# Analysis on the Application of Artificial Intelligence in Computer Network Technology in the Age of Big Data

### **Ding Xiaoyan**

School of Medical Technology, Jiangsu Vocational College of Medicine, Jiangsu, Yancheng, 224005, China

**Keywords:** big data era; artificial intelligence; computer network technology

**Abstract:** Since the industrial revolution, the world's science and technology and economic development have become faster and faster, and information technology has also developed. Computer network technology and artificial intelligence technology have also emerged. In contemporary life, people use computer networks and artificial intelligence. Technology is more convenient and faster in the process of processing information, which not only ensures the scientificity and accuracy of the data itself, but also ensures the security of information processing. This is the change that technology brings to our lives, but it will bring us more challenges, and everything is two-sided. As science and technology help us process information faster, how to better apply information technology is what we need to learn and master.

#### 1. Introduction

The source of artificial intelligence technology is the combination of computer network technology and information technology. In the current era of big data, the application of artificial intelligence technology can help people develop computing processing capabilities faster, more accurately, develop economy, solve problems, and It is very meaningful for the development of human beings to give the most suitable solutions for different problems. However, how to apply artificial intelligence technology better in the current era is a problem we have been discussing. Only by effectively solving this problem can we develop artificial intelligence technology to meet people's needs and ensure the security of computer networks and information. Accelerate the processing of data information. The main purpose of this paper is to analyze the application of artificial intelligence in computer network technology in the era of big data.

# 2. Application of Artificial Intelligence Technology in Computer Network in Big Data Era

The use of intelligent firewall technology in the current application of computer network technology can help us process information content more securely. For example, in actual applications, intelligent firewall technology can prevent spam from intruding. The current mail is still an important way for people to handle work. For this reason, many illegal people will use the convenience of mail to invade computers. However, the intelligent firewall technology using intelligent firewall technology can effectively solve this problem. The intelligent firewall technology can effectively check the received mail, prevent spam from intruding into the computer, and facilitate the people to manage the mail in the daily work process. In the process of applying intelligent firewall technology, there are many advantages. For example, it can directly reject many abnormal services. At the same time, intelligent firewall technology is better for information management than traditional firewalls. Strengthen smart firewall technology for intelligence. The application of firewall technology is more convenient for computer network security management.

The network is one of the most dependable sciences and technology. In the real life, the application network has become the daily life of people. How to manage the network to ensure that people do not suddenly jump out of the interface of spam in the process of applying the network is very important. One problem is that the use of intelligent firewall technology in the development of current computer network technology can help it to better manage, and the combination of intelligent firewall technology and electronic information technology as a support for y is very

DOI: 10.25236/iccse.18.084

important for helping network management. Through the application of intelligent firewall technology, a certain knowledge base can be embedded in the user's computer system, and the intelligent firewall technology can be used to effectively combine the knowledge base and the problem solving technology to ensure the application of the intelligent firewall technology. The information management system can be made more comprehensive, and the security of the network application that can be guaranteed in the process of the problem can be comprehensively managed. In the current situation of China's network, whether it is from its own changes, or from the perspective of liquidity, its own development will be subject to certain constraints. In the process of network management and system assessment, due to lack of intelligence, management will result in management. Problems arise, and the use of intelligent firewall technology can quickly solve these problems, prevent users from appearing in the process of applying the network, and use intelligent firewall technology to solve this problem. And because the intelligent firewall technology itself has a high level, the application of the intelligent firewall technology can solve the problem more quickly and effectively in the face of a difficult problem.

Network security is one of the most important problems in the process of applying information technology in China. How to ensure that users' application information is not stolen in the process of applying the network is very important. This is the security management problem of the network. The use of intelligent firewall technology can ensure that users can establish more secure protection in the process of using the network. Because the intelligent firewall technology can filter information by different measures such as calculation of data and probability, it can ensure intelligent matching. The process of checking network information effectively, and can make the information of big data segments more simple and convenient. This method can also improve the application of intelligent firewall technology to the management of computer network security, efficiently control data information, reduce the harm caused by hackers or unknown viruses through the network, and thus the information security and the network itself, and can also be effective. Avoid harmful information that is transmitted through the network. The use of intelligent firewall technology can also effectively block viruses from invading computers. With the development of technology, hacker virus technology is also developing. Many hackers can crack the network itself and let viruses invade computers. The use of intelligent firewall technology is different. The use of intelligent firewall technology can have more layers of protection even if the firewall is broken, which is of great significance for current network security management.

#### 3. Things to pay attention to when applying artificial intelligence technology

In contemporary life, in order to better develop artificial intelligence technology, it is necessary to continuously integrate the current form and people's views on artificial intelligence technology, to achieve profit and avoid disadvantages, and to require scientific and reasonable artificial intelligence. Technology is applied to people's daily production, work and life. Only in this way can this promote the development of artificial intelligence technology in the era of big data. For this reason, it is necessary to apply artificial intelligence technology in the process of developing technology. The following points:

At present, artificial intelligence technology is developing at a very fast speed, and artificial intelligence technology helps people to live faster and more comfortable in daily life and work. However, artificial intelligence technology itself is still different from human beings, and there is no way to replace it in real life. Human thoughts and human existence cannot rely too much on artificial intelligence technology, and can't think that artificial intelligence technology can judge interpersonal interactions between people. In the process of interpersonal communication, there are often many artificial intelligence techniques that cannot be explained. And judging the situation, artificial intelligence technology has no way to judge the emotion between people and people in daily life. Artificial intelligence technology is a combination of computer network and information technology. It is not a real person. They can only replace people. To solve problems, not to replace people and to analyze feelings. If you rely too much on artificial intelligence technology in daily life, it will lead to the gradual weakening of human social ability, and there is no way to change the

existence of human beings in today's society. People who are too fast in technology development Reduce the emotional interaction between the current in order to ensure that people can properly and actively participates in normal human communication, it is necessary to reduce people's dependence on artificial intelligence technology.

The era of big data has brought great convenience to the people in our work and life, but it has brought new hidden dangers while bringing convenience. The application of computer network technology is in the process of processing data and information. It is very convenient, but with the advancement of technology, information will be lost in the process of applying technology, which will cause the user's information to be leaked. Even the information will be disclosed to the Internet. A large loss of property directly affects the normal life of the user. To this end, in the process of applying artificial intelligence technology, it is necessary to protect the information security of the user itself, and continuously utilize artificial intelligence technology to strengthen the maintenance of data security in the network, so as to ensure that the personal information of the user is not leaked.

At present, although artificial intelligence technology can help people to work and produce better in daily life, if people are over-reliant on artificial intelligence technology, people will lose control of their emotions and feelings in their daily work, and reduce it. People in their daily lives are motivated to solve problems. They think that everything can rely on artificial intelligence technology. This is very unfavorable for human life itself. It will make people's feelings weak and change. Indifference is also very unfavorable for building a socialist harmonious society. Therefore, in the process of actual work, it is necessary to apply artificial intelligence technology more rationally, in order to more actively exert the role of artificial intelligence technology itself.

# 4. Analysis of the Advantages of Artificial Intelligence Technology in Computer Network Technology in the Age of Big Data

The first problem we face in the era of big data is that there is more data to be processed than in the past. How to deal with this data better and faster and accurately is the problem we need to solve now, in the big data itself. The data type is relatively large, and its own data size is also relatively large, with a total capacity of about 10 TB or more. The use of artificial intelligence technology to process information can ensure that the authenticity and security of big data information is continuously increased and improved, and the data information is updated more quickly, and the security of the society in the process of running the data system is improved. Feasibility to ensure that data is not affected during storage. The current market is developing rapidly. If enterprises want to develop and improve their own competitiveness in the market, they must ensure that they have sufficient knowledge of the information. If the speed of information processing is too slow, then there will be no way to satisfy The current market demand is only to continuously update the information processing system, and the artificial intelligence technology can be used to better process the information. Artificial intelligence technology mainly combines contemporary computer technology with information technology, can simulate human thinking ways to apply, help computer programs to better process the obtained data information, and timely discover the current computer system in the application process. In the data problems existing in the process, the most scientific and reasonable measures are taken to solve the problems that arise.

Improve the stability of the network

In the process of applying computer network technology, the most important point is that computer network can be used to obtain a large amount of information in a short period of time. This information is very important for the development of the market and the development of the enterprise. Stability is significant for the user. In order to ensure the dynamic problem of data information in the process of information acquisition, artificial intelligence technology is the best and most convenient technology. In the application process of computer network system, artificial intelligence technology can improve the stability of computer system. Sexuality is more stable and secure in the process of information processing, ensuring that users do not suddenly collapse during the use of the network, and that artificial intelligence technology can also be used to reasonably

obtain inaccurate information and data. Analysis and processing to improve the quality and stability of the entire network operation.

Unknown information can often help technology to develop better. If you want to better develop technology in today's rapid development of information, you need to find the defects in the technology we are using now, especially in the application of computer networks. In the process, if there is no vulnerability found, there is no way to fix it. In the computer network, artificial intelligence technology can be used to discover the fuzzy logic, and process it to discover the information we have unknown, and use this unknown information to better promote the progress of the network. Supervising and managing the network can also better promote the development of computers, improve the network management mechanism in China, accelerate the development of artificial intelligence technology in China, and improve the development level of artificial intelligence technology.

The use of artificial intelligence technology can help information to be deduced, help to obtain another information from one information, that is, extract from the most basic data, and apply the extracted information to the computer network. There are problems, rapid use of artificial intelligence technology to solve, and also can establish a data processing system to help improve the reasoning ability of the computer network.

#### 5. Conclusion

According to the above summary, the current era is the era of big data. This is unchangeable. We must adapt to him, and develop our own technology and production according to the characteristics of the times, and use the good times to bring us life. Convenience to change the difficulties we faced in the past work, and constantly develop artificial intelligence technology, choose the most appropriate artificial intelligence technology development model, let artificial intelligence technology really play out in the current big data era Its own role is to better facilitate people's daily work, travel, life and so on, so that artificial intelligence technology can adapt to the continuous development of the current society, and truly serve the life and work of human beings.

## Acknowledgment

Fund Status: This article is the phased result of the "Study and Practice of the Stereoscopic Teaching Model under the SPOC Environment" (No. Y201814) of the Jiangsu Medical Vocational College.

#### References

- [1] Liu Sizhen. The development of information application of artificial intelligence in computer network technology in the era of big data [J/OL]. China's strategic emerging industry [2018-10-28].
- [2] Gao Ta, Tian Yuxin. Research on Artificial Intelligence Application in Big Data Era in Computer Network Technology [J]. SME Management and Technology (first issue), 2018 (06): 137-138.