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Research Article

Design of Intelligent Financial Investment Risk Prediction System Based on Edge Computing

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With the continuous development of economy and society, the financial market has ushered in its own peak, which has pushed the financial industry as a whole into a new stage. In this environment, the financial investment activities of the public and enterprises have greatly increased and have an important role and impact on the optimal allocation of market funds. Due to the coexistence of risks and interests, the financial investment market will be impacted by high-risk events, which will lead to instability of order and certain economic losses. The operation risk of an enterprise is a huge challenge for its own development. A little carelessness may lead to a sharp decline in the status of the enterprise. Therefore, it is necessary to strengthen financial investment control and risk prediction, which has important practical significance for the benign development of enterprises, improving market competitiveness, and reducing negative impacts. Therefore, this paper adopts the concept of edge computing, and based on the *R&D* and operation experience of relevant venture capital systems, develops an intelligent system that can predict various risks in the whole process of financial investment. Firstly, the mobile edge computing framework is introduced, followed by the computing advantages. Then, the system architecture is designed around the edge computing, such as designing specific algorithms, so as to complete the overall design of the intelligent financial investment risk prediction system. Then, the results are systematically analyzed through experiments, which show that the system can well predict the financial investment risk. Finally, the strategy of optimizing the intelligent financial risk prediction system is proposed.

1. Introduction

Nowadays, due to the rapid rise of the Internet era, it has become one of the most important forms of financial investment. In addition to the inherent factors of the Internet industry, the emergence of more uses of Internet technology and the integration and rapid penetration of different industries are also important factors to promote the development of Internet financial investment [1, 2]. Internet-based technologies such as social tools, cloud payment technology, big data, and indexing tools have made great contributions to the sound development of financial investment. Internet finance is not a simple form of integration of Finance and non-Internet investment, but a traditional financial seed, which is placed on the Internet platform, and then bred new varieties and thrived [3]. Enterprise financial investment is actually a concept of market economy, which is different from physical investment. The main sources of financial investment and financing are bank credit, issuing stocks, and bonds [4]. The definition of enterprise financial investment management is to effectively manage the funds invested in the enterprise, which mainly involves the investment company's decision on how to invest, how to manage the investment process, and whether to reasonably allocate the investment funds to obtain the equivalent market return, i.e., profits [5]. There are many risks in this process, such as the possible future income and the instability and uncertainty of the value of enterprise assets and accounts receivable [6]. This is due to the instability of the financial market itself. The instability and volatility of the financial market will cause the future financial investment to continue to develop in a negative direction that is not conducive to the actions of enterprises, and eventually lead to the loss of funds or initial income invested in enterprises

[7]. For example, exchange rate and interest rate, as well as price fluctuation caused by commodity market price fluctuation, will bring certain losses and risks to investment enterprises. Therefore, China needs to strengthen risk prediction and financial investment control, both of which are very important. Based on this background, this paper uses edge computing technology to build an intelligent financial risk prediction system. Firstly, by analyzing the characteristics of the risk data and using the edge algorithm, a general enterprise investment risk prediction framework is established. Then, the risk prediction intelligent system is designed based on the three aspects of investment elements. Then, through the simulation experiment and result analysis of the system, it is concluded that the system can effectively improve the ability of financial investment risk prediction. Finally, this paper proposes a reasonable strategy to optimize the intelligent system to predict the risk of financial investment.

2. Related Work

Literature reviews the causes of investment risk of financial funds. There are multiple agency relationships in the operation of financial funds, which easily leads to a large amount of information asymmetry among investors, fund managers, and investment companies, which determines that there are hidden risks in the investment process of financial funds [8]. From the source of financial investment risk, it can be divided into systematic risk and nonsystematic risk. According to the life cycle law, these risks can be divided into preinvestment risk, medium-term risk long-term risk, and postinvestment risk. The risk factors and influencing factors in different stages are different, which together constitute the overall risk of financial investment [9]. The literature analyzes the advantages and disadvantages of many venture capital systems, and then uses the concept of analytic hierarchy process to develop a system that can predict the whole financial investment risk according to the relevant experience of the development and operation of venture capital systems [10]. Throughout the financial investment risk prediction system, its core business is divided into five core function modules: core knowledge base, core data maintenance, prediction module, early warning processing module, and report module [11]. The literature studies the mechanism of risk formation in financial investment. On the basis of analyzing the risk factors of financial investment, this paper makes an in-depth study on the formation mechanism and internal laws of financial investment risk [12]. According to the different investment strategies of financial funds, the form of portfolio investment can spread the investment risk. Different types of investment have different risk levels and return rates [13]. The external warning sources formed by the external environment and the internal warning sources formed by themselves have a high communication effect. With the fluctuation of the capital market, financial investment risk has a strong role in transmission, infection, and amplification. The paper designs the contagion risk model of financial investment and carries out numerical simulation test to explain the formation mechanism of financial risk in investment [14]. The basic theories of statistical learning theory and vector machine support are described in the literature; Then, the basic framework of the financial investment risk prediction model based on vector machine is established, and the specific steps of the model recognition and the potential problems to be solved are given in the empirical research stage, and the specific model is demonstrated and implemented in combination with actual cases.

3. Principle of Edge Calculation

3.1. Mobile Edge Computing Framework. Mobile edge computing system is located between wireless access point and wired network. In cellular telecommunication networks, mobile edge computing systems can be deployed between wireless access networks and mobile networks. The mobile edge computing system provides public cloud services and hybrid cloud services through cloud computing facilities (i.e., edge cloud) deployed at the edge of wireless base stations or wireless access networks, as shown in Figure 1.

Cloud resources are planned and managed by the virtualization software environment and are implemented based on the specific cloud platform provided by the mobile edge computing system, such as openstack. Third-party applications can be deployed in the edge cloud as virtual machines or run independently. Wireless networks can present their functions to third-party applications through platform intermediaries. The IT infrastructure of the edge cloud is only managed by the mobile edge computing system, and only provides the mediation call and routing connection functions to the private cloud platform.

3.2. Neural Network Algorithm. Artificial neural network (ANN) is called neural network (NN). It can imitate the structure and function of biological neural network, and then use distributed information processing to meet the computing or mathematical model. A large number of neurons calculate properly at the same time, and the purpose of information processing can be achieved by adjusting the connections between internal neurons.

As the simplest neural network, perceptron has only two layers: input layer and output layer. In the input layer of the first layer, the function of the neural unit is only responsible for data transmission and no other calculation. However, in the output layer, the neural unit must calculate the information input from the previous layer, which is usually referred to as the calculation layer. With the continuous expansion and development of neural network, there will be multilayer neural network model and deep neural network model in the future. The difference between these models is the number of layers of the calculation layer. The perceptron dynamically optimizes the input weight information according to various training algorithms and adjusts the weight value to make the neural network have better training effect.

The working process of the perceptron includes five steps: initialization and activation of the input signal,

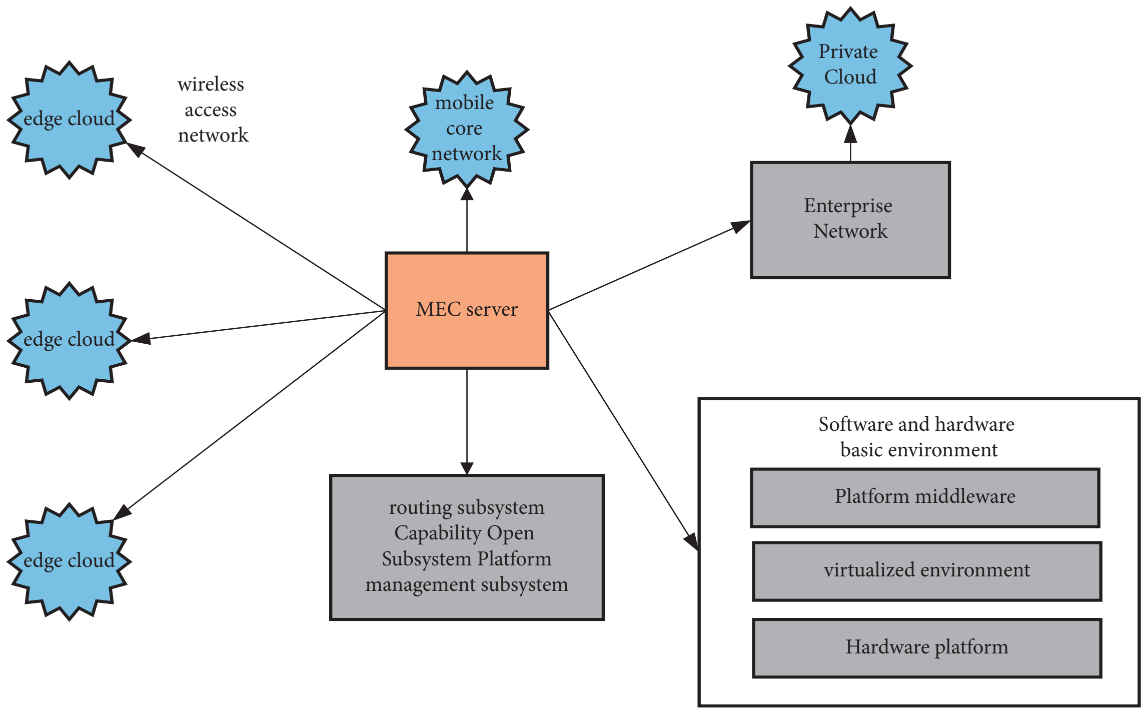

Figure 1: Mobile edge computing architecture.

calculation of the output value, dynamic optimization, and circulation of the weight, where $x\ (n)$ is the $m+1$-dimensional input vector, $w\,(n)$ is the vector corresponding to the weighted value $m+1$, and B is the offset value, η is the learning rate, $y\ (n)$ is the actual output value, and $D\ (n)$ is the expected output value. The specific mathematical formula is shown as follows:

$$x\,(n) = [1, x_1\,(n), x_2\,(n), \ldots, x_m\,(n)]T, \tag{1}$$

$$w\,(n) = [b, w_1\,(n), w_2\,(n), \ldots, w_m\,(n)]T. \tag{2}$$

The actual output mathematical expression of the perceptron is shown in thefollowing:

$$y\,(n) = \mathrm{Sgn}\left[w^T\,(n)x\,(n)\right]. \tag{3}$$

The weight value is dynamically optimized through independent updating, and its mathematical expression is shown in (4).

Here, each neuron in the input layer represented by $X\,(n)$ is connected to each neuron in the next hidden layer. This connection is mathematically expressed as a matrix, and the mathematical expression of the neural network structure is given in the following:

$$z = w^T\,(x) + b, \tag{4}$$

$$a = \sigma\,(z). \tag{5}$$

In formula (5), σ Indicates sigmoid activation function. The difference between shallow neural network and perceptron is that it does not use SGN as the activation function. Sigmoid function and tanh function are commonly used in the neural network. Sigmoid activation function is often used as the threshold function of the output layer, which can map the output result into an interval (0, 1). Its mathematical expression is shown in equation (7):

$$\sigma\,(z) = \frac{1}{1+e^{-z}}. \tag{6}$$

When training the neural network model, because some algorithms use the classical gradient reduction method, this method will lead to the local optimal value of the error function in the convergence process rather than the global optimal value at that time. Therefore, the shallow neural network still has limitations.

The main structure of the recurrent neural network is the unexpanded part of the left RNN and the extended part of the RNN based on the continuous evolution of the right portal. *Xt* is the input, *ht* is the hidden layer state, and *yt* is the output. The above relationship can be expressed as

$$\begin{aligned} h_t &= f\,(h_{t-1}, x_t), \\ h_t &= f\,(W_{xh}x_t + W_{hh}h_{t-1} + b), \end{aligned} \tag{7}$$

where W is the weight matrix and b is the offset term. The output transformation formula is as follows. The type of function g depends on the task.

$$y_t = g\,(W_o h_t + b_o). \tag{8}$$

The LSTM introduces three control gates to replace the RNN cycle. The gateway control mechanism can effectively handle remote dependencies. It is believed here that the ability of the gating unit to prevent the accumulation of internal information not only learns the long sequence dependency in the process of advancing with time but also can choose to forget the redundant information to avoid overload.

The first stage: forgetting stage, through the forgetting gate. The forgetting gate *ft* controls the retention and forgetting of state information in cell CT-1. Using the sigmoid function, output 1 represents retention and output 0 represents forgetting:

$$f_t = \sigma\left(W_{xf}x_t + W_{hf}h_{t-1} + b_f\right). \tag{9}$$

The second stage: select memory. The gateway controls the level at which the entry currently enters the memory unit, and uses the tan *h* function to update the candidate memory amount:

$$\begin{aligned} i_t &= \sigma\left(W_{xi}x_t + W_{hi}h_{t-1} + b_i\right), \\ \tilde{c}_t &= \tanh\left(W_{xc}x_t + W_{hc}h_{t-1} + b_c\right). \end{aligned} \tag{10}$$

The input gate acts on the input information and the forgetting gate acts on the previous information in the memory. The weighted sum of the two gets the summary information. Update the amount of memory running on the memory drive:

$$c_t = i_t \circ \tilde{c}_t + f_t \circ c_{t-1}. \tag{11}$$

The third stage: output phase. The output gate controls the degree to which the memory stored in the memory unit is output. The sigmoid function is also used to determine the output phase, and then the tan*h* function is activated:

$$o_t = \sigma\left(W_{xo}x_t + W_{ho}h_t + b_o\right). \tag{12}$$

Calculate the current hidden layer HT with the updated memory cell:

$$h_t = o_t \circ \tanh\left(c_t\right), \tag{13}$$

where W is the weight matrix of the input process and b is the offset vector. The calculation formula of the three doors is the same. They use their own weight matrix and bias vector, and use *XT* and *ht*-to control the flow of information.

3.3. Advantages of Mobile Edge Computing. Compared with the traditional network architecture and model, mobile edge computing has many obvious advantages, which makes it an important technology of 5G in the future. The advantages of mobile edge computing are as follows.

3.3.1. Low Delay. MEC can "sink" the network computing and storage capacity. This method can be close to the user, so the user's request will not have to go through a long transmission network to the remote core network for processing. The local edge server can share part of the traffic and directly process it and then send it back to the user, thus significantly reducing the communication delay.

3.3.2. Improve Link Capacity. MEC servers installed at the edge of the mobile network can download local traffic data, further reducing bandwidth and core network bandwidth requirements. At present, there are many live broadcasting platforms, and many anchors on these platforms conduct live broadcasting on a regular basis. If these anchors broadcast live, multiple users will be able to access view and request resources on the same anchor. At this time, the requirements for bandwidth and connection status are very high. By deploying edge servers at the edge of the network, live video content can be cached in real time closer to users. User requests can be processed locally, reducing backhaul link bandwidth pressure, reducing link congestion and failure, and improving connection capacity.

3.3.3. Improve Energy Efficiency. Around the mobile network, the energy of the network is mainly composed of two parts: the power consumption of personal computing and the power consumption of data transmission. The introduction of mobile edge computing can significantly reduce the power consumption of the network. Because edge mobile computing itself has computing and storage resources, it can download the computing part locally and consider delegating tasks that require a lot of computing power to data centers or clouds that are farther away and more powerful for processing, so as to reduce the power consumption of core network control computing. On the other hand, with the progress of cache technology, the cost of storage resources is gradually reduced relative to bandwidth resources. The implementation of mobile edge computing is also a method to save bandwidth. Local internal storage can greatly reduce the need for remote transmission, thereby reducing transmission power consumption.

4. Design of Intelligent Financial Investment Risk Prediction System

4.1. System Architecture Design. The investment risk prediction system has been deployed on the Internet, so it must have relevant security protection functions, such as firewall, to ensure the security of the system. Here is the physical diagram of the system architecture, as shown in Figure 2.

As shown in Figure 2, the physical architecture design of the investment risk prediction system reuses some original equipment, including firewalls and database servers, reducing the software cost. Users can access the financial investment risk prediction system through a variety of ways, including PC end, mobile end, and PDA end, and must check through the firewall in advance. Generally, after the authentication is passed, the server processes the data as required by accessing the server, interacts with the database, and finally returns it to the user.

4.2. Design of Edge Computing Environment. As mentioned above, the operation environment design of the risk prediction system is shown in Figure 3. First, create an edge to edge group. Take the customs as an example, and take the General Administration of customs server as the central server to divide regions. Customs servers in the same region are consolidated into a cluster, and all edge devices in the cluster are used to collaborate on regional tasks. The blue

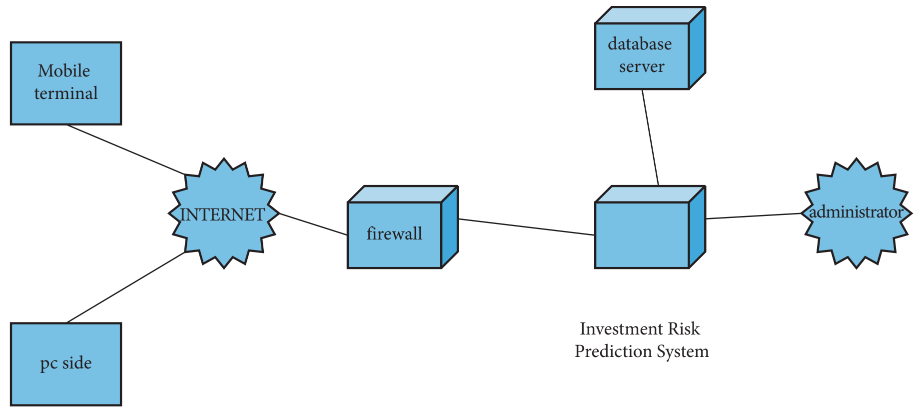

Figure 2: System deployment architecture diagram.

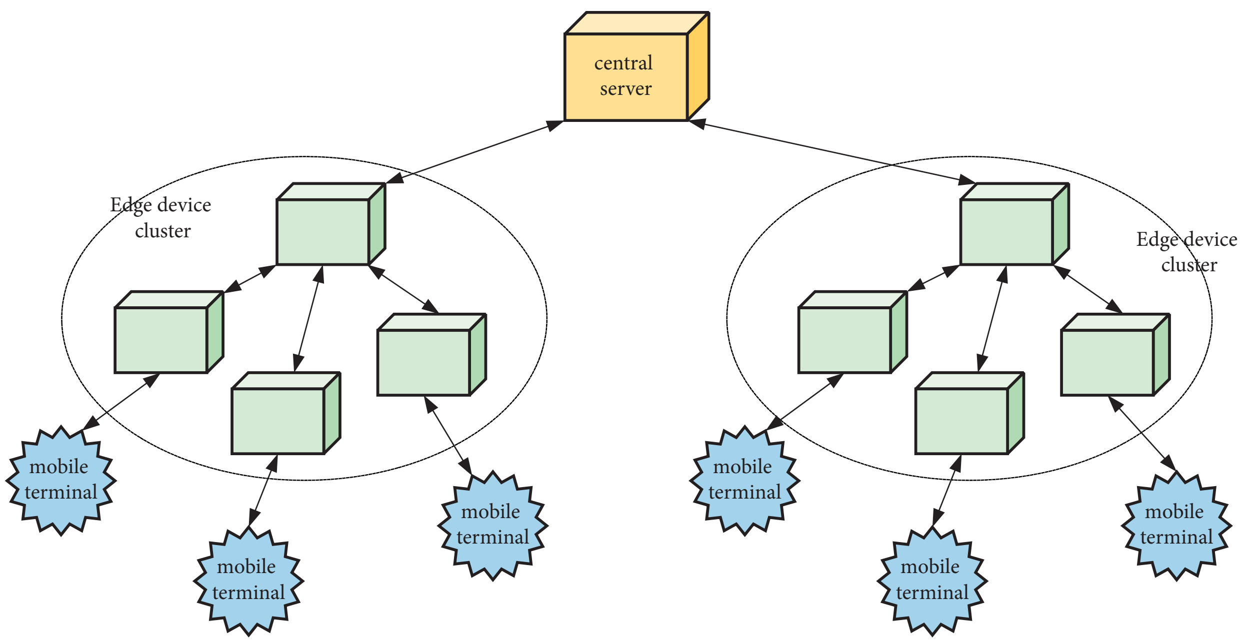

Figure 3: System operation environment diagram.

solid arrow indicates the data flow transmitted by the user. The process is as follows.

First, the user uses the mobile device to send the data that needs to be processed by the edge device, and then the edge device processes the data transmitted by the user.

After data processing, the edge device loads the data to the edge center, and the edge center loads the received data to the central server.

The red dashed arrow in Figure 3 shows the download data flow. The specific download process is as follows.

First, after the central server receives the data uploaded to the edge center, it first distributes the data according to the manual control strategy and downloads part of the data to the edge center.

Then the central server starts the risk prediction work, and the machine early warning strategy detects the load of the central server in real time and determines whether additional work is required to download the central data according to the change of the server load.

If the prediction strategy of the machine decides that more work needs to be done to download the data, the central server will continue to download the data of the edge center. If the edge center receives the downloaded data from the central server, it uses the edge cluster policy to determine the amount of data required by each edge device in each existing cluster, determines the cluster policy to allocate data according to the edge, and transmits the data to the cluster edge device.

After receiving the data transmitted to the edge center, the edge device will start the risk prediction.

Finally, the edge device sends the prediction results back to the user interface for the user to view.

4.3. Specific Algorithm Design. The rational expectation Baumol equation is introduced to describe the transfer of financial investment risk. This argument holds that the prices of stocks, bonds, and other securities are as cyclical as financial investment, and the second-order equation of their price difference is

$$P_t = 2AP_{t-1} - P_{t-2} + Z, \tag{14}$$

where A and Z are constants ($Z > 0 \geq A$), and $|A| < 1$. In addition, (14) can also be expressed in the following trigonometric function form:

$$P_t = V \cos \alpha t + S \sin \alpha t + R, \tag{15}$$

where $R = Z/2\ (1-A)$ is equal to the standard value of investment, that is, the equal average value of price, independent of time t, where cosa $= A$, V, S, and R are constants. Price period p at $= 360$ and wavelength of period $T = 360/\alpha$. The price peak appears in (19) and the low value appears in (20):

$$P_t = \frac{\sqrt{2}(V + S)}{2} + R, \tag{16}$$

$$P_t = -\frac{\sqrt{2}(V + S)}{2} + R. \tag{17}$$

If the total excess demand function of the nonspeculator at time t is

$$E_{nt} = K - WP_t + 2WAP_{t-1} - WP_{t-2}, \tag{18}$$

where K, W ($W > 0$) are constants. (18) shows that the demand of nonspeculators is affected by current prices and price trends. If speculators are introduced, their excess demand function is

$$\begin{aligned} E_{s,t+1} &= C\left[(P_{t+1} - P_t) - (P_t - P_{t-1})\right] \\ &= C(P_{t+1} - 2P_t + P_{t-1}), \end{aligned} \tag{19}$$

where C is a positive number. (19) shows that the demand of speculators belongs to the category of "chasing up and killing down". Generally speaking, if the investment price rises rapidly, the speculator will accelerate the investment and investment scale, otherwise it will decrease. In particular, if the price is $pt + 1$, when it exceeds the "peak" point, speculators will sell assets, and their demand is negative. If the price of Pt + 1 is in the "lowest" state, the demand speculator is positive and they will buy the asset. According to the operating cycle of the investment asset price, the above formula is brought into (19) to obtain the demand function after the entry of speculators:

$$\begin{aligned} E_{s,t+1} &= C(2AP_t - P_{t-1} + Z - 2P_t + P_{t-1}) \\ &= C\left[2(A - 1)P_t + Z\right]. \end{aligned} \tag{20}$$

Since $|A| < 1$, (20) can be written as

$$E_{s,t+1} = -D(P_t - R). \tag{21}$$

Among them, $D = 2C\ (1-A)$ is a normal number, which also confirms the strategy of "buy low and sell high", that is, if the speculator thinks the price is higher than the standard quantity at this time, he will sell the asset. If the asset is less than its basic value, the asset is purchased.

However, due to the entry of speculators, the balance of the capital market is often broken. In the new equilibrium state, the sum of the demand functions of speculators and nonspeculators is zero, that is, ENT + EST = 0. Therefore, there are

$$K - WP_t + 2WAP_{t-1} - WP_{t-2} + C(P_t - 2P_{t-1} + P_{t-2}) = 0. \tag{22}$$

The solution is

$$P_1 = \frac{K}{W - C} + \frac{2(WA - C)}{W - C}P_{t-1} - P_{t-2}. \tag{23}$$

5. System Experiment and Result Analysis

5.1. System Performance Test. See Table 1 for the user login system performance test results.

See Table 2 for the test results of early warning data processing performance.

It can be seen from Tables 1 and 2 that the total system response time of 300 concurrent users is maintained at about 1 second, which can meet the general system performance requirements.

5.2. Selection of Test Samples. In order to verify the effectiveness of the multiclassification voting portfolio model, five methods are selected in this paper. Through the experimental comparison and training of different models with a single classifier, it is proved that the combination of voting model and multiple classifiers of equity investment risk is effective in predicting investment risk. At the same time, according to the principle of diversity and individual optimization, the single training sample modeling is optimized to obtain the basic classifier, and a system combining voting and multiple classifiers is established. Table 3 shows the sample results of forming a classifier for predicting financial investment risk and combining it into a combination of multiple classifiers.

5.3. Analysis of Experimental Results. The relative error comparison is shown in Table 4. It can be seen from the table that the relative error of the test samples is controlled within 5%, which can meet the accuracy requirements of investment risk prediction.

Table 5 shows the comparison between actual values and predicted values of test samples of polynomial kernel function model.

5.4. Optimization Strategy of Intelligent Financial Investment Risk Prediction System. After the subprime mortgage crisis, countries all over the world have strengthened their financial management, mainly focusing on the comprehensive disclosure of financial investment information. Since the end of last century, although the financial capital information disclosure system has achieved consistency in the regulatory standards and norms in the field of financial capital industry,

Table 1: User login system performance test results.

Test name	Test user login performance					
Test function	User login					
Testing purposes	User login data in the maximum concurrent environment of the simulation system					
Test steps	The simulation system fills in the user's username and password, and log in to the system					
			Number of users and transaction execution			
Number of concurrent users	Average transactions per second	Maximum transaction response time (seconds)	Average transaction response time (seconds)	Transaction success rate	Hits per second	Average traffic (bytes/sec)
100	21.21	0.518	0.341	100%	100	457772.4
200	72.348	0.74	0.619	100%	107.379	578238.821
300	91.761	1.086	0.956	100%	129.804	542545.066

Table 2: Early warning data processing performance test results.

Test name	Test system early warning data processing performance					
Test function	Early warning data processing					
Testing purposes	Early warning data processing in the maximum concurrent state of the simulation system					
Test steps	Add continuous ID warning data to the background database. After using the performance test software and other systems, the simulation warning data is processed based on the setting ID and the warning processing content.					
Number of users and transaction execution						
Number of concurrent users	Maximum transaction response time (seconds)	Average transaction response time (seconds)	Average transactions per second	Transaction success rate	Hits per second	Average traffic (bytes/sec)
100	0.577	0.233	54.876	100%	114.871	511383.2
200	0.84	0.495	81.033	100%	130.939	788013.427
300	1.134	1.087	114.991	100%	200.297	920332.2

Table 3: Experimental results of training samples of multiclassifier combination.

Data set	DT	MDA	SVM	Logit	NNs	Comprehensive
1	85.16	80.24	87.58	79.72	83.07	94.18
2	83.42	80.61	87.56	80.87	87.29	92.71
3	80.20	78.20	89.30	80.07	86.58	95.50
4	83.90	76.02	86.45	77.46	89.86	93.30
5	82.06	79.59	87.61	81.96	88.25	96.02
6	79.26	77.69	82.62	79.39	85.50	94.22
Average	81.22	77.77	86.50	81.32	86.84	94.79
Variance	7.21	4.82	6.94	4.70	5.27	1.17
Discrete coefficient	0.09	0.06	0.08	0.06	0.06	0.01

Table 4: Comparison between predicted results and actual values of RBF kernel function model.

Project number	Predictive value	Actual value	Relative error
A	0.58600	0.56489	0.03767
B	0.72220	0.72003	0.00305
C	0.30729	0.30209	0.01738
D	0.36797	0.35401	0.03984
E	0.62579	0.62610	0.00051

Table 5: Comparison between predicted results and actual values of polynomial kernel function test.

Project number	Predictive value	Actual value	Relative error
A	0.57192	0.56489	0.01257
B	0.72766	0.72003	0.01072
C	0.31011	0.30209	0.02683
D	0.35280	0.35401	0.00342
E	0.61635	0.62610	0.01573

we still need to look at this issue from the perspective of development and strengthen it from the following parts:

Information focus and financial investment risk control need to be further strengthened. Project information related to financial capital and ultimate control is not only visible in this field but also common in other fields. Therefore, the disclosure of equity investment information must follow the principle of self-discipline and strict supervision. With the rapid economic growth, there are more and more new exit channels and more financial investment information disclosure. However, there are still some information that do not clearly stipulate the form of disclosure. For example, as a financial limited partnership simulating the shareholders of listed companies, in disclosing relevant information, it not only strengthened the management and attention of daily life information but also improved the openness of the financial capital industry, thus improving the openness and fairness of fund operation.

Establish a sound financial investment disclosure system. The financial investment disclosure system must include three components. First, when an institution discloses information to the public, its information content must include the information of funds raised in the capital market. Second, when disclosing information to investment institutions, the content should not only include relevant information such as operation and financial management but also include relevant information such as recruitment, events with potential risks, and possible risk tips. Third, the information disclosed to the regulatory authority should include a series of issues such as the inspection of the total number of investors, the financial capital preparation plan, the key quantity related to the information disclosure, the disclosure object, account opening, business development, and investment scope.

Additional classification of financial equity information disclosure: With the continuous growth of China's economy, different classification methods of financial investment funds have produced different portfolios and new products. From the perspective of the development speed of China's existing financial investment funds, China's financial investment funds are mainly classified according to the investment subject, investment scale, and investment characteristics. At present, there are many new financing methods in the market: private equity funds, direct investment bank funds, mezzanine funds, direct investment securities company funds, government investment funds, foreign private investment funds, fund industry integration, private equity investment funds based on trust system, etc. Therefore, for different types of equity funds, it is necessary to carry out further hierarchical management of their information disclosure.

Further strengthen the management and supervision of new products and financial funds of enterprises. Innovation is the driving force of progress. Without innovation, there will be no progress. China is a large developing country. With the continuous economic growth, China's Internet finance is also changing. The financial business is increasingly developing in the direction of mixed operation. The fund is gradually exploring its own path of change and innovation in the future. In order to protect the legitimate rights and interests of investors, avoid further risks for financial investment funds and prevent management failure, it is necessary to strengthen the management of stock exchanges, update the disclosure standards, manage investment products, and improve the standards for information disclosure efficiency.

Establish a framework of financial information disclosure based on dynamic management. For regulators and investors, information disclosure plays a very important role: first, it reduces the incompleteness of information retrieval; second is to reduce moral hazard; third, restrict privileged trade. In the management and governance of the financial capital industry, its key role is to prevent leverage risk and capture incomplete information. If investors want to know the real situation of the company, prevent financial risks, and strengthen the risk supervision of regulators, dynamic information disclosure is an effective and vital way for them. In order to prevent the occurrence of financial equity investment risks, it is necessary to establish a dynamic management and management mechanism based on financial information disclosure and strengthened by nonfinancial information disclosure.

6. Conclusion

With the rapid economic growth, the status of financial investment has become increasingly prominent. China has set up special research projects to deal with the operational risks in the process of financial investment. Strengthening risk control in the process of financial investment is an important way for investors to avoid risks and reduce asset losses. Mastering the investment risk assessment and risk control classification of various commodities is of great significance to the establishment and development of relevant systems and mechanisms of investors. Based on this point, this paper introduces the edge computing technology into related fields, introduces the mobile edge computing framework, identifies the advantages of mobile edge computing, and then completes the design of intelligent financial investment risk prediction system through system architecture design, edge computing environment design, and specific algorithm design. The test shows that the system can effectively predict the risk of financial investment and hope to be helpful to China's financial investment.

Data Availability

The data used to support the findings of this study are available from the author upon request.

Conflicts of Interest

The author declares that there are no conflicts of interest.

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