The Application of Neural Network algorithm in Artificial Intelligence Recognition

Longqi Zhang

Henan Normal University, Xinxiang City, Henan Province 453007, China

Abstract. artificial intelligence technology is an important product of the development of science and technology, greatly facilitate people's life and production, in recent years, artificial intelligence technology without living and living artificial intelligence recognition technology is constantly improving, and the perfect process requires the organic combination of neural network algorithm and artificial intelligence recognition. Based on this, this paper analyzes the application of neural network algorithm in artificial intelligence recognition, in order to provide some reference.

Keywords: neural network algorithm; artificial intelligence technology; identification technology; specific application.

1. Introduction

With the rapid development of science and technology in China, artificial intelligence technology is rising rapidly and is widely used in various fields, which requires the continuous improvement of artificial intelligence technology. Artificial intelligence is that with the use of the computer simulation algorithm, machines can imitate human behavior in advance, so as to replace manpower to complete part of the work. In the continuous enrichment and development of artificial intelligence technology, artificial identification technology is one of the more important skill expansion. Thanks to the advantages of neural network algorithm, can integrate information collection, storage, analysis and application into the interaction of neurons, and effectively used in artificial intelligence recognition technology, can further optimize the recognition on the basis of the original accuracy, and improve the efficiency of identification, to help the stable development of artificial intelligence technology.

2. Overview of the neural network algorithm

In the background of the rapid development of social economy, people's work and life needs are continuously innovating, and computers, as an important part of the new era, are also constantly innovating in the process of the demand change and the development of science and technology, forming a neural network system. At present, neural network algorithm has been widely used, and has been recognized by all walks of life, such as medicine, biology, statistics have made advantage of the advantages of neural network algorithm. Neural network system refers to the use of neurons connection, build a relatively complex neural network system, the system can target a large number of data storage, processing, and in repeated practice the optimal algorithm, so is more suitable for complex problem processing, can greatly improve the accuracy of data processing, such as engineering construction design, only the relevant data input into the system, the system will constantly calculate the optimal algorithm, and travel optimal design scheme, which simplifies the repeated calculation process, both save human resources, It also improves work efficiency.

3. the overview of artificial intelligence identification technology

Artificial intelligence technology in the current development situation is good, and in the process of further development, gradually into the daily life and work, its advantage is that to replace human high-risk, repeated calculation work, greatly liberated the laborer hands, and in the process of continuous development, the recognition function, artificial intelligence recognition technology and expand the application category of artificial intelligence technology, and recognition technology is

mainly divided into two categories, respectively is "inanimate" and "living" artificial intelligence recognition technology.

(1) "Inliving body" artificial intelligence recognition technology

"Inanimate" artificial intelligence recognition technology is the most popular technology, which can be seen everywhere in daily life. There are mainly three main types of identification: barcode identification technology, smart card technology and radio frequency identification technology. Barcode identification technology is also divided into one-dimensional and two-dimensional two kinds. One-dimensional bar code is such as the common book identification code, which mainly records the relevant data and information of the books. The common two-dimensional barcode is the commonly used wechat and Alipay payment codes. Smart card technology is to integrate the relevant data into the circuit card, which can complete simple operations, such as common access control cards, vehicle unlock cards, etc.

(2) "Living body" artificial intelligence identification technology

"Living" artificial intelligence recognition technology also is relatively common in daily life, mainly from the perspective of human research and development, including voice recognition, face recognition and fingerprint recognition technology, etc., because the individual has a separate characteristics, so the artificial intelligence technology can target the human body data storage, so as to realize high-speed retrieval and record. Therefore, these three types of identification technologies have been widely used in daily life, which can not only meet people's personalized needs, but also facilitate a series of relatively complex links.

4. Specific application of neural network algorithm in artificial intelligence recognition

The application of artificial intelligence recognition technology in daily life simplifies some of the process of life and work, and the convenience brought is deeply recognized by people, and becomes an indispensable and important tool in life. This is also due to the advantages of accurate and efficient neural network algorithm, and the organic combination of the two can make the artificial identification technology more accurate, so as to be applied in more fields. The application of neural network algorithm in AI identification is analyzed from several aspects below.

(1) Structure formation and intelligent analysis

In the application of neural network algorithm and artificial intelligence identification technology, the essence is to take artificial intelligence equipment as the carrier, and through the integration and sorting of neural network neurons, to form a complete and diversified artificial intelligence identification structure network, so as to meet the diversified identification requirements. Through the optimization of neural network algorithm, the artificial intelligence recognition capability can be further improved to ensure the accuracy and efficiency of identification. Artificial intelligence recognition technology needs to be applied to diversified object recognition, and the application of neural network algorithms to build different neural structures can meet the recognition needs. Artificial intelligence recognition technology no longer needs to focus on accurate and extensive research, but only needs to complete the change from quantity to quality.

(2) Accurate algorithm and information retrieval

The significant advantage of neural network algorithm lies in its good accuracy, and there is a certain correlation between the accuracy of neural network algorithm and the MSE of evaluating network performance. In the calculation of MSE, due to the influence of time factors, there is also an error control function, namely E= (d-0)2/ 2. Through the comparative calculation of the error values and weights, the accuracy of the calculation results can be further optimized, which is the application principle of the neural network algorithm. The application of neural network algorithm to artificial intelligence recognition technology, due to its own accuracy and error analysis ability, with the help of algorithm and effective error analysis, it can further improve the recognition ability of artificial intelligence recognition technology. The recognition ability of artificial intelligence recognition

technology should not only start from the improvement of science and technology, but also be optimized based on the improvement of algorithm. In the neural network algorithm, each neurons forms an integral neural network, and neurons have close connections, which can create a platform for artificial intelligence technology, take data as neurons, complete information exchange through neurons interaction, and then complete data analysis. Therefore, by adding a neural network, the recognition ability of artificial intelligence technology can be greatly improved, that is to say, the information retrieval ability and information matching ability can be improved.

(3) Optimize the fitting effect and improve the identification performance

For the function, the better the fit, the accuracy of the value also increases. In fact, the neural network algorithm completes the combination and construction of multiple functions with the help of the computer, forming a multi-dimensional algorithm system. Neural network algorithm can improve the fitting effect of the whole neural network through the precise control of the neurons in the interior of the system. In the process of specific application of artificial intelligence identification technology, the problems often appear, such as low identification efficiency and poor identification accuracy, and the high-quality fitting effect can minimize the identification obstacles. Artificial intelligence technology application process, with the help of high quality neural network algorithm control, can ensure that artificial intelligence to individual accurate identification, comprehensive feedback of individual information, in the multi-dimensional algorithm system, the system will not be huge data difficult choice phenomenon, but under the premise of neurons work rapid feedback information, this realizes the high efficiency of artificial intelligence recognition, by improving the fitting effect to optimize the performance of artificial intelligence recognition technology.

(4) Analysis and storage of data samples

Neural network system is the main composition of neurons and network nodes, neurons cross formed a multi-dimensional virtual space, and virtual space has infinite characteristics, so can realize a large number of data storage, and on the basis of the neurons storage can build up the corresponding portrait, object, so as to identify the application of technology base. Artificial intelligence recognition technology itself is to identify images or portraits, and the virtual images or portraits built by the neural network system can overlap in the process of recognition, which realizes efficient retrieval and recognition. In order to have a high degree of fit, it is necessary to integrate data collection and optimize data analysis, and preset the corresponding algorithm through the practical calculation of data samples, so that data retrieval can be realized only by inputting keywords in the actual application process, which greatly improves the accuracy and intelligence of identification.

(5) Improve information response and retrieval capabilities

Artificial intelligence identification technology must be used in a wide range of ways in order to be widely used in daily life. If there are problems such as low data storage capacity and slow response capacity, it will undoubtedly affect the promotion of artificial intelligence technology. Therefore, the artificial intelligence recognition technology should have a good data capacity, which improves the data storage requirements of the artificial intelligence recognition technology. Through the neural network algorithm, we can use the neural network for data storage, and the neural network can exist in the way of backup storage.first, Neural network algorithms, aided by the Internet, Collection, integration, and analysis of the corresponding data, And store the required data into the database, But when the AI recognition technology works, Neural network algorithms will combine the required data for efficient data retrieval and information transfer, And then, to realize the process of artificial intelligence recognition, So the neural network assumes the effect similar to the vector, The AI technology itself does not require large amounts of data storage, Only the correspondence identification of the neural network algorithms is required, You can expand and have enough memory, When relevant data information is required, The identification requirements can be completed only by using the information retrieval completed by the neural network algorithm, Therefore, it has become an important means of retrieval and data storage means of artificial intelligence recognition technology, The improvement of the retrieval ability and the information response ability is very significant.

5. Limitations of the application of neural network algorithm in artificial intelligence recognition technology

Through the application of neural network algorithm, the artificial intelligence recognition technology can be more perfect in the structure formation, accurate algorithm, optimization of data storage, improve the reflection time and fitting effect, so it is an important path to promote the development of artificial intelligence recognition technology. But promoting effect also has relative limitations, the characteristics of artificial intelligence technology is high technology content, update iteration, has a strong professional, innovation and technology, so the enterprise in artificial intelligence product creation is usually independent, if different artificial intelligence products, there will undoubtedly be the problem of insufficient fit, thus produce function. In addition, the development time of artificial intelligence technology is too short. Although the neural network algorithm can realize the optimization of artificial intelligence recognition technology in a short term, with the innovation of artificial intelligence technology, the requirements for the algorithm are bound to change. At this time, the neural network algorithm will no longer be applicable, which will affect the actual fusion effect.

Conclusion: To sum up, the effective application of neural network algorithm has further improved the universality, accuracy and timeliness of artificial intelligence recognition technology, and greatly met the development needs of artificial intelligence recognition technology. Artificial intelligence technology has become an indispensable part of our life, such as WeChat sweep, banned the traditional cash payment, convenient people's life, this is the embodiment of artificial intelligence recognition technology, and in the process of artificial intelligence recognition technology, the application of neural network algorithm is an important means. But for now, the artificial intelligence recognition technology still exists to be optimized, artificial intelligence is bound to become the main trend of the future, it requires relevant people to strengthen the importance of the artificial recognition technology, in the process of continuous research and development and perfect, make the artificial intelligence technology benefit people's lives, for the arrival of the intelligent era.

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