

Application of artificial intelligence in computer network technology

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Abstract: With the continuous development of science and technology in China, artificial intelligence has played an important role in many industries. By applying artificial intelligence to computer network technology, computer network technology can provide greater help for people's life and work, enrich the content of computer network technology, and improve the efficiency of people's life and work. In the era of big data, the computer system gradually has some defects. The introduction of artificial intelligence technology can greatly improve the efficiency and quality of computer data processing. In view of this, this paper will analyze the application of artificial intelligence in computer network technology, and put forward some strategies for your reference.

Key words: Artificial intelligence; Computer network technology; Application

1. Overview and analysis of artificial intelligence

Artificial intelligence system is very different from the traditional intelligent system. It is a new type of technology and has made a great breakthrough in the previous technology. AI usually means that after the system answers a command, it accumulates the target data through simulation, so as to automatically complete the corresponding work in the future. Through artificial intelligence technology, it can carry out comprehensive processing of some non detailed data, and it can also carry out dynamic control of the global system in combination with the overall and local working state. In addition, AI can process some unrelated and real-time updated data, and comprehensively collect and sort out the source of these data. At the same time, AI can provide users with some real-time information, such as information related to data processing and behavior development. In addition, AI has strong real-time processing ability, which is also an important function of AI. Combined with various data and real-time information, AI can integrate various resources more efficiently, so as to ensure that users can obtain more diversified information, and also enable these information resources to be transmitted among different subjects, so as to realize more efficient sharing of information.

In the work of computer network information management in China, the introduction of artificial intelligence technology can carry out more reasonable and scientific management of all kinds of network data. The application of artificial intelligence in computer networks can greatly improve the security of China's computer communication networks and enhance the speed and quality of processing various types of information. People can also use the memory storage function of artificial intelligence to store some data on the network, so as to create a larger, scientific and systematic network information resource base. This resource base can be used as the basis for AI to work and help people sort, summarize and analyze network data more efficiently. The application of artificial intelligence in computer network technology can greatly improve the efficiency of network information processing, and further improve the level of network information management and network information processing.

2. Application value of artificial intelligence in computer network technology

2.1 Enhance the processing ability of fuzzy data and information

With the development of the times, a large number of small-scale data processing work is gradually increasing, and there will be a lot of fuzzy data information in the application and development of computer network technology, which will virtually increase the difficulty of people processing this kind of information, which requires us to introduce artificial intelligence to help people think and analyze the data. By introducing artificial intelligence, the computer can process all kinds of fuzzy data more logically. This is also a new data processing method, which can be realized without too many data models. By applying artificial intelligence to computer network technology, it can greatly promote the level of fuzzy information processing and the ability of information processing cooperation of computer network technology.

2.2 Improve the application ability of nonlinear network data and deep learning

In the current computer network technology, it is necessary to carry out the collaborative processing of a lot of data, which gives birth to a lot of network data and machines to process new information. In the application of computer network technology, a lot of data information will be generated. Although the information has low basic network knowledge and level, it contains a very large amount of data and contains high application value, which requires us to introduce artificial intelligence to explore these data in a deeper level. In the process of data mining, AI will gradually learn to carry out logical reasoning and semantic analysis on these data, which is of great significance to improve the efficiency and quality of data mining. Artificial intelligence technology also includes the nonlinear data processing of computers, which is an artificial intelligence produced by imitation.

2.3 Faster operation speed and lower cost

With the development of the times, digital computer technology and modern network communication technology have been further developed, which provides many conveniences for people's life and work. However, with the increasing amount of data, computer network technology needs to face a large amount of information processing in practical application, which will have a great impact on its operation

efficiency and operation quality. The application of artificial intelligence to computer network technology can significantly improve the running speed of computer network, reduce the time spent in calculation, reduce the consumption of various resources and energy, and play an important role in improving the time cost of computer operation.

3. Problems in computer network technology

3.1 Lack of network security monitoring

In fact, many computer network software will be infected with viruses, which will have a great impact on computer network security. When people operate computers, computer network viruses will infect computers through hard disks, software and so on, thus threatening the data security of computers. Generally speaking, computer viruses have two characteristics: replication and infectivity. Due to the lack of network security monitoring technology, the virus monitoring and network control functions of many computers have been greatly limited, which will lead to virus intrusion into the computer network and affect the actual work efficiency of the computer network. In the long run, the computer will be stuck and run slowly. Some computer viruses will even destroy the internal files of the computer, resulting in the failure of the computer to start normally and very serious system failures.

3.2 Insufficient intelligence

With the continuous development of artificial intelligence, people have higher and higher requirements for computer network technology. However, because few people can reasonably apply artificial intelligence to computer network technology before, it is easy to have various problems, which makes it difficult for computer network to meet people's use needs. Therefore, we should find the development direction of computer network, and reasonably apply artificial intelligence to computer network, which can effectively improve the intelligent level of computer network, make it better meet the needs of users, and improve the actual use effect of computer network.

3.3 Difficult to meet personalized needs

Under the background of the continuous development of information technology, the form of computer network technology has been greatly developed. However, people's expectations of computer network are also rising. Everyone has their own use needs, which leads to the difficulty of computer network technology to meet people's personalized development needs. At the application level, due to the lack of artificial intelligence support, it is difficult for computer networks to efficiently process massive data and provide users with more personalized services.

4. Application of artificial intelligence in computer network technology

4.1 Application of network security management

If we want to improve the application level of computer network technology, we must have a more intelligent computer program as the support, so that we can more efficiently manage, observe and process the data in the computer. Before that, we should formulate a more reasonable rule to make the behavior of the computer system more reasonable. In the face of the behavior of invading the system, we can respond in time, so that we can further improve the effect of network security management with the help of artificial intelligence.

In addition, if we want to improve the level of computer network security management, we should set up a firewall, and further optimize and innovate the firewall technology by introducing artificial intelligence. Generally speaking, firewall technology will have a great impact on computer network security. If it can ensure the reasonable application of firewall technology, it can effectively intercept viruses, so as to better protect the security of computer network. The combination of artificial intelligence can make the computer network better deal with problems. In the application of computer network technology, firewall technology is one of the most important forms. The combination of it and artificial intelligence can more effectively carry out the analysis and processing of computer viruses, and avoid the intrusion of viruses into the computer system.

In the computer network technology, artificial immune technology is one of the key technical content. Through the reasonable application of artificial intelligence to artificial immune technology, it can better help the computer system resist foreign invasion, and can also greatly improve the effect of computer virus monitoring, and help people do a good job in the treatment of computer virus. By combining artificial intelligence and computer immune technology, we can gradually create a more perfect computer immune system to help computers better identify and control computer viruses.

The reasonable application of artificial intelligence to computer network technology can help computers to carry out a higher level of data mining work. With the help of AI, the computer network can better find the abnormal conditions in the current computer software. Combined with the learning and memory ability of AI, it can solve all kinds of abnormal problems more pertinently and ensure the smooth operation of the computer system.

4.2 Application in data acquisition and analysis

In computer network technology, data collection and analysis is one of the very important contents. By applying artificial intelligence to data acquisition and analysis, the actual work efficiency of computer network technology can be greatly improved. In the practical work of computer network technology, we should first collect and analyze all kinds of data information. Through the analysis of massive data, we can effectively extract valuable information, which plays an important role in promoting the development of computer network technology. In the current era, the data on the network has a very large amount and diversity. Under the influence of this feature, if people still use traditional technical means when processing network information data, it will greatly increase the pressure of data collection and analysis of workers. Therefore, we can try to apply artificial intelligence to data acquisition and data analysis, which can effectively reduce the difficulty

of workers. At the same time, under the influence of artificial intelligence, we can carry out more effective classification and screening of computer data, so as to extract valuable information content more efficiently, which has important practical significance for data collection, analysis and processing. From here we can see that the application of artificial intelligence to computer network technology can greatly improve the actual efficiency of work, and also has a very strong role in promoting the accuracy of work.

4.3 Application in intelligent problem solving

It is important to manage and evaluate the problems in computer network technology combined with artificial intelligence. Combined with artificial intelligence technology, it can optimize the algorithm of the corresponding problems in the computer network according to the existing conditions, so as to realize the intelligent problem solving. Combined with the corresponding reasoning technology, it can carry out intelligent reasoning on the problems in the system and the root causes of the problems according to the specified conditions, so as to provide algorithms and key points for solving the corresponding problems. By applying artificial intelligence to computer networks, we can further optimize the search technology, choose more flexible ways to solve problems according to the differences of different problems, and improve the efficiency of the search function invisibly, so as to help people better realize the call of various types of data. In addition, with the help of artificial intelligence, computer network technology can better solve different problems, which can greatly improve the utilization efficiency of computer network resources and the quality of problem solving.

Summary

To sum up, if we want to improve the application effect of artificial intelligence in computer network technology, we can apply it from the aspect of network security management; Application in data acquisition and analysis; This paper analyzes the application of intelligent problem solving in order to promote the application quality of artificial intelligence in computer network technology to a new height.

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