

## *Retraction*

# **Retracted: Privacy Protection Algorithm Model of We-Media Network from the Perspective of Big Data**

### **Wireless Communications and Mobile Computing**

Received 29 August 2023; Accepted 29 August 2023; Published 30 August 2023

Copyright © 2023 Wireless Communications and Mobile Computing. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Peer-review manipulation

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

### **References**

- [1] Y. Hu, "Privacy Protection Algorithm Model of We-Media Network from the Perspective of Big Data," *Wireless Communications and Mobile Computing*, vol. 2022, Article ID 4334979, 8 pages, 2022.

## Research Article

# Privacy Protection Algorithm Model of We-Media Network from the Perspective of Big Data

Yue Hu 

*Dongfang College, Zhejiang University of Finance and Economics, Jiaxing Zhejiang 314408, China*

Correspondence should be addressed to Yue Hu; 18407032@masu.edu.cn

Received 12 May 2022; Revised 14 June 2022; Accepted 16 June 2022; Published 26 June 2022

Academic Editor: Kalidoss Rajakani

Copyright © 2022 Yue Hu. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

In recent years, with the in-depth research on the privacy protection methods of We-media network, various types of big data analysis technologies gradually protect the network privacy data, but there are still problems of low intelligence and poor protection in the existing research. Based on this, this paper first uses big data technology and artificial intelligence deep learning algorithm to complete the construction of different types of self-media control databases. Then, it analyzes the common privacy data types of We-media network, constructs an optimization protection model based on secondary identification and verification strategy, and forms a data query system. Finally, simulation experiments are conducted to verify whether the constructed network privacy protection model can realize the intelligent protection of network privacy algorithms from different dimensions. In the process of privacy protection of experimental data at different stages, the internal correlation differences of different types of protection algorithm strategies are obvious in the multidimensional analysis of specific databases. For different types of factor data in different types of We-media networks, the protection rate of the We-media network privacy protection model designed in this study has reached more than 95%. The research results show that the self-media network privacy protection model based on big data and artificial intelligence deep learning technology can realize protection from the aspects of gateway verification and data encryption and has high accuracy and reliability.

## 1. Introduction

With the continuous integration of artificial intelligence technology and big data analysis technology with human life, as an important part of cloud intelligence algorithm, deep learning technology has gradually played more and more roles in many fields [1]. At present, most We-media data protection systems are mainly based on traditional data storage and protection strategies [2]. If the deep learning algorithm is introduced into the self-media privacy data protection system, the self-media data protection system will hopefully obtain more protection strategies [3]. Among them, the combination of deep learning algorithm and data control technology based on big data is a good solution to make our media data protection system intelligent [4]. At present, most big data analysis systems still use neural network algorithm in the design process [5]. Although the network structure of the neural network algorithm is simple and the efficiency of the protection and recognition process

is fast, its training method relies too much on the database, which eventually leads to the low accuracy of the big data analysis system. Therefore, the big data analysis system established by the neural network algorithm is always not suitable for solving the problem of private data with popular nature [6, 7]. For the self-media system, due to the increasingly large privacy data sets of different users and the increasing number of internal neuron nodes, the control and prediction of each neuron node become more and more difficult. Therefore, it is necessary to study the privacy data protection methods of self-media data [8]. Based on this, this paper constructs a privacy protection model of We-media network based on big data deep belief learning algorithm.

Aiming at the problems of simplification and cracking of the current We-media data protection methods, this paper establishes and optimizes the relevant methods of We-media network privacy protection model and puts forward the construction method of We-media network privacy protection model based on big data and deep learning. The full

text is mainly divided into five chapters. Chapter 1 gives a general overview of the research background and content; Chapter 2 introduces the big data technology, the current situation of We-media data protection system, and the research status and shortcomings of neural network privacy protection model of We-media network. Chapter 3 introduces the establishment of big data technology, deep learning network, and secondary identification verification model. The fourth part uses the big data system to train a large amount of sample data through deep learning neural network and designs confirmatory experiments to verify the efficiency of the deep learning model designed in this paper to protect the privacy of We-media network. The fifth part summarizes the full text.

Compared with the current privacy protection model based on data flow in We-media control, the innovation of this paper is to establish a privacy protection model of We-media network controlled by intelligent analysis program by using big data strategy and deep learning neural network algorithm. Deep learning neural network algorithm can deeply analyze and optimize the hierarchical structure of self-media sample data and solve the problems of low intelligence and low efficiency of traditional self-media privacy data protection methods. Based on this, this study uses big data and deep learning neural network technology to establish a new multilevel self-media network privacy protection model, which can greatly improve the data structure of each level of the database and then improve the recognition rate and accuracy of self-media network privacy control data.

## 2. Related Work

Despite several years of development, there are still some deficiencies in the establishment, operation, maintenance, and upgrading of We-media network privacy compared with some more developed systems [9]. Jgyl and other scholars applied the data adaptive strategy to the self-media system and constructed a one-time communication protocol key using chaotic mapping. When using this self-media system, its security will be greatly enhanced [10]. Santos and other scholars have developed a self-media privacy protection system based on biometrics. The key of the system is bound with human biometrics, and the protection rate can reach 98% in the case of noise [11]. Yang and other scholars proposed a secret Internet protocol. When using this protocol, the secret protocol can be randomly embedded in the VoIP protocol of the self-media system, so as to protect privacy [12]. Max and other scholars optimized a self-media protection system, which has the functions of system index, logical database, and query structure, which can be used to optimize the self-media privacy protection methods [13]. For the research of big data system, Jeong and other scholars proposed to optimize the big data algorithm to optimize the structural level of the self-media system. The algorithm is carried through the machine learning protection framework, and the method of finding out the feature subset is used to maximize the privacy protection dimension of all levels of the self-media system [14]. Wang and other scholars have proved through experiments that the multilayer perceptron

depth neural network with Ruzicka regression characteristics is combined with the expected condition maximization clustering method, and the operation of the privacy protection method of self-media network under cellular network is analyzed by using big data technology. The model can provide theoretical support for the operation mode of self-media system [15]. Zhang and other scholars imported the ordinary big data feature data into the feature selector to obtain the deep feature data, integrated the artificial intelligence algorithm into the big data technology, and successfully analyzed the incentive and protection mechanism of We-media data [16]. Using the method of big data combined with random forest algorithm, Yin and other scholars overcome the characteristics of easy overfitting of the algorithm by collecting the weather conditions, flight time, airport location, and other information experienced by commercial aircraft during operation and obtained the prediction accuracy of flight delay of more than 90%, which verified the feasibility of big data analysis technology in different application scenarios [17]. Zhang and other scholars analyzed dozens of characteristic subattributes that may affect the loading speed of self-media system according to big data technology and predicted the calling time of self-media privacy data through convolution neural network algorithm, with an accuracy of nearly 100%. The self-media system adjusts the loading strategy of feature subattributes according to the prediction results, which is of good significance to speed up the protection strategy of self-media privacy data [18].

To sum up, it can be seen that on the one hand, the current We-media privacy protection mechanism is not combined with big data [19]. On the other hand, although China has done a lot of theoretical analysis and research on self-media privacy protection algorithms, there is still much room for improvement in practical application strategies, and there is no establishment of intelligent self-media data protection model [20].

## 3. Methodology

*3.1. Application of Big Data Strategy in Privacy Protection Model of We-Media Network.* The big data module is responsible for loading the privacy data of We-media. After the data loading is completed, the big data system will import the extracted data into the database of the management module to meet the data analysis of the privacy data of We-media network. The analysis module mainly integrates Mel cepstrum parameter MFCC model, hidden Markov HMM model, and deep artificial intelligence self-learning model, which is built by TensorFlow framework. The main function of the analysis module is to calculate and identify the privacy data of our media network and output the corresponding data to control our media devices. The privacy data management module has the functions of adding, deleting, and modifying the imported and analyzed data. The overall architecture of the data analysis and protection system based on big data strategy is shown in Figure 1. The big data analysis system collects and analyzes the privacy data of different We-media in real time so that

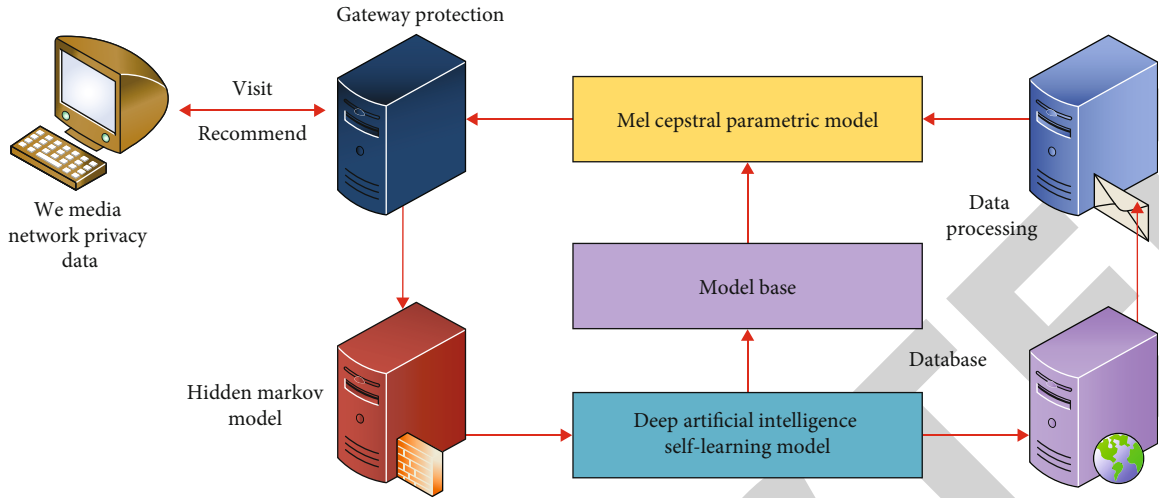


FIGURE 1: Data analysis and protection system based on big data strategy.

the whole system has the learning ability to achieve the reliability of the privacy protection data of our media network.

3.2. Application of Mel Cepstrum Algorithm in Privacy Protection Model of We-Media Network. Modern big data systems, whether in application scope or built-in analysis algorithms, are more and more diversified, which puts forward higher requirements for the series of processes of big data systems from program design to use scenarios. In the process of privacy data feature recognition in We-media, firstly, based on the integrated big data system, this study analyzes the complete Mel cepstrum parameter MFCC combined with deep belief neural network, selects the parameters related to the control data features, and proposes a voice control data feature recognition system integrating linear prediction, probability analysis, and iterative network.

When We-media data is input into the big data analysis core, we must first extract the characteristics of the data. The traditional feature analysis model is the linear predictive cepstrum coefficient LPCC model. When We-media data is combined with the linear predictive cepstrum coefficient LPCC model, 10 to 20 cepstrum coefficients can simply calculate and describe the formant characteristics of private data, but its antinoise ability is poor. Combining the Mel cepstrum parameter MFCC with excellent antinoise ability but long calculation time with the linear thinking of linear prediction cepstrum coefficient LPCC, a new Mel cepstrum parameter MFCC model with high robustness can be designed by combining the advantages of the two models. The parameter extraction process is shown in Figure 2.

In the process of Fourier transform calculation, when a column of control analysis signal  $X(n)$  is input, the first step is to calculate its linear prediction coefficient  $a_i$  by using the autocorrelation method, where  $i$  is an integer arranged in sequence from 1 to the number of sampling point values, and the calculation formula of disturbance analysis  $Q(e^{j\omega})$  is as follows:

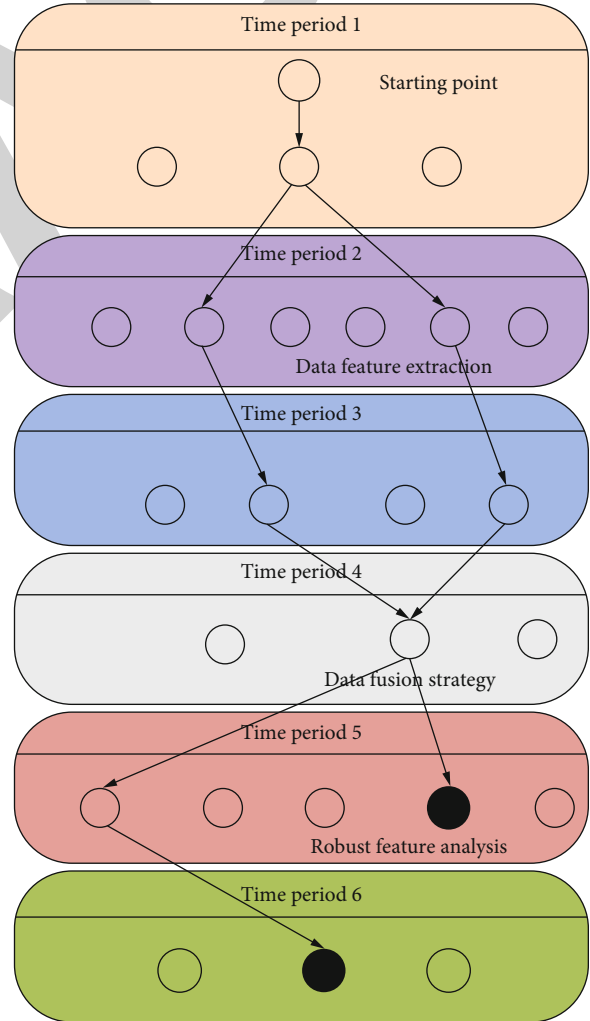


FIGURE 2: The parameter extraction process of the new Mel cepstral parameter MFCC model.

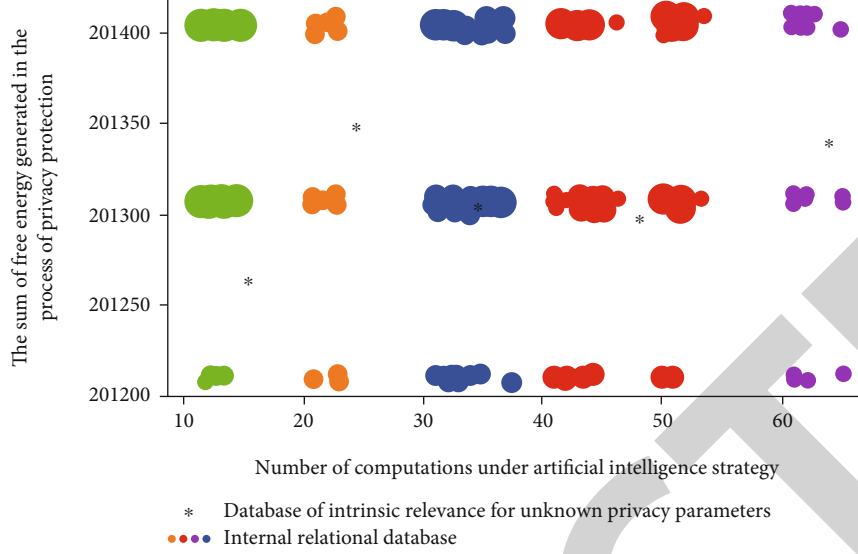


FIGURE 3: Simulation analysis results of two sets of different data under the big data-driven model based on artificial intelligence algorithm.

$$Q(e^{j\omega}) = \frac{Q}{\left(\sqrt{|1 - \sum_{i=1}^N a_i e^{-j\omega i}|}\right)}, \quad (1)$$

where  $N$  is the order number of linear prediction coefficients.

Next, it is necessary to calculate the logarithm of the power spectrum of the linear prediction coefficient LCP and then calculate the characteristic parameter  $R(x)$  of the linear prediction Mel cepstrum parameter MFCC. The calculation formula is as follows:

$$R(x) = \sqrt{\sum_{k=1}^N \lg[P(x)] \cos[x(k-0.5)] \frac{\pi}{N}}, \quad (2)$$

where  $P(x)$  is the linear prediction coefficient,  $N$  is the order of the linear prediction Mel cepstrum parameter, and the minimum value of  $k$  is 1 and the maximum value is  $M$ .

**3.3. Simulation Solution Process of Artificial Intelligence Big Data Algorithm in Self-Media Network Privacy Protection Model.** When using artificial intelligence big data algorithm, its self-media network privacy protection model needs to be trained. Firstly, the energy function of the restricted Boltzmann machine needs to be calculated, and then, the values of the nodes and hidden points of the artificial intelligence big data analysis system are determined through the energy function. Then, the maximum likelihood estimation is carried out to obtain the parameters of each node. Finally, the partial derivative of the weight can be obtained to obtain the following formula:

$$\Delta w_{ij} = \frac{\sqrt{\left| \varepsilon \left( \langle v_i h_j \rangle_{\text{data}} - \langle v_i h_j \rangle_{\text{model}} \right) \right|}}{\langle v_i h_j \rangle_{\text{model}}}, \quad (3)$$

where  $\langle v_i h_j \rangle_{\text{data}}$  and  $\langle v_i h_j \rangle_{\text{model}}$ , respectively, represent the data input from the media and the expected value of data free energy generated in the process of privacy protection of the media network. Figure 3 shows two groups of different data. Under the big data-driven model based on artificial intelligence algorithm, with the increase of calculation times, the change of the total free energy of the internal correlation database is gradually improved. The more obvious the total free energy is, the better the stacking iteration effect of Boltzmann machine is.

Figure 4 shows the state creep simulation analysis results of the hidden Markov model under the big data strategy.

As can be seen from Figures 3 and 4, under the known weight groups and the output values of different artificial intelligence algorithm models, it can be seen that the different weight groups have a great impact on the effect of the network. This is because the MFCC filtered by shift knot analysis strategy needs to import the probability distribution law of the output observation corresponding to the hidden Markov model, and the corresponding standards of different data are also different. Moreover, in the two groups of data under the big data-driven model, with the increase of control data types, the corresponding noncoincidence index factors show a change trend of first decreasing and then gradually stabilizing. This is because the construction of implicit Markov model usually includes five elements: two state sets and three probability matrices. Its formula is as follows:

$$X = \left\{ \frac{\partial, \beta, \alpha, A, B}{3} \right\}, \quad (4)$$

where  $\partial$  is the hidden set,  $\beta$  is the observable set related to  $\partial$ , and  $\alpha$  is the probability matrix of model initialization.  $A$  is the probability matrix under the implicit set, and its formula is as follows:

$$A_{ij} = B(\partial_j | \partial_i), \quad 1 \leq i, j \leq n, \quad (5)$$

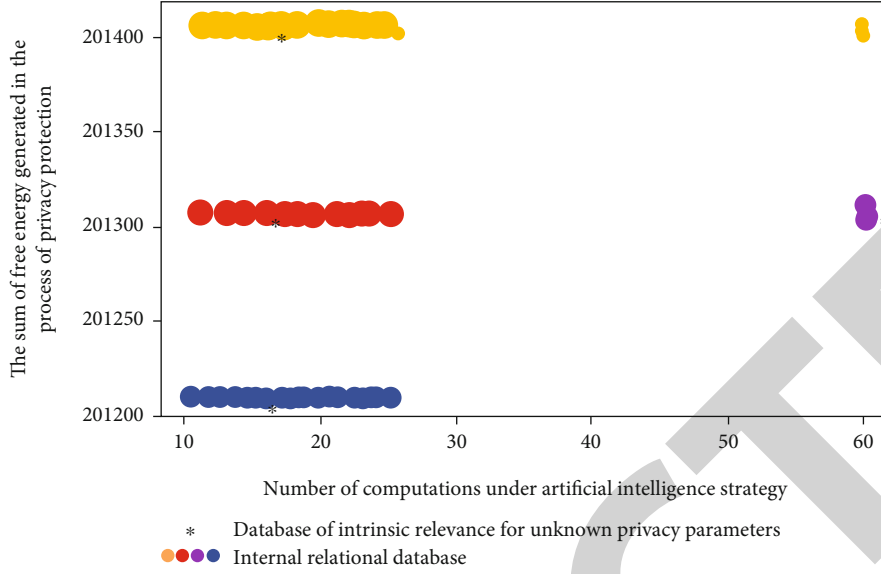


FIGURE 4: Simulation analysis results of state sneaking of two sets of data under the big data analysis strategy of Hidden Markov Model.

where  $n$  represents the number of hidden sets and the model represents the probability that the next time is  $\partial_j$  state in  $\partial_i$  state. The calculation formula of transition probability matrix  $B$  is as follows:

$$B_{ij} = B(\beta_j | \partial_i), \quad 1 \leq i \leq m, 1 \leq j \leq n, \quad (6)$$

where  $m$  represents the number of observable sets and  $n$  represents the number of hidden sets.

When the multi-index analysis function is used, the chaotic functions of the main factor and the secondary factor are, respectively, shown in the following formula, where  $x$  is the model of the input system:

$$\begin{aligned} S_1(x) &= \frac{1-x}{x+e^{x+1}+1}, \\ S_2(x) &= \frac{xe^{1-x}+e^x}{x+e^x+1}. \end{aligned} \quad (7)$$

In the process of evaluating the analysis results of We-media data, there are a variety of mixed factors affecting the evaluation results. Therefore, it is necessary to grade these factors to determine their influence. Calculate the similarity degree of the trend between each subfactor and the main factor, and arrange the order of the similarity degree. Use the self-media control data set, non-self-media control data set, and random data set, respectively. Under different strategies, the corresponding simulation results are shown in Figure 5.

According to the result diagram in Figure 5, when different We-media privacy data are input into the evaluation model, under the big data driving strategy at different stages, the change process of hierarchical protection evaluation results corresponding to We-media factor data is relatively stable, while the results of the data set always show the char-

acteristics of large fluctuation. Therefore, the type of input data is also an important reason for changing the characteristics of our media privacy data for recognition.

Calculate the absolute difference between the secondary factors and the main factors of the system, and the formula is

$$L(x) = \frac{\sqrt{|e^x/(1+xe^x)|}}{e^{-x}+xe^x}. \quad (8)$$

After big data compensation, the absolute difference formula of the self-media network privacy protection system is

$$L_1(x) = \left| \frac{\sqrt{(x+1)e^{x+1}} - \sqrt{|(x-1)|e^{x-1}}}{\sqrt{1+xe^x}} \right|. \quad (9)$$

After the relevance analysis, the sequential evaluation formula of the relevance of this We-media privacy protection system is as follows:

$$K(x) = \frac{1+xe^x}{\sqrt{e^{1-x}/(1+e^{1+x})} + \sqrt{e^{1-x}/(1-e^x)}}. \quad (10)$$

After analyzing the multidimensional network bottleneck strategy, its formula can be transformed into

$$K_1(x) = \frac{(x+xe^x)^2}{\sqrt{(1+e^{1-x})/(1+e^{1+x})} - \sqrt{(1-e^{1-x})/(1-e^x)}}. \quad (11)$$

Then, the evaluation system is established for the simulation results. The evaluation coupling degree formula of the self-media network privacy protection system is

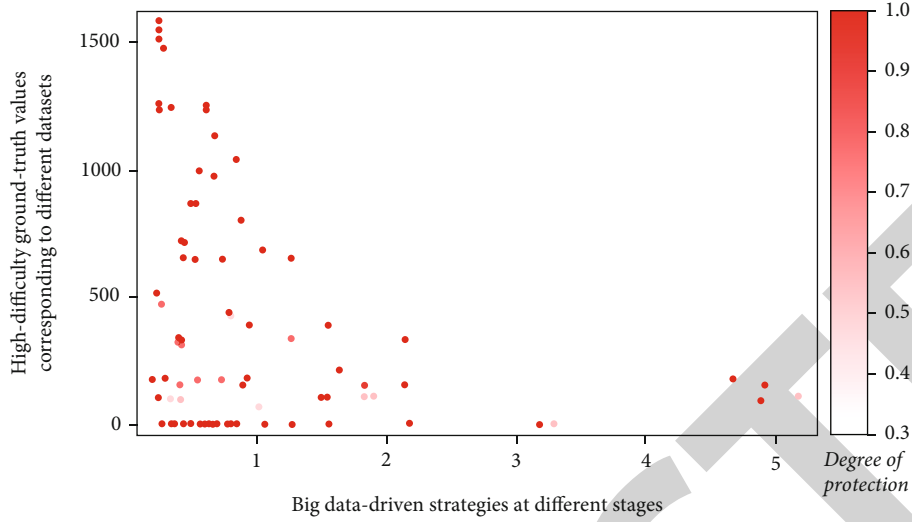


FIGURE 5: Simulation results of protection degree corresponding to different data sets under different strategies.

$$Z(x) = \sqrt{\frac{2}{2x + e^x}}. \quad (12)$$

After the analysis of multidimensional factor protection strategy, the evaluation formula of coupling degree is

$$Z_1(x) = \frac{\sqrt{(e^x - 2)/(2x + e^x)}}{3x + e^x}. \quad (13)$$

Finally, the evaluation system is solved, and the expression of its comprehensive evaluation function is

$$f(x) = \sqrt{\frac{K_1(x) + L_1(x) + Z_1(x)}{xe^x}}. \quad (14)$$

## 4. Result Analysis and Discussion

**4.1. Experimental Design.** After the processing of artificial intelligence and deep learning algorithm, the feature information in the original We-media network privacy control data will be clustered by the big data analysis system. At the same time, the filtered high-dimensional feature parameters can reduce the content of privacy types in the We-media network database and highlight the protection features in the original We-media privacy data. During the experiment, 12 We-media experts were recorded 10 times as privacy protection files of training data according to the same network throughput and the sequence of 25 audio data and 25 text data. The trained network privacy feature model, artificial intelligence analysis model, and protection algorithm model form a complete We-media network privacy protection system. Figure 6 shows the preliminary results of the verification experiment of We-media network privacy protection model based on big data vision and artificial intelligence algorithm.

It can be seen from the results in Figure 6 that in the process of privacy protection of experimental data at different stages, the internal correlation differences of different types

of protection algorithm strategies are obvious in the multidimensional analysis of specific databases, because in different We-media network privacy databases, there are obvious differences in the protection mechanism and focus of data protection, and different protection factors will be used for defense to prevent viruses or Trojans from destroying these data. Therefore, compared with the existing We-media data protection systems (such as traditional data streaming protection or differentiated innovation protection methods), the We-media network privacy protection method adopted in this study is more intelligent, its application range is wider, and the overall analysis model has the advantages of convenience, high efficiency, and low computational complexity.

**4.2. Experimental Data Processing and Result Analysis.** Figure 7 shows the error change evaluation results of the detection model of the self-media network privacy protection model under the continuous evaluation function and discrete evaluation function. The abscissa is the different experimental stages, and the ordinate is the error rate. The smaller the successful error rate, the better the system stability.

According to the evaluation results in Figure 7 and the variation law of disturbing error rate, for different types of factor data in different types of We-media networks, the privacy protection models of We-media networks designed in this study have reached more than 95% protection rate, among which the difference of protection rate is more obvious for privacy data in different time periods. According to the above results, the model designed in this study is well trained in the training of privacy protection data recognition model and has good robustness and targeted protection for the privacy data sent by different We-media. Therefore, the overall accuracy and protection of the model system are also high. It provides some theoretical support and systematic verification samples for the development of a new generation of We-media smart phone network privacy protection system.

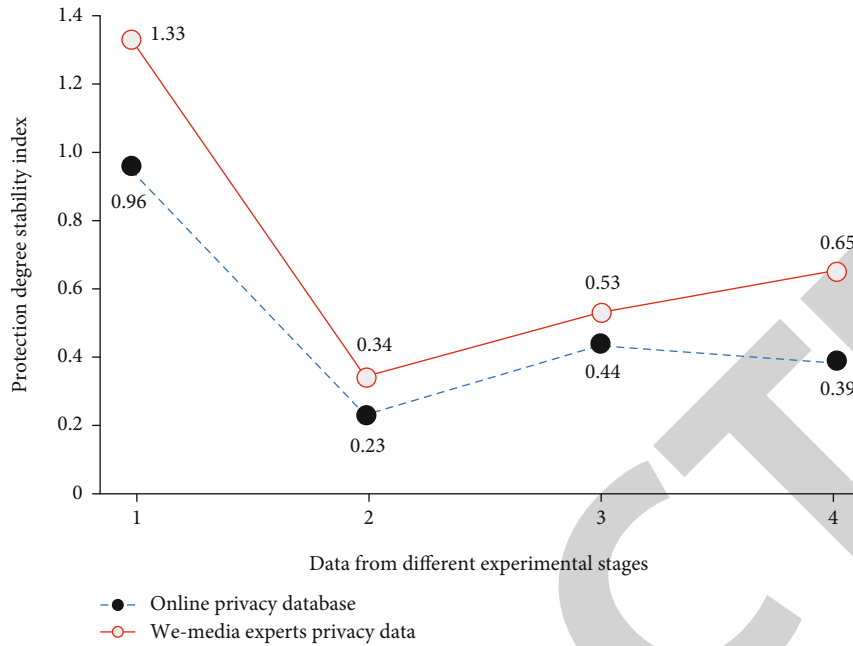


FIGURE 6: Preliminary results of the verification experiment of the We-media network privacy protection model based on the vision of big data and artificial intelligence algorithm.

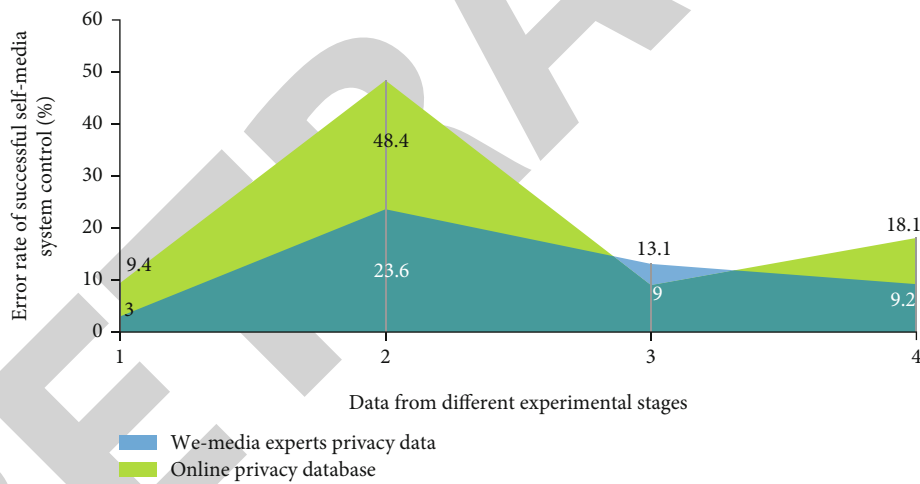


FIGURE 7: Experimental error change evaluation results.

### 5. Conclusion

(1) This paper uses big data technology and artificial intelligence deep learning algorithm to complete the construction of different types of We-media control databases. Firstly, Mel cepstrum parameter artificial intelligence model is adopted to obtain the characteristic parameters of control commands through cepstrum, and then, the characteristic parameters are denoised through big data analysis physics. Finally, the data protection model is used to classify and identify the control data of our media intelligent privacy protection system, so as to realize the multidimensional protection of privacy data

(2) This paper analyzes the error of the overall algorithm model of the system and big data analysis, constructs the deep belief network classification algorithm and the application of big data analysis in the We-media system, analyzes the common privacy data types of the We-media network, constructs an optimized protection model based on secondary identification and verification strategy, and forms a data query system. In the process of privacy protection of experimental data at different stages, the internal correlation differences of different types of protection algorithm strategies are obvious in the multidimensional analysis of specific databases. For different types of factor data in different types of



We-media networks, the protection rate of the We-media network privacy protection model designed in this study has reached more than 95%, of which the difference in privacy data protection rate in different time periods is more obvious

- (3) The results show that the privacy protection model of We-media network based on big data and artificial intelligence deep learning technology can be protected from two aspects: gateway verification and data encryption, and has high accuracy and reliability. However, this study only makes an experimental analysis on the privacy protection of the We-media network, not from the perspective of the security of the We-media data network environment. Therefore, we can study the next step from the perspective of network security

### Data Availability

The figures used to support the findings of this study are included in the article.

### Conflicts of Interest

The author declares that there are no conflicts of interest.

### Acknowledgments

The author would like to show sincere thanks to those techniques which have contributed to this research.

### References

- [1] S. S. Kahai and Y. Lei, "Building social capital with Facebook: type of network, availability of other media, and social self-efficacy matter," *International Journal of Human-Computer Studies*, vol. 130, pp. 113–129, 2019.
- [2] Q. Wang, J. Alcaraz-Calero, R. Ricart-Sanchez et al., "Enable advanced QoS-aware network slicing in 5G networks for slice-based media use cases," *IEEE Transactions on Broadcasting*, vol. 65, no. 2, pp. 444–453, 2019.
- [3] Y. X. Zhang, Y. X. Feng, and R. Q. Yang, "Network public opinion propagation model based on the influence of media and interpersonal communication," *International Journal of Modern Physics B*, vol. 33, no. 32, article 1950393, 2019.
- [4] S. Suzuki, H. Aihara, and K. Takeuchi, "Privacy protection NAND flash system with flexible data-lifetime control by in-3-D vertical cell processing," *IEEE Journal of Solid-State Circuits*, vol. 55, no. 10, pp. 2802–2809, 2020.
- [5] A. Sayyafan, A. Aboutaleb, B. J. Belzer et al., "Deep neural network media noise predictor turbo-detection system for one and two dimensional high-density magnetic recording," *IEEE Transactions on Magnetics*, vol. 57, no. 3, pp. 1–13, 2021.
- [6] A. Martin, R. Viola, M. Zorrilla, J. Florez, P. Angueira, and J. Montalban, "MEC for fair, reliable and efficient media streaming in mobile networks," *IEEE Transactions on Broadcasting*, vol. 66, no. 2, pp. 264–278, 2020.
- [7] T. Serizawa, T. Maeda, and T. Sawada, "Neutralization-induced self-assembly of cellulose oligomers into antibiofouling crystalline nanoribbon networks in complex mixtures," *ACS Macro Letters*, vol. 9, no. 3, pp. 301–305, 2020.
- [8] T. V. Giannouchos, A. O. Ferdinand, G. Ilangovan et al., "Identifying and prioritizing benefits and risks of using privacy-enhancing software through participatory design: a nominal group technique study with patients living with chronic conditions," *Journal of the American Medical Informatics Association*, vol. 28, no. 8, pp. 1746–1755, 2021.
- [9] K. Um, E. J. Hall, M. A. Katsoulakis, and D. M. Tartakovsky, "Causality and Bayesian network PDEs for multiscale representations of porous media," *Journal of Computational Physics*, vol. 394, pp. 658–678, 2019.
- [10] J. G. Luc, M. A. Archer, R. C. Arora et al., "The thoracic surgery social media network experience during the COVID-19 pandemic," *The Annals of Thoracic Surgery*, vol. 110, no. 4, pp. 1103–1107, 2020.
- [11] J. E. Santos, D. Xu, H. Jo, C. J. Landry, M. Prodanović, and M. J. Pyrcz, "PoreFlow-net: a 3D convolutional neural network to predict fluid flow through porous media," *Advances in Water Resources*, vol. 138, article 103539, 2020.
- [12] C. C. Yang and M. Zhao, "Mining heterogeneous network for drug repositioning using phenotypic information extracted from social media and pharmaceutical databases," *Artificial Intelligence in Medicine*, vol. 96, no. MAY, pp. 80–92, 2019.
- [13] X. Ma, K. Zhang, C. Yao et al., "Multiscale-network structure inversion of fractured media based on a hierarchical-parameterization and data-driven evolutionary-optimization method," *SPE Journal*, vol. 25, no. 5, pp. 2729–2748, 2020.
- [14] S. Jeong and J. Lee, "Signal detection using extrinsic information from neural networks for bit-patterned media recording," *IEEE Transactions on Magnetics*, vol. 57, no. 3, pp. 1–4, 2021.
- [15] Z. Wang and C. Xia, "Co-evolution spreading of multiple information and epidemics on two-layered networks under the influence of mass media," *Nonlinear Dynamics*, vol. 102, no. 4, pp. 3039–3052, 2020.
- [16] P. Zhang, M. Durrezi, and A. Durrezi, "Internet network location privacy protection with multi-access edge computing," *Computing*, vol. 103, no. 3, pp. 473–490, 2021.
- [17] C. Yin, L. Shi, R. Sun, and J. Wang, "Improved collaborative filtering recommendation algorithm based on differential privacy protection," *The Journal of Supercomputing*, vol. 76, no. 7, pp. 5161–5174, 2020.
- [18] C. Zhang, L. Zhu, C. Xu et al., "BSFP: blockchain-enabled smart parking with fairness, reliability and privacy protection," *IEEE Transactions on Vehicular Technology*, vol. 69, no. 6, pp. 6578–6591, 2020.
- [19] B. Luo, X. Li, J. Weng, J. Guo, and J. Ma, "Blockchain enabled trust-based location privacy protection scheme in VANET," *IEEE Transactions on Vehicular Technology*, vol. 69, no. 2, pp. 2034–2048, 2020.
- [20] G. Xu, H. Li, S. Liu, M. Wen, and R. Lu, "Efficient and privacy-preserving truth discovery in mobile crowd sensing systems," *IEEE Transactions on Vehicular Technology*, vol. 68, no. 4, pp. 3854–3865, 2019.