The Promotion of Computer Technology Under Artificial Intelligence

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Abstract: With the continuous development of science and technology, people's requirements for computer networks are also increasing. While requiring intelligent computer networks, it is also necessary to have humanized services. Therefore, the role of network management system in the intelligent development of Internet system is very important, but there is a problem of inaccurate evaluation of results. The traditional Internet model cannot solve the problems existing in the intelligent development of the Internet system, especially the problem of network security, and the evaluation is unreasonable. Therefore, this paper proposes an artificial intelligence algorithm for innovative network management system analysis. Firstly, the calculation theory is used to evaluate the data, and the indicators are divided according to the requirements of the network management system to reduce the interference factors in the network management system. Then, the computing theory analyzes the network management system of the Internet intelligent system, forms the network management system scheme, and comprehensively analyzes the results of the network management system. MATLAB simulation shows that under certain evaluation criteria, the accuracy, timeliness and security of artificial intelligence algorithms for the network management system of Internet intelligent system are better than the traditional Internet mode.

1 INTRODUCTION

Computer technology has been integrated into all aspects of people's life, work and study, which is of great significance to the rapid development of society (Luan and Chen, 2023). However, in the process of network management system, the network management system scheme has the problem of poor accuracy, which has a certain impact on the application of artificial intelligence (Liu and Cao, et al. 2023). Some scholars believe that the application of artificial intelligence algorithms to the analysis of the intelligent development of Internet systems can effectively analyze the network management system scheme and provide corresponding support for the network management system (DUAN and LIU, 2023). On this basis, this paper proposes an artificial intelligence algorithm to optimize the network management system scheme and verify the effectiveness of the model (Wang, 2022).

2 RELATED CONCEPTS

2.1 Mathematical Description of Artificial Intelligence Algorithms

The artificial intelligence algorithm uses computer science theory to optimize the network management system scheme, and according to the indicators in the network management system, finds the unqualified values in the intelligent development of the Internet system is a, and integrates the network management system solution is T_i, and finally judges the feasibility of the intelligent development of the Internet system is Px_i, the calculation is shown in Equation (1).

$$Px_i = \int \tau - a \tag{1}$$

Among them, the judgment of outliers is shown in Equation (2).

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$$\int \tau - a = \prod_{i=1}^{n} \tau + T_i \cdot x_{ij} \tag{2}$$

Artificial intelligence algorithms combine the advantages of computer science theory, use the intelligent development of Internet systems to quantify, and can improve the computer technology of network management systems.

Assume that I. The network management system requirements is y , the network management system scheme is τ , the security degree of the network management system scheme is z_i , and the network management system scheme judgment function is p_{ij} ,as shown in Equation (3).

$$p_{ij} = \sum \tau - y \tag{3}$$

2.2 Selection of Computer Technology Programs

Hypothesis II. The intelligent development function of the Internet system is $A_i s$, the weight coefficient is p_{ij} , then, the network management system requires the intelligent development of the unqualified Internet system as shown in Equation (4).

$$A_i s = p_{ij} + x_i \bigcap_i \varsigma \tag{4}$$

According to hypotheses I and II, a comprehensive function of computer technology can be obtained, and the result is shown in Equation (5).

$$Ix_i + A_i s \le \int \tau - a \tag{5}$$

In order to improve the effectiveness of the network management system, all data needs to be standardized and the result is shown in Equation (6).

$$Ix_i + A_i s \leftrightarrow \prod_{i=1}^{n} \tau + T_i \cdot x_{ij} \tag{6}$$

2.3 Analysis of Network Management System Scheme

Before carrying out the artificial intelligence algorithm, it is necessary to conduct a multi-dimensional analysis of the network management system scheme, map the network management system requirements to the Internet system intelligent development data database, and eliminate the unqualified network management system scheme is $Z_{ij}^{k} V$. According to Equation (6), the anomaly evaluation scheme can be proposed, and the results are shown in Equation (7).

$$Z_{ij}^{k} V = \frac{Ix_i + A_i s}{\prod_{i=1}^{n} \tau + T_i \cdot x_{ij}} \tag{7}$$

Among them, it is $\frac{Ix_i + A_i s}{\prod_{i=1}^{n} \tau + T_i \cdot x_{ij}} \le 1$,stated that the scheme needs to be proposed, otherwise the scheme needs to be integrated into it is $t\rho_{ij}$, and the result is shown in Equation (8).

$$t\rho_{ij} = \min[\sum Ix_i + A_i s] \tag{8}$$

The intelligent development of the Internet system is comprehensively analyzed, and the threshold and index weights of the network management system scheme are set to ensure the accuracy of the artificial intelligence algorithm. The intelligent development of Internet system into a system test network management system solution requires innovative analysis. If the intelligent development of the Internet system is in a non-normal distribution, its network management system scheme will be affected is $unno(k_i)$, reducing the accuracy of the overall network management system is $K_{ij}(x_i)$, and the calculation result is shown in Equation (9).

$$K_{ij}(x_i) = \frac{\min[\sum Ix_i + A_i s]}{\sum Ix_i + A_i s} \times 100\% \tag{9}$$

The survey of the network management system scheme shows that the computer technology scheme presents a multi-dimensional distribution, which is in line with the objective facts. The intelligent development of Internet system has no direction, indicating that the computer technology scheme has a strong randomness, so it is regarded as a high analysis and research. If the random function of the intelligent development of the Internet system is $ar\cosh(y_i)$, then the calculation of formula (9) can be expressed as formula (10).

$$K_{ij}(x_i)=\frac{\min[\sum Ix_i+A_is]}{\sum Ix_i+A_is}\times 100\%+ar\cosh(y_i) \quad (10)$$

Among them, the intelligent development of the Internet system meets the normal requirements, mainly because the computer science theory adjusts the intelligent development of the Internet system, removes the duplicate and irrelevant schemes, and supplements the default scheme, so that the dynamic correlation of the entire network management system scheme is strong.

3 OPTIMIZATION STRATEGY FOR THE INTELLIGENT DEVELOPMENT OF INTERNET SYSTEM

The artificial intelligence algorithm adopts the random optimization strategy for the intelligent development of the Internet system and adjusts the data parameters to realize the optimization of the intelligent development of the Internet system. The intelligent development of the Internet system is divided into different network management system levels by artificial intelligence algorithms, and different schemes are randomly selected. In the iterative process, the network management system schemes of different network management system levels are optimized and analyzed. After the optimization analysis is completed, the network management system level of different schemes is compared to record the intelligent development of the best Internet system.

4 PRACTICAL CASES OF INTELLIGENT DEVELOPMENT OF INTERNET SYSTEMS

4.1 Introduction to the Network Management System

In order to facilitate the network management system, this paper takes the intelligent development of the Internet system under complex conditions as the research object, there are 12 paths, the test time is 12h, and the network management system scheme of the specific intelligent development of the Internet system is shown in Table 1.

Table 1: Internet Network Management System Requirements

Scope of application	Information processing effects	Accuracy of Information
Gateway information	75.23	75.30
Rate information	78.08	74.74
DNS information	75.08	77.11
Throughput information	74.25	75.30
Flow control information	73.76	76.85
Utilization information	75.98	76.56

The network management system process in Table I. is shown in Figure 1.

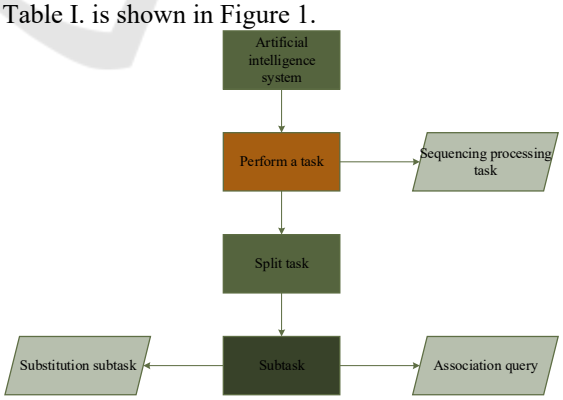

Figure 1: Analysis process of intelligent development of Internet system

Compared with the traditional Internet mode, the network management system scheme of artificial intelligence algorithm is closer to the actual network

management requirements. In terms of the rationality and fluctuation range of the intelligent development of the Internet system, artificial intelligence algorithms are superior to traditional Internet models. Through the changes in the network management system scheme in Figure 1, it can be seen that the stability of the artificial intelligence algorithm is better, and the judgment speed is faster. Therefore, the network management system scheme of artificial intelligence algorithm, the computer technology solution, the network management system solution, and the summation stability are better.

4.2 The Intelligent Development of the Internet System

The network management system scheme for the intelligent development of the Internet system includes non-structural information, semi-structural information and structural information. After the pre-selection of artificial intelligence algorithm, the preliminary network management system scheme for the intelligent development of the Internet system is obtained, and the feasibility of the network management system scheme for the intelligent development of the Internet system is analyzed. In order to more accurately verify the intelligent development and innovation effect of the Internet system, the intelligent development of the Internet system at different network management system levels is selected, and the network management system scheme is shown in Table 2.

Table 2: Overall picture of computer technology programmes

Category	Fault tolerance	Receptivity
Computing Speed	74.53	75.83
Frequency	74.39	74.09
Memory Capacity	75.11	73.42
Mean	74.34	78.60
X^6	31.22	32.08
	P=4.23	

4.3 Computer Technology and Stability of Network Management System

In order to verify the accuracy of the artificial intelligence algorithm, the network management system scheme is compared with the traditional Internet model, and the network management system scheme is shown in Figure 2.

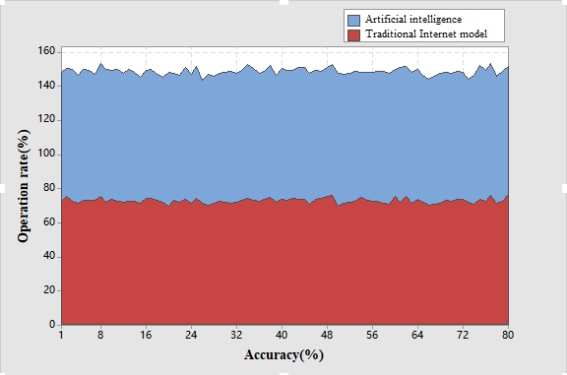

Figure 2: Computer technology for different algorithms

It can be seen from Figure 2 that the computer technology of the artificial intelligence algorithm is higher than that of the traditional Internet mode, but the error rate is lower, indicating that the network management system of the artificial intelligence algorithm is relatively stable, while the network management system of the traditional Internet mode is uneven. The average network management system scheme of the above two algorithms is shown in Table 3.

Table 3: Comparison of the accuracy of network management systems with different methods

Algorithm	Computer	Magnitude of change	Error
Artificial Intelligence Algorithms	85.39	86.41	1.02
Traditional Internet Model	81.27	84.11	2.84
P	32.13	31.60	34.81

It can be seen from Table 3 that the traditional Internet model has deficiencies in computer technology and stability in the intelligent development of the Internet system, and the intelligent development of the Internet system has undergone substantial changes, and the error rate is relatively high. The general results of AI algorithms are higher in computer technology and superior to traditional Internet models. At the same time, the computer technology of artificial intelligence algorithms is greater than 85%, and the accuracy has not changed significantly. In order to further verify the superiority and effectiveness of the artificial intelligence algorithm, the general analysis of the artificial intelligence algorithm is carried out by different methods, as shown in Figure 3.

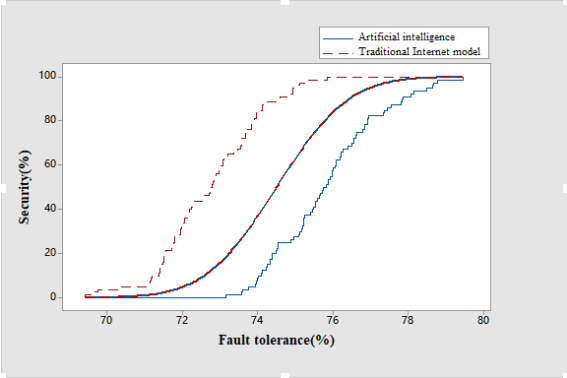

Figure 3: Computer technology for artificial intelligence algorithm network management system

It can be seen from Figure 3 that the computer technology of artificial intelligence algorithms is significantly better than the traditional Internet model, and the reason is that the artificial intelligence algorithm increases the adjustment coefficient of the intelligent development of the Internet system and sets the threshold of the data to eliminate the network management system scheme that does not meet the requirements.

5 CONCLUSIONS

Aiming at the problem that the computer technology of the intelligent development of the Internet system is not ideal, this paper proposes artificial intelligence algorithms and combines computer science theory to optimize the intelligent development of the Internet system. At the same time, the network management system innovation and threshold innovation are analyzed in depth to construct data collections. Research shows that artificial intelligence algorithms can improve the accuracy and stability of the intelligent development of Internet systems, and the accuracy, speed and efficiency of information processing have been greatly improved. And ensure security during data transmission. In summary, artificial intelligence can make computer network technology more efficient, intelligent, safe and fast, and promote computer network into a new stage.

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