The development and application research of computer artificial intelligence technology

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Abstract. In recent years, with the rapid development of modern science and technology in China, artificial intelligence technology is widely used in many fields. From the essential level analysis, artificial intelligence mainly through the simulation of human brain thinking to execute user commands. From the application requirements of modern society, the embodiment and development of intelligent functions in the field of artificial intelligence need to rely on the basic computer network and related technologies. The auxiliary and interworking applications of the two have a very key role in achieving better application effects of computer network technology. This paper mainly introduces artificial intelligence and computer technology, further analyzes and explores the specific application of artificial intelligence in computer technology, and expects to provide some useful reference for relevant personnel

Keywords: artificial intelligence; Computer technology; application.

1. Introduction

In recent decades, the research on computer intelligence, artificial intelligence and neural networks has entered a climax. It is a major challenge in the research of artificial intelligence to make computers realize the recognition ability of human hearing and vision. With the gradual combination of artificial intelligence technology with multimedia, database and other technologies, computers are becoming more and more efficient and intelligent. At present, the whole world pays great attention to artificial intelligence technology. In order to improve national strength and achieve the goal of rejuvenating the country through science and technology, China has increased investment and policy support in AI.

2. Application advantages of artificial intelligence in computer technology

2.1 Improve the network cooperation ability

Through artificial intelligence technology, the management mode can be divided into multiple levels, and reasonable management methods can be selected at different levels to fully meet the running needs of computers. Nowadays, the management mode is generally divided into three levels. The first level and the second level choose the management method of polling. Once there is a problem in one level, the other level can protect the computer operation. The third level mainly works according to the instructions of the first level and the second level. Through this method can effectively improve the coordination ability of network management, promote the normal communication of each link, but also can reflect the independence of different levels of management, and improve the quality of network management.

2.2 Save computing costs effectively

In electronic information technology application in the field of artificial intelligence, for a large amount of tedious data processing usually is calculated, using artificial way of manpower and material resources investment is very big, also can't guarantee the accuracy of the digital processing, and making money is bigger, when the application of electronic information technology to the field of artificial intelligence, can have fast operation mode and operation rate, from And effectively reduce the manpower, material resources and capital investment required by the traditional calculation

method, and the calculation is fast, accurate, high efficiency, and effectively save the cost of computing[1].

2.3 Improving the efficiency of network system operation and management

With the emergence of the high-speed development of computer network system, information data processing requirements in the difficulty and complexity have also been further improved. In this case, the information processing should not only pay attention to the accuracy of the content and effect of specific aim, the content itself will in a constantly changing system, when the artificial intelligence technology into the conventional computer information system, dynamic changes and the effect will be further promoted to realize the dynamic management. For the management of network platform and system operation, artificial intelligence technology makes the overall operation management work quality and efficiency have been improved synchronously.

3. The problems existing in computer network technology

In the process of rapid development of practice, the use of computer network is very wide, its application efficiency is also very outstanding. But there is no denying that the computer network technology in the process of development and application, there are still more prominent problems and deficiencies, it is urgent to use scientific optimization measures, in order to truly consolidate the application efficiency of computer network. The problems existing in computer network technology are concentrated in the following aspects:

3.1 There are viruses in computer networks

In the practice of computer network application, because of the characteristics of the openness of the computer network itself, this also provides the possibility of virus breeding. When the computer network virus, if not eliminated in time, is bound to have a serious impact on the data information in the computer network, but also make the computer network to slow down, and even may make the computer network system paralysis, collapse and so on[2].

3.2 There are loopholes and deficiencies in network protocols

In the process of computer network operation, network protocol is a very important material premise. To promote the operation and development of computer network scientifically and efficiently, and enhance the overall use effect of computer network, we should pay attention to the construction of scientific network protocol, and effectively prevent the problems and deficiencies in computer network. Network protocol has the characteristics of openness, universality, and so on, because of this, the computer network protocol in the process of playing a role, there may be a relatively large vulnerabilities and deficiencies, which will undoubtedly increase the computer network operation risks, and even may cause the computer network paralysis.

3.3 There are obvious loopholes in the application system

In the process of efficient and scientific operation of computer network, application system always plays an important role. In order to enhance the effectiveness of the application system and optimize the performance of the application system, we should pay attention to grasp the possible loopholes and defects in the application system thoroughly and comprehensively. In fact, the vulnerability problem of application system is more common and common. When the application system vulnerability is exploited by illegal personnel, it is easy to implant viruses in the application system, and even may use this vulnerability to steal the key information data of the user, which is not conducive to the efficient and stable operation of the computer network.

4. The application of artificial intelligence in computer technology

4.1 The application of artificial intelligence in computer aided management

At present, computer aided management has been widely used in modern management. The use of artificial intelligence technology in computer management is a kind of auxiliary management mode, the basic theory of cognitive science, can through the knowledge form of management theory, management thought is optimized, by means of learning in the form of expression and formal analysis of the knowledge system, promote the problem-solving ideas and solutions to the ground. The foundation of the artificial intelligence processing system is the knowledge base. Since the birth of artificial intelligence, the theory and technology are increasingly mature, the application field is also expanding. For example, intelligent Internet of things system, application of driverless cars, intelligent security system, smart home system, smart medical system, smart education system, smart finance, smart agriculture, etc. Intelligence is ubiquitous in our lives. Artificial intelligence is the future direction of the world, freeing people from manual labor in traditional industries[3].

4.2 Improving the stability of computer networks

As far as the performance optimization of our computer is concerned, it generally has information interaction and information circulation, and the difficulty coefficient of data processing is relatively high, the way is complex, and the flexibility is low. Due to the limitation of this problem, confusion and delay of data processing may occur in some networks. In this context, some experts and technicians have proposed to solve this problem through the application of artificial intelligence, and the possibility of this idea has been verified in practice. Specifically, with the assistance of artificial intelligence, complex data information can be quickly organized and summarized, laying a solid foundation for the analysis and processing of data information, ensuring the quality and security of information network data, and playing an important role in ensuring the safe and stable operation of computer information network.

4.3 Improve the industrial chain of technology and improve economic benefits

Under the background of the new era, the development model of industrial chain can concentrate advantageous resources and promote the development of regional economy. In the future development of the application of artificial intelligence in computer network technology, it is necessary to further improve the technical industrial chain, so that artificial intelligence technology can be applied to more links in the industrial chain, so as to improve the economic benefits of artificial intelligence technology application. In the development process of all walks of life, the development of the industrial chain is an inevitable trend, and only the increasingly mature industrial chain, can really effectively promote the development of the industry. Application of computer in the industrial development of the Internet technology, synchronous application is relatively mature artificial intelligence technology, artificial intelligence technology as intelligence analysis and processing instructions and important tool for processing the data information gathering, stimulates the higher-order cognitive intelligence really effective instead of people to work, technical personnel can work in the management level, the more technical monitoring[4].

4.4 Intrusion detection technology

The computer network technology in the era of big data not only brings convenience to the data processing work, but also brings network security problems like a double-edged sword. If the computer is only passively protected, the probability of being threatened by network security will be greatly increased. Artificial intelligence technology can be used for intrusion detection to improve network anti-interference ability and ensure network security. Through the analysis and inspection of logs, network behaviors and data, when malicious attacks are detected, an alert can be issued to protect the security and integrity of network resources and improve network security. In recent years, all sectors of the society focus on the open network information security issues launched a hot debate,

this problem has affected the development of the computer industry. In fact, the intrusion of viruses and network hackers will not only lead to the disclosure of data information, but also bring extremely serious economic losses and bad social impact. In order to avoid this vicious event, it is necessary to develop the security protection function of the mobile data of network user information and build a reliable network security management system. Especially for the online payment network password is maliciously leaked, citizens' personal information is leaked, related technical personnel should combine artificial intelligence to develop network intrusion data detection security technology. Objectively speaking, the advantage of network intrusion data detection security technology is that it can complete real-time data detection and processing work, detect and troubleshoot abnormal information, find network security problems and give timely solutions.

4.5 The improvement of system management evaluation level

In the improvement of the system management evaluation level, we should do a good job of scientific evaluation of information according to the application characteristics of computer technology, judge the problems existing in the application of computer, timely repair system vulnerabilities, take a more scientific way to do a good job of comprehensive evaluation, and find specific measures to solve the problem. Under the background of the artificial intelligence technology constantly improve, to establish the evaluation of computer network management mode, the computer network can be according to the field of intelligent information processing capability, data analysis, and the problems in the search system, with intelligent reasoning and judgement, this paper analyzes the reason of the problem, to take a more scientific solutions, can effectively improve the management evaluation system of self optimization Force. It can quickly find the shortcomings existing in the system operation, fully highlighting the superiority of artificial intelligence technology.

4.6 Applied to site inspection safety

Data storage All the above functions are real-time processing of the content in the camera, which requires someone to work in the monitoring room all the time. But in reality, there is not always someone on duty, and it is impossible for the monitoring room staff to focus on the monitor display screen all the time. Therefore, it is also extremely important to trace the data of historical monitoring. To save disk resources as much as possible, only people without hard hats can be recorded, and pictures can be recorded instead of video. Since video processes frames, if every frame is recorded, the disk footprint will rise dramatically and a lot of redundant data will be generated. In this paper, the feature point based target tracking method is used to determine whether the target detected before and after is the same person, but this will occupy more system computing resources. Therefore, a simpler judgment method is needed. To simulate the real situation, if there is a person without helmet in the middle of the camera, then this person will also exist in the next frame of the video. Therefore, the number of people without helmet is used to design the algorithm. If there is a person without helmet in the video, the number will be increased by 1, and then the number will be increased or decreased to determine whether to take a screenshot to save the current picture.

5. Conclusion

Artificial intelligence technology is as close to the operation of human intelligence as possible, so it has irreplaceable significant advantages for the transformation and upgrading of traditional industries. However, compared with the rapid breakthrough of specialized artificial intelligence technology, the development of general artificial intelligence technology is only a relatively preliminary stage of exploration. Compared with the rapid progress of professional and practical means or skills, there are still very significant differences in the understanding and cognition of artificial intelligence technology. This indicates that the society as a whole still has a relatively shallow understanding of artificial intelligence technology, and the environment for its technology application is still immature. Therefore, the application of artificial intelligence technology in the

development of computer technology can not only focus on technology, but also need to strengthen the publicity and popularization of grassroots efforts. Only when more and more ordinary people comprehensively improve their cognitive level of artificial intelligence technology, can the application of artificial intelligence technology in the development of computer technology have a better business environment and a relatively solid audience base. This is not only a fundamental measure for the application of artificial intelligence technology in the development of computer technology in the new era, but also a top priority to optimize the technology application architecture and promote the maximization of the application value of artificial intelligence technology under the new situation.

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