Research on the application of artificial intelligence under big data under communication network technology

Zening Chen*

Shenyang Fire Science and Technology Research Institute of Mem, Shenyang, China

Abstract. Artificial intelligence is the latest achievement of the development of science and technology. Its development depends on the maturity of related cloud technology and big data technology. This article analysis the application of big data technology in artificial intelligence for reference by relevant professionals.

Keywords: Big Data Artificial Intelligence, Application Research, Cloud Technology.

1. Introduction

Artificial intelligence has been developed on the basis of various knowledge such as psychology, mathematics, and informatics. It can summarize and analyze various human activity laws in society; big data is based on massive information and works under scientific conditions. The summary and classification of the data, the prediction of what may happen, the application of big data in artificial intelligence is mainly to realize the conversion of data to knowledge and promote the further improvement of technology.

Due to the continuous development of computer technology, a huge amount of new data is also being generated all the time. The current growth rate has reached 50% per year. The application of big data can be used to determine the specific movement status of some cars and equipment. It is the detailed analysis of the location, which accelerates the development of traditional information technology, and makes data processing work consumes less human and material resources. Artificial intelligence reads relevant information through probabilistic analysis or statistics. Perform intelligent analysis and improve the overall accuracy.

2. Big data core technology

The big data storage application is a parallel database, and the execution of database tasks is realized by paralleling multiple nodes. Due to the relatively high performance, the actual application is widespread. Over the years, system performance has continued to improve, and specific result caches, database indexes, etc. have continued to improve. Due to its own series of problems, many people choose to store data on smart terminals. Using artificial intelligence robots to extract core content information can save a lot of storage space and reduce storage risks.

Big data itself has certain characteristics, and the representation of data is many and more complex. In the past, when the system performs data retrieval, keywords are published to each server to achieve parallel retrieval. Sometimes the results of retrieval cannot meet actual needs, so Some people applied the HDFS system under the Apache Hadoop framework to open source information for big data, and finally realized random access.

The application of big data has been very extensive. Today's electronic online shopping, publishing pictures or videos through social media, etc. all use this technology. The core content of this technology is big data mining technology. The effective information searched in huge, incomplete information and random databases can reduce various risks and finally obtain scientific judgments. The generalization of big data mining technology is data classification, summary analysis, clustering, web data mining and so on.

3. Application of Big Data Technology in the Field of Artificial Intelligence

With the deepening development of high-tech technology, mankind has entered the information age, and big data is also widely used in the field of artificial intelligence.

(1) Artificial intelligence robot. Use the perception level, operation level or cognitive level of the artificial intelligence robot to make settings to allow the robot to play its actual effects, such as playing the selected music content through the software, quickly finding the required phone number, and providing the phone number that matches the actual requirements Nutritious meal, the organic integration of artificial intelligence technology and big data technology allows robots to make decisions or think like humans, transmit a large amount of information through information sensors, and use pattern recognition engines to structure or systemize big data Analyze, use data feedback or learning algorithms to deepen the skill setting of the robot. After practical application, it is found that the more corresponding training corpus data, the more demand for neuron nodes, and the more accurate the recognition of specific semantics as shown in Figure 1. Through science According to calculations, the gap between the overall recognition rate of 10 million and one million neurons has reached 10%, and the gap between the overall recognition rate of 10 billion and 1 billion neurons has been higher than 20%, so big data applications The optimization is an inevitable trend.

(2) Intelligent manufacturing. Intelligent manufacturing is produced on the basis of artificial intelligence. Knowledge is the basis for promoting the development of intelligence. Intelligence is a level of how to use knowledge for application. Intelligent manufacturing includes intelligent manufacturing systems and intelligent manufacturing technologies. In the specific application process, a series of similar analysis, reasoning, decision-making and other activities are carried out. On the basis of intelligent manufacturing, the concept of related automation is innovated, and the development is increasingly highly integrated. Modernization, intelligence, flexibility, years of research and development have had an impact on the manufacturing industry. Data collection and management in the manufacturing industry, order management, intelligent manufacturing, and customized platforms are all related to big data. After in-depth mining, more accurate matching can be achieved and manufacturers' risks can be reduced.

(3) Smart Agriculture. The so-called smart agriculture is a modern and advanced agricultural production that achieves efficient, intensive and sustainable development through industrialized production under environmental conditions that can be manually managed. It can conduct large-scale operations off-season, all-weather, and anniversaries. According to modern agriculture Basically, the application of multi-faceted subject knowledge such as agricultural engineering, biotechnology, new materials, etc., to raise the level of science and technology to a new level, increase the yield of land and increase the working efficiency of the working people. This is a breakthrough reform Innovation. Combining the actual conditions of different regions, controlling specific instructions on the basis of accurate data analysis, building a mobile big data system for agriculture, agricultural workers can quickly understand the specific industry dynamics, grasp the growth status on time, and achieve scientific Agricultural management.

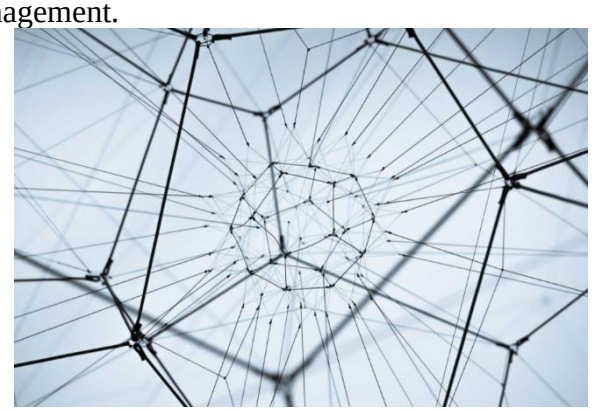

Figure 1. Artificial intelligence robot network

On the basis of scientific analysis and research on the development situation, seek advantages and avoid disadvantages, and apply artificial intelligence technology to daily life or social development and construction work. However, some problems should be paid attention to in actual applications.

(1) Technology cannot replace interpersonal relationships. Nowadays, artificial intelligence technology has been developed, but it cannot make scientific and reasonable judgments about some special situations that occur in the processing of interpersonal relationships. It cannot feel the delicate and rich emotions between humans. If you rely too much on the technology, it will cause certain Social issues, human social communication skills will be reduced, so people should continue to participate in normal interpersonal communication, to avoid excessive reliance on technology.

(2) Protect data and information security. Under the condition of big data artificial intelligence, various information and data resources are often attacked or lost, which will cause a certain degree of impact on users, and cause unnecessary economic or other losses. It is reasonable for data network security The problem is maintained, the safety factor is improved, and the user's information is guaranteed.

4. Conclusions

Relying on artificial intelligence technology for a long time will cause the loss of human feelings and emotions, and the problems that arise in real life cannot be actively solved, making the feelings between individuals become very fragile, which is negative for the stable development of society Therefore, it is reasonable to apply artificial intelligence technology, give full play to its advantages, and let it contribute to the development of society.

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