The Application of Artificial Intelligence in Computer Web Technology in the Era of Massive Data

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Abstract. With the rapid progress and continuous innovation of web technology and information technology, our society has entered the era of massive data. The application of computer web technology in various fields has raised people's living standard to a new level. In recent years, the introduction of artificial intelligence makes the development of computer technology faster. At the same time, it also brings great convenience to human beings. Researchers found that the comprehensive application of artificial intelligence and computer web technology can well deal with the problems of computer web technology. In this paper, artificial intelligence in the background of the era is the research object. This paper discusses its application in the web technology of computer, and finally gets the conclusion.

Keywords: Artificial Intelligence, Computer, Web Technology

1. Introduction

Artificial intelligence is the product of the combination of computer technology, web technology and communication technology. In the current era of massive data, the application of artificial intelligence has a very amazing ability of data processing[1]. The application of computer network and artificial intelligence can not only solve the problem of insufficient information processing ability of electronic equipment, but also actively put forward corresponding countermeasures. It can make the computer in the safe operation of the case of rapid information processing.

At present, artificial intelligence has been widely used in people's work and life. It is applied to all sectors of our society[2]. The innovation of computer technology is based on the application of artificial intelligence. Generally speaking, the production of artificial intelligence technology enriches people's life. It also improves the efficiency of people's work. Its use makes a lot of new technology obtain very remarkable development.
2. Definition and important characteristics of artificial intelligence computer

2.1. Definition

With the reform and innovation of our society, the concept of artificial intelligence is gradually put forward by the scientific community. In short, artificial intelligence refers to the technology which is developed by simulating human thinking and behavior through the virtual technology of computer. This technology has rich content and strong challenge. Artificial intelligence is closely related to computer science, linguistics and psychology.

2.2. Main characteristics

The rapid progress of science and technology leads the rapid development of computers. The characteristics of artificial intelligence tend to be diversified. Its main features include the following aspects.

2.2.1. Identifying and solving problems. Artificial intelligence can fundamentally solve problems that cannot be determined. When it comes to computing problems of computers that can't get clear information, artificial intelligence can deal with difficult problems very well. It can achieve the mastery of unclear information. In addition, electronic equipment through the strict management of artificial intelligence can make the network get efficient protection.

2.2.2. Strong learning ability. Artificial intelligence has the ability to learn and accommodate new knowledge. The computer can get high-level data through logical calculation and reasoning of the data with lower difficulty. This can shorten the time of network search. Therefore, it can strengthen the practicability of network management and accelerate the speed of network operation.

3. Problems of computer web technology at present

Web technology has brought great convenience to human production and life. However, there are some problems in computer security. The two key functions of network management system are network control and network monitoring. With the continuous increase of Internet users, the security of user information should also be protected by network security management. However, the network crime still appears frequently.

In order to solve this problem, we should strengthen the sensitivity and intelligence of the network control system. As a new management mode, artificial intelligence can significantly ensure the security of Internet users in network information. Technicians can simulate the process of human brain processing information through artificial intelligence technology. This way can ensure the intelligence and automation of computer network system. This mode can ensure the efficiency and quality of network management.

4. The application of artificial intelligence in computer web technology in the era of massive data

4.1. Intelligent firewall technology

The advantage of AI is that it can help people manage the network security of computer effectively and
conveniently. Artificial intelligence has good effect in intelligent firewall, intelligent anti-spam and intrusion detection technology. The security efficiency of intelligent firewall is better than that of traditional firewall (see Table 1). It can effectively deal with the problem of denial of service. The intelligent identification technology used by the intelligent firewall can better distinguish and process the corresponding data information.

**Table 1. Types and main defects of firewalls**

| Firewall structure          | Major defects                      |
|----------------------------|------------------------------------|
| Dual host system           | Unable to protect against virus    |
| Shielding host system      | Unable to defend against internal attacks |
| Shielding subnet system    | Performance restriction            |

4.2. **Intrusion detection technology**

In the network security of computer, the technology of intrusion detection is a key link. Intrusion detection technology can improve the integrity, security and confidentiality of data resources of electronic equipment. It can generate reports through data collection, data selection, data classification and information processing (see Table 2). This report can reflect the security problems of electronic equipment to users as soon as possible. For the intrusion detection of artificial neural network system, artificial intelligence has a good effect.

**Table 2. Types and main functions of IDS**

| Types of IDS     | Major function               |
|------------------|-----------------------------|
| Host-based IDS   | Protection function server   |
| Network-Based IDS| Monitoring network path      |

4.3. **Agent management technology**

Agent management technology of artificial intelligence is also called agent technology of artificial intelligence.

It is based on a kind of entity software and knowledge base to analyze and process the corresponding information technology[5]. Agent management technology can provide users with more intelligent and human services. It can help users filter bad information and quickly find the information they need. It is widely used in our daily life and study.

5. **The necessity of using artificial intelligence in computer web technology**

In the process of using network management system, network monitoring technology and network control technology are gradually valued by people. In the early days of computer generation, due to the
lack of continuity and regularity of network data, it is difficult for us to judge the authenticity of network data by ourselves[6]. Therefore, we must realize the intelligence of web technology.

In recent years, with the continuous expansion of computer applications, people put forward higher standards in network management. The use of artificial intelligence technology can effectively judge the network fault and effectively eliminate the information security problem. Generally speaking, computer technology can't be separated from the effective role of artificial intelligence technology in the development. Artificial intelligence technology is very important in the improvement and processing of computer data. Therefore, it is of great significance to introduce artificial intelligence technology into computer network management.

6. Conclusion

The application of artificial intelligence technology not only plays an important role in enterprise management, but also is widely used in agriculture, industry and other fields. It can be said that the development of computer technology determines the development prospect of artificial intelligence technology. The development of artificial intelligence technology also promotes the update of computer web technology. Therefore, the integration of artificial intelligence and computer web technology can better meet people's needs for modern science and technology.

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