left\{T_i = g_{y_i}\right\}_{i=1}^{n}\right\}. \tag{1}$$

(2) M_j = MKeyGen. This function is used to generate the master key M_j. Among them, g, c, and d are defined as the above function MKeyGen as given in the following formula:

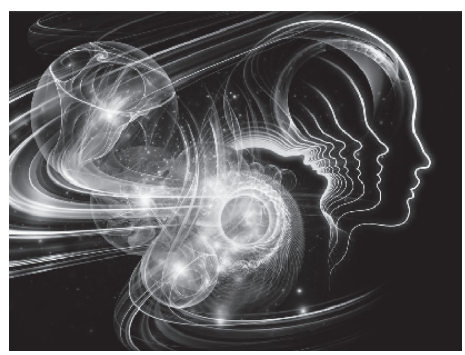

Figure 3: Schematic diagram of artificial intelligence (this picture is borrowed from the Internet).

$$\{g^c, d, \{y_i\}_{i=1}^{n}\}. \tag{2}$$

(3) A = Encrypt(P_j, N, L). This function uses the public parameter P_j and the access control structure L to encrypt the plaintext N and obtains the ciphertext A. Γ is to meet the authorization set collection requirements of the corresponding access control structure. Among them, att(y) returns the attribute information of node y.

$$\left(\Gamma, A^{\sim} = \mathrm{Ne}(g,g)^{cs}, A = g^{ds}, \forall y \in Y\colon A_x = g^{q_{y(0)}}, A_x^{\prime} = L_{\mathrm{att}(y)}{}^{q_{y(0)}}\right). \tag{3}$$

(4) S_j = SKeyGen(N_j, B). This function uses master key N_j and user attribute set B to generate user private key S_j. As the attribute set associated with the user's private key, B is a nonempty subset of the data file

attribute set V. Choose random number $\gamma \in Z_p$, individual attribute $s \in B$, and random number $\gamma_s \in Z_p$. The function $\mathrm{SKeyGen}(N_j, B)$ is given in the following formula:

$$\left(E = g^{(c+\gamma)/d}, \forall s \in B\colon E_s = g^{\gamma} T_s^{\gamma_s}, E_s' = g^{\gamma_s}\right). \quad (4)$$

(5) $N = \mathrm{Decrypt}(D, S_j)$. This function uses the user's private key S_j to decrypt the ciphertext CT to obtain the plaintext N. Before defining this function, first define the recursive operation $\mathrm{Decrypt}(D, S_j, z)$, let $i = \mathrm{att}(y)$, each leaf node z can calculate the recursive function $\mathrm{Decrypt}(D, S_j, z)$ as given in the following formulas:

$$\frac{e(E_i, A_z)}{e(E_i', A_z')} = e(g, g)^{\gamma q_z(0)}, \quad i \in B, \quad (5)$$

$$\frac{1}{e(E_i, A_z)} = e(g, g)^{r q_z(0)}, \quad i \in B. \quad (6)$$

For any person without z leaves, at least j_z $e(g, g)^{\gamma q_z(0)}$ can be used as a Lagrangian fusion region. After the calculation, $e(g, g)^{\lambda q_{Z_s}(0)}$ can be found and $e(g, g)^{\gamma q_z(0)}$ can be calculated with the subsidiary node $\{Z_s\}$ of n. Suppose $U = e(g, g)^{\gamma q_R(0)} = e(g, g)\lambda_s$, $\mathrm{Decrypt}(D, S_j)$ is expressed as given in the following formula:

$$D^{\sim} / (e(D, E)/U). \quad (7)$$

2.5. BP Neural Network Prediction Model. With the rapid development of artificial intelligence in recent years, due to the specificity and excellent performance of neural networks in processing high-dimensional nonlinear problems, neural networks have been widely used in the composition and creation of art creation technology combinations in interactive equipment and installations. Among them, the BP network is considered to be the best, most essential, and core component of the forward neural network. Data statistics show that more than 80% of the neural network may be through the BP network used or some of its related deformations and realized by optimization. The related deformation and its optimization are different in different research objects and goals. The research method used in this study is mainly the artificial neural network, so the BP neural network prediction model is first established as a basic model in order to be used as a reference standard for model performance in further research.

BP network is a multilevel feedforward neural network. During the network training process, the signal is propagated forward. The most critical step is to adjust the weight of the network through error propagation, the so-called BP (back propagation) learning algorithm. If the output level cannot obtain the expected output, then it enters the backward propagation process according to the decline, updates the network weights and predicts, and continuously improves the network performance, so that the output gradually approaches the expected output. The topological structure of the BP neural network is shown in Figure 4.

The relevant expression is as follows.

(1) Hidden layer activation function f:

$$f(a) = \frac{1}{1 + e^{-a}}. \quad (8)$$

(2) Hidden layer output H:

$$H_j = f\left(\sum_{i=1}^{n} Q_{ij} a_i - a_j\right), \quad j = 1, 2, \ldots, l. \quad (9)$$

(3) Predicted output O:

$$O_k = l \sum_{j=1} H_j Q_{jk} - b_k, \quad k = 1, 2, \ldots, m. \quad (10)$$

(4) Calculate the prediction error e, and Y is the expected output:

$$e_k = Y_k - O_k, \quad k = 1, 2, \ldots, m. \quad (11)$$

(5) Weight Q_{ij}, Q_{jk} update:

$$\begin{aligned} Q_{ij} &= Q_{ij} + \eta H_j (1 - H_j) a(i) \sum_{k=1}^{m} Q_{jk} e_k, \\ &\quad i = 1, 2, \ldots, n,\ j = 1, 2, \ldots, l, \\ Q_{jk} &= Q_{jk} + \eta H_j e_k, \quad i = 1, 2, \ldots, l,\ k = 1, 2, \ldots, m. \end{aligned} \quad (12)$$

(6) Threshold a, b update:

$$\begin{aligned} a_j &= a_j + \eta H_j (1 - H_j) a(i) \sum_{k=1}^{m} Q_{jk} e_k, \\ &\quad j = 1, 2, \ldots, l, \\ b_k &= b_k + e_k, \quad k = 1, 2, \ldots, m. \end{aligned} \quad (13)$$

2.6. Features of Interactive Installation Art

(1) The experience of participating in interaction

Art works that include interactive installations require higher enthusiasm for participants. It requires participants to participate and feel the atmospheric conditions created by art. This is also one of the most basic installation sites to ensure user experience. Public intervention and participation are an indispensable part of this. There are many differences between this and traditional installation art. For example, her report format is not only fixed at a point but through the floor of a public space or lobby, allowing viewers to reach places where there may be crowds at any time from different angles. Evaluate or take photos of the works in different dimensions, thereby increasing the audience's participation. The appearance and presentation of such works can actively attract the goal of the masses, and this way of

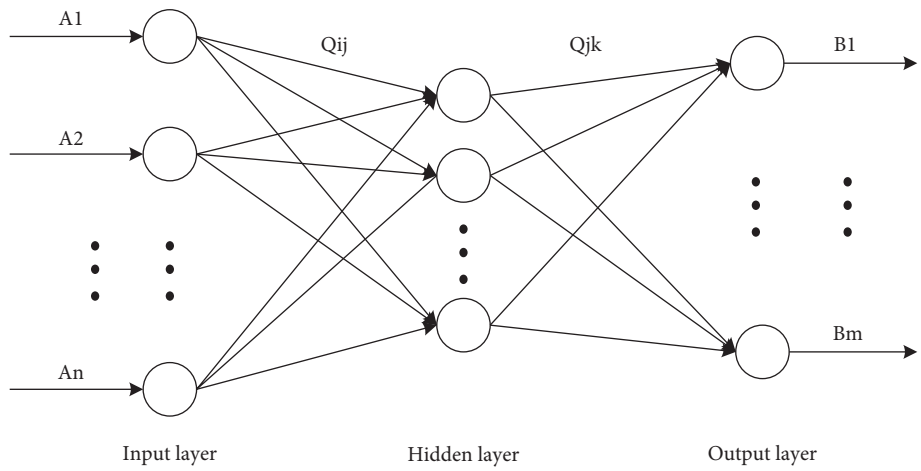

Figure 4: BP network topology structure diagram.

participation is more in line with the current social development status quo. This type of work not only allows participants to experience fun but also allows participants to experience it.

(2) The technological nature of information transmission

With the advancement of science and technology and the development of information technology, the form of expression of interactive devices has also changed. Today, most interactive installation artworks are made through science and technology. The use of high technology can attract the attention of participants and meet the needs of participants. The curiosity or interest of the public, especially participating in some new technologies that the public is not used to, may better involve the public in the project.

(3) Timeliness of interactive devices

In general, the collection value of interactive installation art is not high, and its original intention is not to collect. It is just a short-term exhibition, which produces different artistic special effects through different forms of interaction with the public. The art work of the interactive installation must ensure and increase the participation of the participants by creating different indoor and outdoor three-dimensional or multidimensional spaces and satisfy the curiosity and interest of the participants. The interactive installation artwork can determine the location of the artwork and how it interacts with the public according to the attributes and characteristics of the artwork itself. Of course, other external support can also make the artwork more interesting.

(4) The diversity of interactive installations

Interactive installation art surpasses certain requirements and limitations of traditional art. It can integrate multiple disciplines and elements to create works such as video, sound, film, prose, poetry, drama, music, and architecture. In general, interactive installation art is more developed and integrated, no longer limited to a single way of expression, and the importance and value of creation are more diversified.

The characteristics are given in Table 1.

2.7. Development of Interactive Installation Art. In 1980s, the use of new media became more extensive, and the flexible use of multiple media made interactive installation art more colorful. In 1990s, with the further development of computer technology, there were more and more new media art exhibitions and art festivals related to interactive installation art abroad. During this period, Internet technology also began to prevail, and the emergence of online media made interactive installation projects more diversified and differentiated in their manifestations. During this period, the use of other new media in interactive installation art became more and more mature, and more and more artists and the public began to pay attention to the design of interactive installation art. The main body of interactive installation art has been constantly updated and expanded. Today, it has begun to show humanitarian care, and the interaction has gradually matured. More and more people pay attention to and participate in it, and many related art centers have appeared. The following are some important new art exhibition centers and museums abroad, as given in Table 2.

3. Experiments on the Creation of Interactive Installation Art Works under the Background of Artificial Intelligence

This article is based on the technical composition and creation steps of interactive installation art works under the background of artificial intelligence as follows: 1. Explain the creation tools of interactive installation art works, 2. Explain the creation process of interactive installation art works, as follows:

3.1. Creative Tools for Interactive Installation Art Works. In terms of creative tools, the creative tools of interactive installation art are more complex, which may include

Table 1: Features of interactive installation art.

Serial number	Features
First	Participate in the interactive experience
Second	The technological nature of information transmission
Third	Timeliness of interactive installations
Fourth	The diversity of interactive installations

Table 2: International new media art centers.

Country name	Exhibition centers and museums
United States	Massachusetts Institute of Technology (MIT) Media Lab
Tokyo, Japan	ICC Media Arts Center
Germany	ZKM Technology Media Art Center
Linz, Austria	Ars Electronic Arts Festival
Netherlands	V2 Media Art Center

computers, various sensors, projectors, editing software, and some comprehensive decorative materials. This kind of hardware and software is the core of interactive installation art creation tools. Specifically, programming and programming are the soul of interactive video installation art. Input, output, signal processing performance, graphics output and conversion, and all images are based on language processing and editing. There is no other art form.

3.2. Creation Process of Interactive Installation Art Works. The creative process of the integration of interactive installation art and practice must start from the structural design framework of interactive image installation art, create creativity and ideas from the technical realization, and use modern electronic image technology, computer technology and detection technology to finally realize the interactive installation art work creation. Before starting to create a project, positioning the project is very necessary and very important. The specific process is as follows:

(1) Work creative proposal

The creation or design concept of artwork has its own theoretical system, as does interactive video installation art, but its most unique charm lies in the concept of interactive creation. This idea must take into account the design of the project. Specific, but two-way, it must be considered that the created project is not only a simple screen but also requires the ability to process and exchange information. The work itself also has "judgment and understanding." Therefore, after defining the vector form of creativity expression, it is also necessary to grasp the theme and intention of the expression and apply it. The design of interactive installation art, in terms of design concept, is to design a work of art with a specific form of expression, interacting and reacting with another media art through interactive technology. This kind of interaction can be the exchange of information between people and things, between things and things, between people and things, and between virtual and reality.

(2) Determine how to collect information

The most obvious difference between interactive installation art and other art lies in its installation characteristics. Most information collection methods are based on indirect contact between the audience and the project. Of course, some may also use direct contact.

(3) Determine the way of expression of the work

Once the style and form of the work are determined, the next step is how to design specific expressions, such as whether to use audio or tactile, or use visual and tactile graphics and images, or use other forms of sensory media expression or integrated multisensory application. Means show that this is the key to successful work. In interactive installation art, graphics or video rendering design is very important. Three factors must be considered when designing: one is the design and expression of the image, the other is the design technology used, and the third is the output device used.

(4) Draw the structure of interactive installation artwork

Draw the schematic diagram and configuration diagram of the interactive installation artwork and the circulation flowchart of the interactive system and then apply the installation and connection of the installation according to the drawings.

(5) Database and program integration

Once the design of the image elements of the work is completed, it is necessary to consider how to interact with the audience. To solve the problem of how the work interacts with the audience, two preparations must be made: one is to establish a database, organize, and summarize various graphic elements, and invite them to interact in groups. For the database, the remaining data must be considered. Keep it as short as possible and make the visit stable. The second is the design of the call plan. According to the information content sent by the public, the library files are required to randomly produce various animation graphics; the data content and the information content sent by the public are, respectively, determined, and interactive program design is carried out. In the programming process, on the one hand, it is necessary to realize the interactive program logic diagram; on the other hand, it is necessary to solve the basic coding tasks and visual design tasks of the interactive interface.

(6) Promotion and implementation of interactive works

After creating the work, the next step is to install, repair, and display it in the showroom. When choosing an exhibition space, the overall layout of

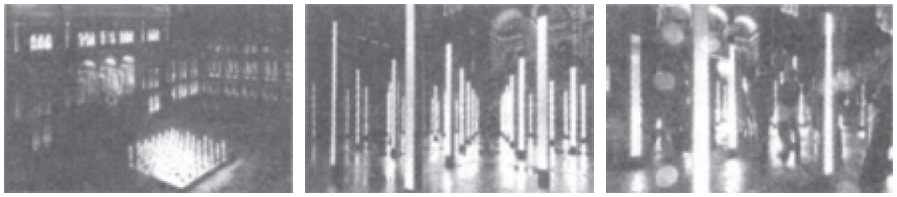

Figure 5: "Volume" luminous interactive device (this picture is borrowed from the Internet).

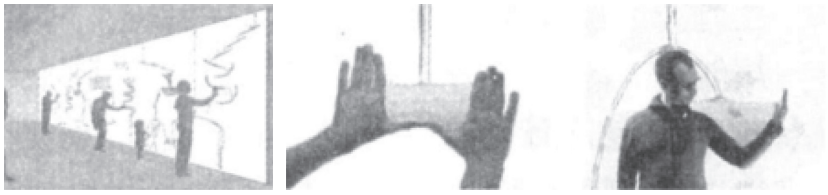

Figure 6: Interactive virtual water wall (this picture is borrowed from the Internet).

the space should be considered in detail. The main purpose is to promote the monitoring and interaction of the flow of people.

4. Creation of Interactive Installation Art Works under the Background of Artificial Intelligence

4.1. Typical Case Analysis of Interactive Installation Art Works

4.1.1. "Volume" Luminous Interactive Device. "Volume" is an acousto-optic device composed of a series of light, which can emit a series of visual and sound inductions based on the energy of the human body. When the movement of the human body interacts with volume, people will experience the great enjoyment of sound and light. Therefore, the installation has become a wonder in the garden, as shown in Figure 5.

4.1.2. Interactive Virtual Water Wall. The interactive virtual water wall is an interactive simulation water flow design work constructed by combining modern digital display technology with traditional pens and erasers. The shape and projection shape of the stroke can be sensed, and the water flow will change the direction and flow of the water flow to show the virtual reality phenomenon of the water flow. The interactive virtual water wall is a large interactive installation consisting of four projectors and four cameras. Four floodlights are used to project water flow onto an opaque white wall, and four cameras are used to perform projection and detection functions in the background. The interactive virtual water wall is shown in Figure 6.

4.2. Questionnaire for Expo Visitors. The structure of the questionnaire consists of single-choice questions and multiple-choice questions. The questionnaire design mainly starts from three aspects: visitors' understanding of interactive installation art, visitors' attitudes towards interactive installation art, and visitors' demand for interactive transposition art. We received 200 valid questionnaires.

(1) Age: 19 people under 18 years old, 118 people 18–28 years old, 25 people 28–40 years old, 15 people 40–60 years old, and 23 people over 60 years old. As given in Table 3, it shows that the Expo visitors are mainly young and middle-aged people.

(2) Occupation: the occupations surveyed include students, businessmen, retirees, farmers, and civil servants. Among them, the number of students is the largest, reaching 95, the number of businessmen is 23, the number of retirees is 54, and the number of farmers is the smallest, only 7 people, and the number of civil servants reached 21. The details are given in Table 4.

(3) Education level: the education level of visitors is the most with bachelor degree, 92 people, and junior college students second, 48 people, indicating that the interactive installation art and application of new technologies and new sciences of this World Expo have great influence on scientific and technological talents. The specific situation is shown in Figure 7.

(4) The survey and analysis of the overall satisfaction with the interactive installation art in the Expo: as given in Table 5, there are 5 people who are very satisfied, 114 people are satisfied, and 75 people think they are average, and finally, they feel dissatisfied. The number is 6 people.

(5) Location: in the surveyed population, as given in Table 6, we can conclude that the majority of people are in urban areas, with 122 people, and the population of rural areas is 66, while the number of people in rural areas is only 12.

4.3. Satisfaction Survey Analysis of Artificial Intelligence. We collected 200 questionnaires at the World Expo. We analyzed the security, computing speed, cost, and efficiency of artificial intelligence technology. From Figure 8, we can

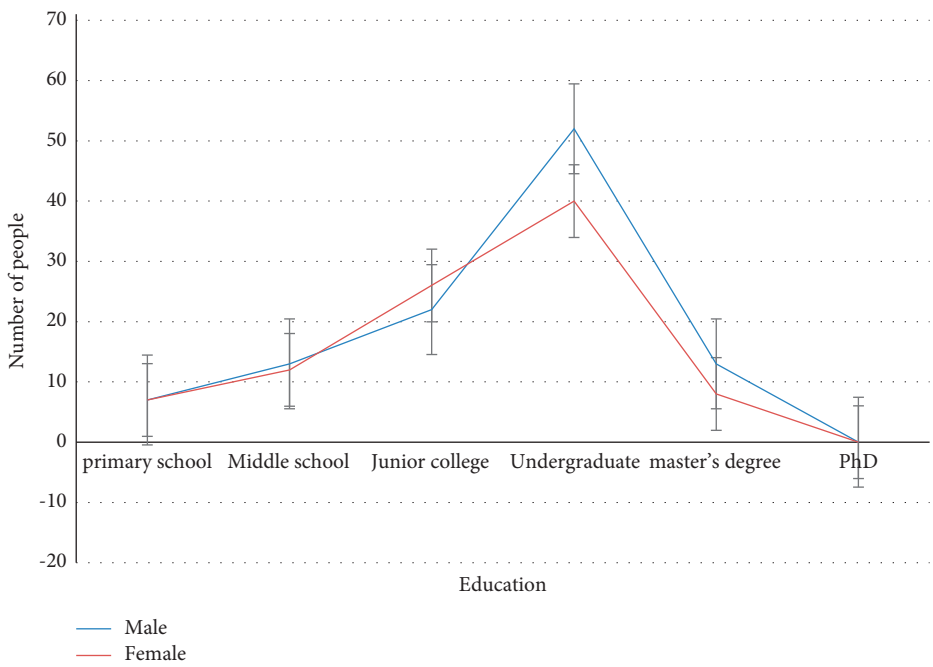

Figure 7: Analysis of the education level of visitors.

Table 3: Age survey results.

Age	Under 18	18–28 years old	28–40 years old	40–60 years old	Over 60 years old
Male	10	69	11	7	14
Female	9	49	14	8	9
Total people	19	118	25	15	23

Table 4: Number of surveyed persons in different occupations.

Profession	Students	Businessman	Retired people	Farmer	Civil servants
Total people	95	23	54	7	21

Table 5: Investigation and analysis on the satisfaction of interactive installation art.

Types	Very satisfied	Satisfaction	General	Dissatisfied
Male	2	55	45	4
Female	3	59	39	2
Total people	5	114	75	6

Table 6: Investigation status in the area.

Area	City	Township	Rural area
Male	62	33	5
Female	60	33	1
Total people	122	66	12

conclude that 89% of people think that the security of artificial intelligence technology is very high. Yes, 92% of people think that artificial intelligence technology has a fast computing speed, 86% of people think that artificial intelligence technology is low in cost, and 91% of people think that artificial intelligence technology is very efficient.

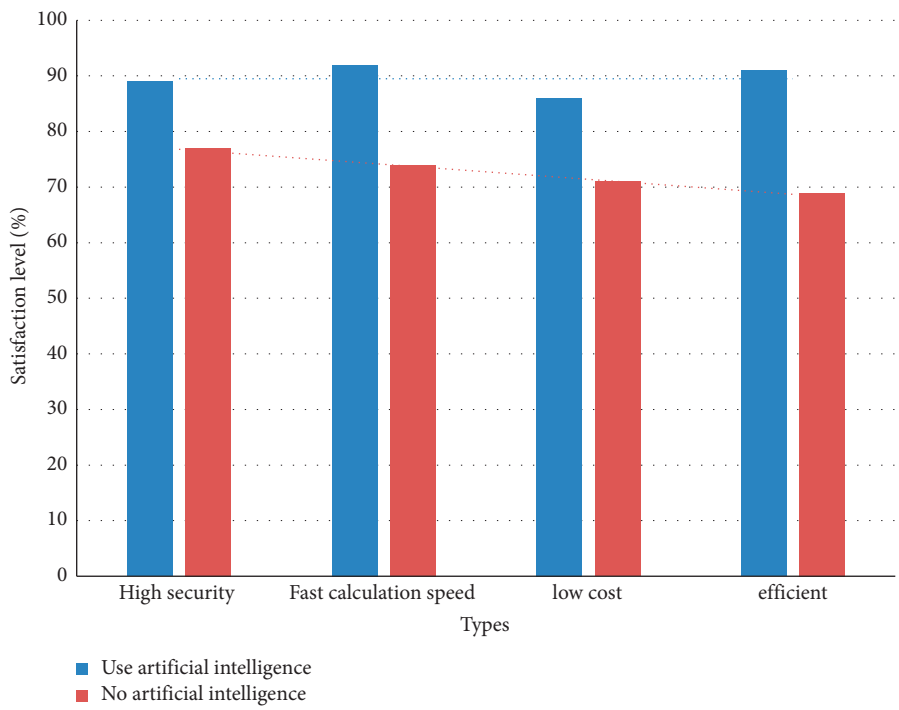

Figure 8: Investigation and analysis of artificial intelligence satisfaction.

5. Conclusion

Interactive installation art is a very complete and open design era. The development of technology, the development of digital art, and the needs of people's lives have created the development of interactive installation art. The integration of multiple disciplines is the inevitable development of art, and interactive installation art will naturally be recorded in the annals of history. From the various exhibitions at home and abroad in recent years, we can see that any kind of interactive installation is an interdisciplinary masterpiece, which cannot be solved by a single type of professional knowledge. Therefore, this requires us to conduct interdisciplinary research and polygon training on interactive installation art, while cultivating team spirit and multidisciplinary talent for collaboration. Only in this way can we make the work more attractive.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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