

## Feature Enhancement Strategy for Computer Three-Dimensional Bionic Images Based on Virtual Reality Technology

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**Keywords:** Virtual reality technology; computer; three-dimensional bionic image; feature enhancement; strategy

**Abstract:** At present, virtual reality technology has not been widely used in the field of feature enhancement of computer three-dimensional bionic images, Many technicians have not paid enough attention to the application of virtual reality technology. Therefore, the feature enhancement strategy for computer three-dimensional bionic images based on virtual reality technology is imminent. In view of the objective trend of the development of virtual reality technology, this paper introduces the overview of virtual reality technology by using analysis methods and contrast methods on a large number of references, and studies the feature enhancement strategy for 3D bionic images based on the overview of virtual reality technology, hoping to provide effective reference for the users of virtual reality technology. This article first introduces an overview of virtual reality technology. Secondly, the feature enhancement strategy for three-dimensional bionic images is studied from the image transformation enhancement strategy, the modeling ability enhancement strategy for three-dimensional bionic images, the reality enhancement strategy and the presence enhancement strategy for three-dimensional bionic images. Finally, in the form of concluding remarks, the important significance of using the feature enhancement strategy for computer three-dimensional bionic images for the popularization and promotion of virtual reality technology is summarized.

### 1. Introduction

In recent years, with the constant attention paid to virtual reality technology in China, higher requirements have been put forward on the feature enhancement of computer three-dimensional bionic images. Therefore, the topic of "the feature enhancement strategy for computer 3D bionic image based on virtual reality technology" has become the focus of social attention. In order to promote the rapid development of virtual reality technology, we must attach importance to the understanding of the overview of virtual reality technology on the one hand, on the other hand, we should pay attention to the feature enhancement of computer 3D bionic images based on virtual reality technology and make a greater contribution to the development of virtual reality technology.

### 2. An overview of virtual reality technology

As we all know, virtual reality technology is a technology that imitates real life. Also, virtual reality technology is one of the most widely used technologies in all simulation technologies. In addition, virtual reality technology presents man-computer graphics perfectly to users mainly through the perfect combination of graphics and multimedia technology. Therefore, research on virtual reality technology is a complex and challenging task. Meanwhile, virtual reality technology is also an advanced and cutting-edge simulation technology. In general, virtual reality technology mainly involves the following areas. The first is to simulate the external atmospheric pressure through virtual reality technology. The second is to simulate human perception through virtual reality technology[1]. The third is to simulate the ecological environment of nature through virtual reality technology. The fourth is to simulate sensing devices through virtual reality technology. Among them, the external atmospheric pressure simulated by virtual reality technology is mainly used to scientifically and reasonably control the change of the external atmospheric pressure, so as

to vividly display the three-dimensional stereoscopic image. The human perception simulated by virtual reality technology is used to simulate the five realistic sensory organs of human auditory, visual, olfactory, tactile and taste, so that the sensation of five senses of human beings can be accurately presented to the multiple-perception researchers. The natural ecological environment simulated by virtual reality technology is mainly used to predict the changes of the natural ecological environment in an all-round way, thereby improving the quality of the natural ecological environment[2]. The sensing devices simulated by virtual reality technology is mainly used to scientifically and reasonably apply sensing devices, thereby improving the working performance of the sensing devices and ensuring the normal, safe and stable operation of the sensing devices and displaying the computer's auditory, visual, olfactory, tactile and taste sensations vividly through the sensing devices.

In general, virtual reality technology usually has the following three characteristics: The first is the presence of virtual technology. The second is the interactivity of virtual technology. The third is the autonomy of virtual technology. The presence of virtual technology means that the user simulates the real presence of the environment by sensing the presence of the virtual technology[3], and maps the simulated real presence of the environment into the computer, and finally forms a realistic three-dimensional image to ensure a good experience of users. The interactivity of virtual technology refers that the user simulates the real interaction of the computer by sensing the interactivity of the virtual technology, and maps the simulated real interaction of the computer into the computer, ultimately forming a realistic three-dimensional image, thus ensuring a good experience of users. The autonomy of virtual technology means that user simulates the real sense of autonomy of the environment by perceiving the autonomy of the virtual technology, and map the real sense of autonomy of the simulated environment into the computer, and finally form a realistic three-dimensional image, thus guaranteeing the good experience of users.

### **3. Feature enhancement strategy for three-dimensional bionic images**

#### **3.1. The image transformation enhancement strategy**

The first strategy for feature enhancement of 3D bionic images is the image transformation enhancement strategy. As we all know, the image transformation enhancement strategy is of great significance for the realistic and vivid display of three-dimensional simulation images. The application steps of the image transformation enhancement strategy are as follows: First of all, the small window can be scientifically and rationally changed through the perfect combination of the presence of image transformation technology and the virtual reality technology, thus to realize the characteristics of window transformation efficiently. Besides, any window size can be changed. Secondly, the size of the image computer displays can be changed through the perfect combination of the stability characteristics of image transformation technology[4] and the virtual reality technology to display three-dimensional simulation stereo image to users, thereby improving the users' experience of authenticity. Finally, the realism of 3D simulation stereo image can be improved through the perfect combination of the security features of image transformation technology and the virtual reality technology, thus ensuring the security of 3D simulation stereo images. In general, the value of the image transformation enhancement strategy can be truly realized by strictly following the above three steps. In a word, the three-dimensional simulation stereo images can be vividly displayed by using the image transformation enhancement strategy.

#### **3.2. The modeling ability enhancement strategy for three-dimensional bionic images**

The second strategy for feature enhancement of 3D bionic images is the modeling ability enhancement strategy for three-dimensional bionic images. As we all know, the modeling ability enhancement strategy for three-dimensional bionic images has important significance for the realistic and vivid display of 3D simulation stereo images. The application steps of the modeling ability enhancement strategy for three-dimensional bionic images are as follows: Firstly, various types of images can be modeled using the stability characteristics of 3D bionic image modeling

technology, so that the value of 3D bionic image modeling technology can be fully utilized[5], which lays a theoretical foundation for the application of the modeling ability enhancement strategy for three-dimensional bionic images. Secondly, the perfect combination of the high-efficiency features of 3D bionic image modeling technology and the virtual reality technology has greatly improved the efficiency of modeling images. By scientifically and rationally designing the appearance of the image, the three-dimensional simulation stereo image is presented to the users, thereby improving the realistic experience of users. Finally, the appearance of the image can be stereotyped for a long time after the image is modeled by utilizing the persistence characteristics of the three-dimensional bionic image modeling technology combining with the virtual reality technology perfectly, avoiding the change of the appearance of the image due to the passage of time, thus improving the reality of the three-dimensional simulation stereo image. In addition, it also effectively guarantees the durability of the three-dimensional simulation stereo image. In general, the value of the modeling ability enhancement strategy for three-dimensional bionic images can be truly realized by strictly following the above three steps. In a word, the three-dimensional simulation stereoscopic image can be vividly displayed by using the modeling ability enhancement strategy for three-dimensional bionic images.

### **3.3. The reality enhancement strategy for three-dimensional bionic images.**

The third strategy for the feature enhancement of 3D bionic images is the reality enhancement strategy for three-dimensional bionic images. As we all know, the reality enhancement strategy for three-dimensional bionic images has important significance for the realistic and vivid display of 3D simulation stereo image. The application steps of the reality enhancement strategy for three-dimensional bionic images are as follows: Firstly, the sense of reality of various types of images can be simulated using the high-efficiency feature of the reality enhancement strategy for three-dimensional bionic images combining with virtual reality technology[6], so that the value of the reality enhancement strategy for three-dimensional bionic images can be fully played to lay a theoretical foundation for the application of the reality enhancement strategy for three-dimensional bionic images. Secondly, the use of simplicity features of the reality enhancement strategy for three-dimensional bionic images greatly simplifies the realistic simulation process for various types of images. Finally, the sense of reality of the image can be preserved for a long time after realistic enhancement simulation of the image by utilizing the persistence characteristics of the reality enhancement strategy for three-dimensional bionic images combining with the virtual reality technology perfectly, avoiding the pass of the reality of the image due to the passage of time, thus improving the reality of the three-dimensional simulation stereo image[7]. In general, the value of the reality enhancement strategy for three-dimensional bionic images can be truly realized by strictly following the above three steps. All in all, the three-dimensional simulation stereoscopic image can be vividly displayed by using the reality enhancement strategy for three-dimensional bionic images.

### **3.4. The presence enhancement strategy for three-dimensional bionic images**

The fourth strategy for feature enhancement of 3D bionic images is the presence enhancement strategy for three-dimensional bionic images. It is well known that the presence enhancement strategy for three-dimensional bionic images is of great significance for the realistic and vivid display of three-dimensional simulated stereo images[8]. The application steps of the presence enhancement strategy for three-dimensional bionic images are as follows: Firstly, the presence of various types of images is simulated using the advanced features of 3D bionic image technology combining with the virtual reality technology, so that the value of 3D bionic image technology can be fully displayed, laying a theoretical foundation for the application of the presence enhancement strategy for three-dimensional bionic images. Secondly, the efficiency of the presence simulation of the image can be greatly improved by using the flexibility characteristics of the three-dimensional bionic image technology combining with virtual reality technology. And it is also beneficial to display the three-dimensional simulation stereo image to the users, thereby improving the realistic experience of users. Finally, the presence of the image can be preserved for a long time after the

simulation of the presence of the image using the stability characteristics of the three-dimensional bionic image technology combining with the virtual reality technology. Usually, as long as the above three steps are strictly operated, the value of the presence enhancement strategy for three-dimensional bionic images can be truly played. In a word, the three-dimensional simulation stereoscopic image can be vividly displayed by using the presence enhancement strategy for three-dimensional bionic images.

#### **4. Conclusion**

In summary, with the continuous attention paid to virtual reality technology in China, the application of virtual reality technology in the field of feature enhancement of computer 3D bionic images has made gratifying application results. Nowadays, the feature enhancement work of computer 3D bionic images based on virtual reality technology has achieved satisfactory results. In addition, in order to promote the rapid development of virtual reality technology, more and more virtual reality technicians are actively involved in the research on "the feature enhancement strategy for three-dimensional bionic images based on virtual reality technology" and constantly improve their professionalism, laying a certain theoretical foundation for the future development of virtual reality technology.

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