

Research Article

Optimization Model of Employment and Entrepreneurship Guidance for University Graduates Using Credible Neural Network and Spark Big Data Technology

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China's economy has grown significantly since the turn of the century, and its domestic situation has become more stable. The employment and employment issues that college graduates encounter across the nation, however, demonstrate the opposite tendency. The general public's attention has turned to "difficulty in getting employment," which has emerged as a crucial component of the overall social employment problem. Additionally, it examines the environment and elements that influence college students' employment, such as the social, economic, and policy elements as well as the university, employer, and individual elements. This study examines the development of college students' entrepreneurial service system by using colleges and universities as the research object and integrating theoretical analysis with empirical research. The M Apriori technique is then parallelized using a Spark and Credible neural network-based approach. This solution makes full use of Spark's benefits based on in-memory processing and data item RDD storage by adopting data parallelism and a local rather than global strategy. The M Apriori algorithm is parallelized and ported to the Spark platform for parallelization, enhancing Spark MLlib. The simulation test and analysis are completed in the end. The study's findings demonstrate the algorithm's excellent accuracy, which is 8.65% greater than that of the Apriori method. Finally, the experimental findings demonstrate the effectiveness of the method used in this paper.

1. Introduction

The service system has evolved from information acquisition and meeting the fundamental needs of communication and entertainment to personalized or customized services that integrate and link social, medical, educational, transportation, and other services with the introduction of the "Internet +" action plan, the rapid development of Internet and Internet of things technology, and the arrival of the cloud era [1, 2]. Local regular colleges and universities have given local college students and graduates the necessary support and services to encourage and assist them in starting their own enterprises. This type of necessary guidance and service is a major strategy and measure put forth by the major universities for the construction of an innovative nation at this stage. It is a crucial step to strengthen the teaching reform of higher education, foster the inventive

spirit of college students, and develop their practical ability. It is also a necessary way to encourage college graduates to increase their employment levels [3].

In the national network video conference on the employment of ordinary college graduates, Yuan Guiren, Minister of Education, stressed that "doing a good job in the employment of college graduates is conducive to building a strong country in human resources, ensuring and improving people's livelihood, and promoting the sustained and healthy development of higher education." Therefore, it is of great significance to solve the employment problem of college graduates. The entrepreneurship service industry is an emerging industry. It mainly provides highly systematic innovation and entrepreneurship services for entrepreneurial enterprises, covering multiple functional elements such as maker space, incubator, accelerator, entrepreneurship coffee, and entrepreneurship community, as well as

entrepreneurial activities with rich content and high-frequency words, to create an entrepreneurship service ecosystem [4]. Therefore, the entrepreneurship service industry is of great significance for the country to promote innovation and entrepreneurship economic development mode. However, due to the restriction of domestic economic development level and the obstacle of social ideology, the innovation and entrepreneurship service industry has been developing for 20 years before it began to break out at the beginning of this century. Thousands of innovation and entrepreneurship service enterprises of different types emerged, ranking first in the world in terms of number, providing a good growth and development platform for entrepreneurial enterprises in all walks of life [5]. But since China's economy as a whole lagged behind in its development, a sizable amount of the country's GDP still comes from an economic structure dominated by heavy industries and agriculture. In light of this, it is extremely challenging to alter the economic structure and style of development through "mass innovation and entrepreneurship." As a result, the growth of the innovation and entrepreneurship service sector is also challenging. Although there are more businesses in the industry, a significant number of businesses have also vanished due to intense rivalry [6].

The state administrative departments at all levels successively released the State Council's opinions on further doing a good job in employment and entrepreneurship under the new situation, the Ministry of Education's notice on doing a good job in employment and entrepreneurship of graduates of regular colleges and universities in the 20th century, and the notice of the general office of the Ministry of Education on carrying out and utilizing the "Internet +" new employment mode to its fullest extent to create a precise docking service platform for supply and demand through employment networks, mobile phone SMS, employment apps, Wechat, and other channels, compare the database of graduates' job search intentions with the database of employers' job demand information, intelligently match key information like education, specialty, and region, and accurately push the necessary supply and demand information for graduates, providing college graduates with correct docking services, policy, and direction [7, 8]. The most active and reliable source of employment is entrepreneurship. According to a poll conducted by the organization for economic cooperation and development, all of the employment opportunities in society are provided by entrepreneurs and small- and medium-sized business owners. They will increase wealth and offer society immeasurable employment prospects if they can continue to encourage entrepreneurship and the growth of small and medium-sized businesses [9]. Entrepreneurship is crucial for boosting the economy and generating job opportunities. The most revolutionary factor driving future economic and social progress is entrepreneurship [10]. A number of assistance programs have been released by the Chinese government at all levels and numerous colleges to encourage some college students to find jobs through self-employment. Entrepreneurship among college students is becoming a significant method and approach for increasing student employment.

Additionally, existing data demonstrates that, in terms of promoting entrepreneurship in China, college students have an entrepreneurship rate of just about 2% and entrepreneurial motivation that is lower than that of middle-aged individuals. College students' entrepreneurship has been hampered by their lack of a concept of independent entrepreneurship, inability to think independently, imprecise entrepreneurial goals, scarcity of original entrepreneurial ideas, and inadequate market knowledge. Its ingenuity lies in the following.

The starting point of this study is based on the guarantee system of college students' independent entrepreneurship in local colleges and universities. From the perspective of research, there are still few scholars who pay attention to this issue, and there is a lack of complete theoretical construction for the service system of college students' independent entrepreneurship. And the previous studies are all on the macro level. The research of this paper focuses on the implementation of policies, which is more targeted.

2. Related Work

At present, group computing based on the man-machine cooperation mode is still in the stage of research and development. Group computing tasks often cover various professional fields, so it is necessary to adopt reasonable strategies to use network platforms, Internet users, and other group resources to accomplish computing tasks together. Therefore, the focus of group computing is to study the task allocation strategy. The traditional allocation strategy adopted by group computing is just to randomly allocate tasks. However, in the real big data application environment, Internet users are virtual and complicated and have different knowledge backgrounds and credit degrees. The random allocation strategy cannot satisfy the dependence of group tasks on knowledge.

Chen et al. proposed to "promote employment through entrepreneurship," and local governments and universities actively responded and cooperated. Various entrepreneurship education and training centers, entrepreneurship bases, and incubation parks have sprung up one after another to encourage college students to start their own businesses. However, the current situation of entrepreneurship among college students in China is still not ideal [11]. Liu proposed optimizing the distribution mode in combination with the ant colony algorithm. The optimized population calculation can give corresponding positive and negative feedback to the final distribution result. However, the ant colony algorithm is easy to reach the local minimum value in the case of large data volume and cannot finally obtain the optimal distribution strategy [12]. Gonzalez Roma et al. expounded the basic contents of the employment service system for Chinese graduates, pointing out that the system is mainly composed of the Ministry of Education, the Ministry of Human Resources and Social Security, and its employment service departments such as talent exchange service centers at all levels, universities, and vocational intermediary agencies and aims to complete the information collection of college graduates, build an employment information platform,

conduct professional vocational consultation and vocational education, strengthen skills training, and provide employment practice. Improving management services such as social security for graduates has laid a foundation for further research on the employment service system for college graduates in China [13]. Fini et al. put forward suggestions for improving the employment service system of college graduates in China from the perspective of management departments. They believe that the role of the Ministry of Education and other administrative departments should be fully brought into play to transform government functions [14]. Addario and Vuri pointed out that the focus of the improvement of the employment service system for college graduates in China is to form an effective information transmission and feedback mechanism among relevant administrative departments through the establishment of a talent network database covering all colleges and universities across the country and give full play to the role of various departments [15]. Suddaby et al. focus on the study of the mode of employment service system for college graduates in China. According to the research, the existing system focuses on vocational training and employment ability training, establishes an information platform, and implements the multibody system of school leadership, government guidance and support, enterprise participation, and student learning and practice, which jointly promotes the establishment of the employment system for college graduates in China [16]. Kang and Xiong believe that private colleges and universities should take the professional characteristics of students as the basis and establish a perfect employment guidance curriculum system to make the employment guidance curriculum run through the career of college students. She emphasized the importance of employment guidance teachers with professional skills, which can enhance the practical operation ability of students through practical teaching and complete the training objectives of employment guidance courses in private colleges [17]. The definition proposed by Zhao et al. has been accepted by more and more people. They believe that entrepreneurship is not only the creation of a new enterprise but also the successful operation of a new enterprise after its creation, that is, entrepreneurship within the company [18]. Cheng et al. proposed a task assignment algorithm based on game theory to detect the accuracy rate of task completion by people with the same professional background and knowledge level and solved the problem of group task assignment for users with the same level of knowledge and professional background. However, these two task assignment methods still have the problem of low assignment accuracy [19]. Chen proposed an improved user theme perception iterative group computing model based on "crowdsourcing." This model uses a large number of task testing questions to iteratively detect the professional background of different users and the accuracy rate of completing tasks and assigns tasks of corresponding topics to users with a full understanding of their real themes and accuracy. This model overcomes the difficulty of random assignment mode, However, the model still has some defects such as low accuracy, high cost of task testing, and unstable extraction for different topics [20].

3. Methodology

3.1. Research on the Service System of College Students' Entrepreneurship. As early as the 1980s, a few college students started their own businesses in China. Only because of the influence of the objective environment, at that time, the number of college students in China was small, and they were scarce talents. With academic qualifications as the guarantee, their entrepreneurial situation and prospects are very good. In recent years, the large-scale enrollment expansion of major universities in China for many years has led to a sharp increase in the number of college students. However, the market demand has not changed fundamentally, and the employment situation is becoming more and more serious. As a part of the entrepreneurial army, college graduates, compared with ordinary workers, have relatively more systematic and solid professional knowledge, have a stronger comprehensive ability, and can find, establish, and use a relatively complete social resource chain. They have fully possessed the basic abilities required to become an excellent entrepreneur, but they still need further training in psychology and experience. College students' independent entrepreneurship is a process in which college students make rational use of college and social resources, through individuals or teams, with the help of innovation consciousness, seek development opportunities, and constantly grow and create value. In this process, many college students have no enthusiasm, and few can put their ideas into practice. Among the few who put them into practice, many entrepreneurs have low scientific and technological content, can not keep up with the development of the times, and are washed away by the waves.

College students are a relatively special group in the labor market. In the broad sense, they include all college students with a college education or above. In the narrow sense, they only refer to the general students and students with the same education, and the choice and implementation of careers in social occasions. College students' employment is distinct from regular employment in some ways. (1) Specialization: when compared to the employment of regular people, college students are significant human resources, and their labor market is a talent market. Consequently, special career fairs are frequently conducted for recent graduates. (2) For the first time, college graduates are employed for the first time after they have completed their studies. The forms include formal confirmation of work units or admission to graduate students before leaving the university, obtaining double degrees, upgrading from a junior college to an undergraduate, studying abroad, and working abroad. (3) Timeliness: college students usually graduate in June and July of each year. This period and the time before and after it often become the golden period of employment. Once they fail to get employment, they often need to wait for opportunities in the coming year. (4) Mass, with the continuous expansion of university enrollment, more and more college students enter the market for employment every year, and a large-scale group has been formed. Once a large-scale group is difficult to find employment, it will bring many social problems. Colleges and

universities are the main body of employment guidance service work, and college students are the object of employment guidance service work. Employment guidance, professional guidance, career planning, and entrepreneurship guidance are the main contents of the employment guidance service system. Personalized guidance, internship practice, psychological consultation, follow-up investigation, and information service form a complete employment guidance service system, as shown in Figure 1.

As the main body of graduate employment guidance services, each university has set up a special graduate employment service institution "Employment Guidance Center" and arranged full-time staff to be responsible for the employment management of graduates. The organization mainly arranges the employment guidance courses of the school, conducts employment consultation, organizes recruitment propaganda, and collates and publishes employment information, employment policy consultation, and employment formalities. The series of campus activities are closely related to the employment guidance service, such as understanding the employment situation, cultivating the awareness of innovation and entrepreneurship, designing career planning, learning professional knowledge and skills, participating in social practice, conducting psychological counseling, participating in enterprise recruitment, and signing employment contracts. The employment guidance service helps college students prepare for employment in terms of ideology, concept, psychology, and ability, so as to help graduates improve their employment efficiency and success rate more effectively.

3.2. Task Assignment Algorithm Based on Big Data Population Computing. The software architecture of the employment service system adopts the B/S architecture mode. The system develops system functional modules in the form of plug-ins based on the dtcms open source content management system developed by Shenzhen power QIHANG Software Co, Ltd. The dtcms system is a lightweight architecture, and the system framework adopts the typical h-tier architecture, suitable for small- and medium-sized information and enterprise stations. Different channels can be independently established according to user needs, and plug-ins can be inserted and dialed to make expansion easier. This method designs the whole process of task assignment. Before assigning a calculation task, the task submitted by the publisher is modeled and preprocessed. At the same time, the real theme of the receiver and the accuracy and integrity of the corresponding theme are modeled. In the process of task allocation, the task matching is performed iteratively by designing a receiver that accurately perceives the subject of the computing task, so that the computing task can be more accurately allocated to the appropriate user, and the processing task is more targeted. The calculation model of user task allocation and processing based on user topic accurate perception is shown in Figure 2.

According to Figure 2, each employer has the traits of a large number and size of group computing jobs, complicated types, and wide disciplines when submitting big data analysis and processing group tasks on the "service" platform. As a result, the

focus of this part is on researching and developing a task model that can handle massive data group activities in batches.

This paper chooses a clustering algorithm that can automatically determine the number of clustering categories by studying the popular clustering methods and evaluating whether they can be used for large amounts of data, whether they can handle different data types, and whether they can find different types. It is a preprocessing step that can be applied to other analysis algorithms. Studies that have already been done have shown that it can be improved on a cloud platform, which is helpful for upcoming studies. To determine the extent to which each data point is a member of a specific cluster, the technique utilized in adaptive clustering uses membership degree. When the goal function converges, clustering can be stopped, and the number of cluster centers can be determined adaptively. The main steps in the algorithm process include calculating the distance between a point and the cluster center, calculating the membership degree of each point to the center, finding the cluster center iteratively, and choosing the objective function. The following definitions describe the computation activities involved in the algorithmic process:

$$\text{Dist}_{ij} = \|\text{Task}_i - C_j\|. \quad (1)$$

Dist_{ij} denotes the Euclidean distance between the i task Task_i and the j cluster center C_j .

$$F_{ij} = \left[\sum_{c=1}^k \left[\frac{\text{Dist}_{ij}}{\text{Dist}_{ic}} \right]^{2/m-1} \right]^{-1} = \left[\sum_{c=1}^k \frac{\text{Dist}_{ij}}{\text{Dist}_{ic}} \right]^{-1}, \quad (c = 1, 2, \dots, K). \quad (2)$$

F_{ij} is the membership degree of the i task to the j cluster center. Among them, c is the c cluster center, m ($m \in (1 \sim \infty)$) is the fuzzy index, and the best value is 2 according to experience.

$$\text{Sum}(F_{ij}) = \sum_{j=1}^K F(i, j), \quad (i = 1, 2, \dots, n). \quad (3)$$

The membership degrees from each cluster center to task i are added up as $\text{Sum}(F_{ij})$. The cluster centers' number is indicated by j and k .

$$C_j = \frac{\sum_{i=1}^n (F_{ij}^m \cdot \text{Task}_i)}{\text{Sum}(F_{ij})}. \quad (4)$$

C_j denotes the j cluster center. The membership degree i from the task j to the cluster center F_{ij} is calculated by formula (3), and the membership degree of the j cluster center and the membership degree $\text{Sum}(F_{ij}) = 1, m$ to be satisfied are fuzzy indexes.

$$J_m = \sum_{i=1}^n \sum_{j=1}^k F_{ij}^m (\text{Dist}_{ij})^2, \quad (i = 1, 2, \dots, n; j = 1, 2, \dots, K). \quad (5)$$

The j cluster center's objective function is calculated using J_m , n , the overall number of tasks, and m , the fuzzy index.

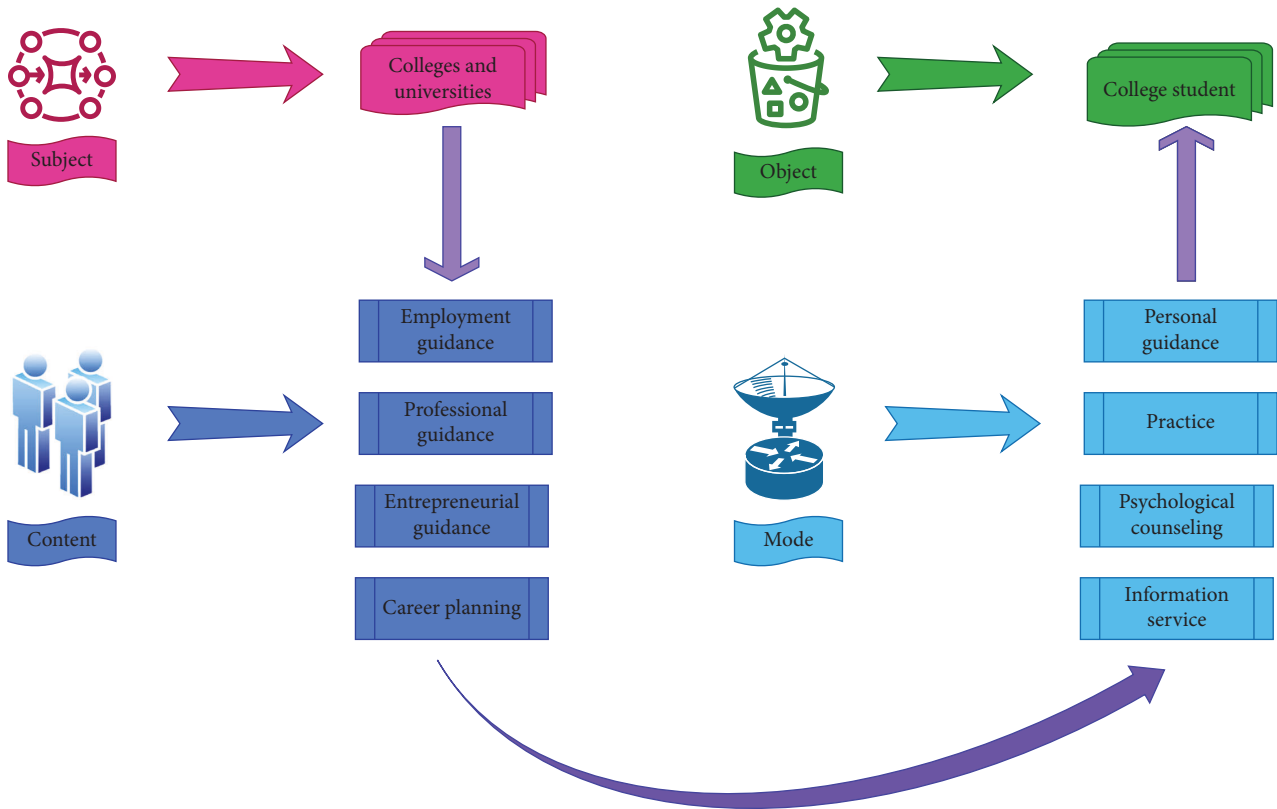


FIGURE 1: Composition elements of college graduation employment guidance service system.

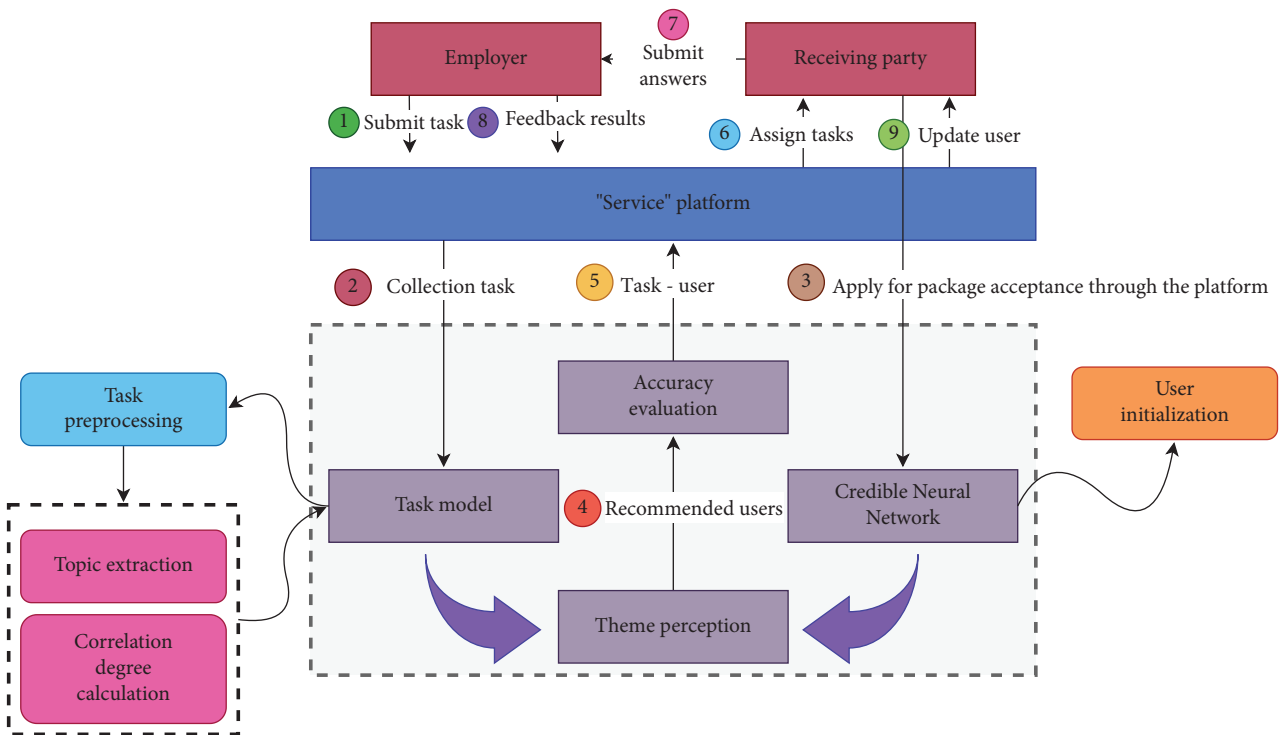


FIGURE 2: Flow chart of task allocation algorithm for big data group computing users.

3.3. Apriori Algorithm Optimization. Although entrepreneurship education is on the rise in China, many schools and universities have not yet fully embraced it. Therefore, the following challenges will unavoidably arise when building the entrepreneurial service system. (1) College students do not have very high levels of vocational cognitive ability. (2) University students have higher standards. (3) There is an issue with college and university talent development. (4) There are several issues with entrepreneurial education and guidance. Establishing a reliable and efficient service system for entrepreneurship and employment, as well as fostering and enhancing college students' innovative and entrepreneurial spirit and all-encompassing entrepreneurial ability, has become one of the criteria for evaluating the quality of higher education. These factors have a significant bearing on the implementation of entrepreneurship education in colleges and universities as well as the success of college students' businesses. The purpose of the entrepreneurial service system's internal guarantee system is to ensure that it operates as normal while incorporating modern, rational, and scientific management practices. Colleges and universities must start from the management, teachers, courses, students, funds, and practice bases in order to strengthen the entrepreneurship education of college students. This will help to ensure that all services are targeted and put in place in order to increase college students' entrepreneurial ability and success rate. The course is intended for a select group of college students with strong entrepreneurial potential and a strong business model. A major shift that will eventually take place is the true popularization of entrepreneurial education in the context of public education. Depending on how well entrepreneurial education is being implemented, professional-mandated courses and elective courses can be chosen. The needed courses may include theoretical ones like those for developing leadership skills, learning the fundamentals of business management, and marketing in the classroom, as well as practical ones like financial and logistics management in a company or entrepreneurship center. Finally, as a university, it should also seek and provide financial support for entrepreneurial college students in many ways and channels. It can apply for special funds, allocate funds from its own education funds, or even provide guarantees to the local government or banks for outstanding college students with bright entrepreneurial prospects and strong entrepreneurial ability, so as to avoid good projects that are not scabbarded and not tested.

When the platform distributes the group tasks submitted by the employer to the subcontractor, due to the large number of users of the subcontractor, their knowledge, wisdom, experience, and skills are different. In order to find the contractor who is suitable for executing the submission task, this paper uses user information map modeling and makes the qualified users receive the task, form the candidate sequence, then reasonably allocate the task through the proposed task allocation scheme based on topic perception, and finally complete the task. Therefore, this research needs to build a user model that can handle big data group tasks.

Due to the similarity between users, when a new user applies for receiving a package, it is only necessary to find the relevant users who have participated in the group task by

calculating the user similarity μ_{user} and initialize the new user through the similarity.

Initialization of Competence and Areas of Expertise. Competency records the average accuracy of users' tasks on different topics. Then, the user competency is defined as follows:

$$A_i = \frac{1}{n} \sum_{j=1}^n A_{\text{rate}_{ij}}. \quad (6)$$

A_i and $A_{\text{rate}_{ij}}$ denote the competence and accuracy of the user i to complete the j subject task, and n denotes the number of subjects.

- (1) When the user i has never participated in a group task, the similarity coefficient μ_{user} is calculated according to the Incomplete Attribute of the user. The more similar the user is, the closer the theme and accuracy rate are. Define the user's competence and expertise in this case as follows:

$$\begin{aligned} A_i &= \text{Max}(\mu_{\text{user}} \times A^{\text{Similarity User}}), \\ \text{Pro}_i &= \text{Pro}^{\text{Similarity User}}. \end{aligned} \quad (7)$$

- (2) When the user i has participated in a group task, calculate the correlation coefficient task between the subtopic j task and the user's historical task, and predict the accuracy of the user's task completion through similar tasks. The user competency under this condition is defined as follows:

$$A_{\text{rate}_{ij}} = \text{Max}(\mu_{\text{task}} \times A_{\text{rate}_i}^{\text{Similarity Task}}). \quad (8)$$

Therefore, the accuracy rate of the initialization i user completing the task of the topic j is defined as follows:

$$A_{\text{rate}_{ij}} = \text{Max}(A_i, A_{\text{rate}_{ij}}). \quad (9)$$

Integrity Initialization. The user's integrity is the standard to judge whether the user can complete the task well. C_{rate_i} indicates the user's true integrity.

- (3) When the user i has never participated in a group task, the user is given the right to participate. The initial integrity of the user is the minimum integrity threshold required by the task. Define the integrity of users in this case as follows:

$$C_{\text{rate}_i} = C_{\text{rate}_{\text{need}}}. \quad (10)$$

- (4) When the user i has participated in the group task, the initial integrity of the user in completing the task is the accuracy of the task actually completed in history

The Ratio of the Rate to the Accuracy Rate of the Predicted Task. Define the integrity of users, in this case, as follows:

$$C_{\text{rate}_i} = \frac{1}{n} \sum_{i=1}^n \frac{CR_i}{CY_i}, \quad (11)$$

where CR_i and CY_i , respectively, represent the accuracy rate of the actual completed task and the accuracy rate of the predicted completed task, and n represents the number of tasks.

The model is an important link in the employment service system to improve the quality of employment. Through in-depth communication with the candidate students, the employer can have a comprehensive understanding of the students. After the employer publishes the job requirements, the employer can view the resumes and other information of the students according to the recommended list listed by the system. In addition to the written materials, tsutomi allows students to upload personal style display materials and display students' learning and life, professional achievements, technical skills, etc. through pictures and videos. The employer can leave a message or send a short message to the students in the system to contact the students and can also use video interaction to further communicate.

4. Result Analysis and Discussion

The experiments used in this study are condensed and put into practice in a single-machine development environment. The efficiency of the allocation strategy investigated in this article is first confirmed by comparison experiments, and the performance of the allocation algorithm suggested in this paper is then measured in accordance with the caliber of each evaluation index in the experiment. This paper's experimental setup and software include Windows 7 + MyEclipse + Maven + Mahout API. Mahout currently offers a wide range of algorithm APIs, and many serial operation mode-based algorithms have been converted to map-reduce computing modes. This has a significant positive impact on the algorithm's data size and performance, which is crucial in large data group computing. Mahout has evolved from the Hadoop cluster platform that served as its first application platform. In addition to operating in a cluster, its technique may also be implemented in a single-machine setting.

In conclusion, the algorithm involved in the allocation strategy studied in this paper is mainly the secondary development of mahout in combination with Java, which is more optimized and more efficient than the algorithm written in pure Java. The task allocation of group computing is to use the existing "service platform" to publish tasks. In view of the complexity of the big data group computing task, the wide range of specialties, the large scale of the task, and the high dependence on cognitive reasoning technology, as well as the virtuality, diversity of knowledge structures, and rich professional levels of the users involved in the big data group computing task, this paper preprocesses the group tasks and the group users in advance and then performs simulation iteration in the task allocation process to match the users and tasks. The overall population calculation and allocation process include the following: (1) initialization of task party model, (2) receiving initialization of the task party model, (3) dynamic matching of user theme perception process, and (4) displaying the accuracy of allocation results.

In the simulation experiment, the experimental data designed above are used. First, the group task theme is obtained by the above algorithm; Since the description of each problem is composed of strings with a size of 20–100, the above algorithm is used to compare the similarity of the two strings, i.e., task similarity. At the beginning of the simulation experiment, the tasks with high relevance are divided into several sets. During the experiment, when applying algorithm 3, we consider the convergence and adaptability of tlda algorithm α, β . For the selection of values, this paper first uses the test set to find out the optimal hyperparameter value by a grid search to obtain the symmetric scalar value and then updates it according to the proposed fixed point iteration method proposed by ascensional to obtain α, β . The values are 0.1 and 0.01, respectively. When applying algorithm 4, in consideration of the rational utilization of resources, when the selected value of the critical value r of prediction classification is too high, the recall rate becomes high, making the query conditions too strict, and getting too few potential users. On the contrary, the prediction results are distorted and the resources are wasted. For this experiment, the cost is calculated by the 0–1 loss function, and the comprehensive value of R is 0.85.

This evaluation experiment mainly verifies that the task assignment algorithm proposed in this paper has better performance in accuracy and is better than the random assignment algorithm, as shown in Figure 3.

In the experiment, 200 cases of three real data sets were used, and three different algorithms were used to process the data. According to the analysis of experimental results in Figure 3, for the complete results of population calculation, the accuracy rate of the results obtained by the random algorithm is not high, which is basically between 45% and 65%, and the accuracy rate of completing wine tasks with large difficulty coefficient is significantly reduced. Through the analysis of the results of the simulation experiment under beta (5,1), it can be seen that the accuracy rate of the assignment algorithm studied in this document is better than that of the random algorithm, and the accuracy rate of completing tasks can reach about 78%, and the accuracy rate of wine task set and music task set is improved. Based on the assignment algorithm studied in this paper, the accuracy rate of completing tasks can be maintained between 75% and 85%. During the assignment process, this paper captures the possibility of completing tasks of participating users through logical regression calculation and can accurately assign tasks to participating users who are used in the background of professional knowledge in this field. Therefore, a high accuracy completion result can still be obtained on wine tasks.

This evaluation experiment mainly verifies that the task assignment algorithm proposed in this paper has good performance in task scale and scalability, as shown in Figure 4.

Three alternative algorithms were utilized in the experiment to process 50, 200, 500, and 1000 real data task sets of the car. When processing tasks of various scales, the random assignment algorithm's accuracy rate of task completion varies each time, generally falling between 45% and 65%, as evidenced by the study of the experimental

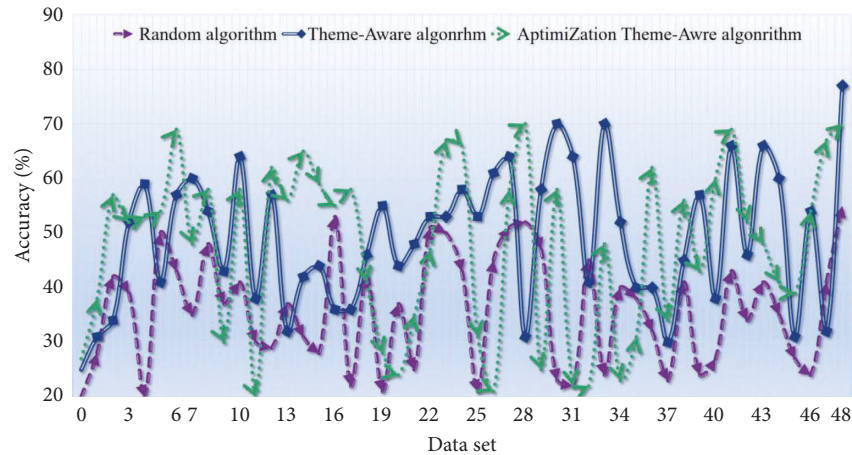


FIGURE 3: Diagram of simulation test accuracy on real data.

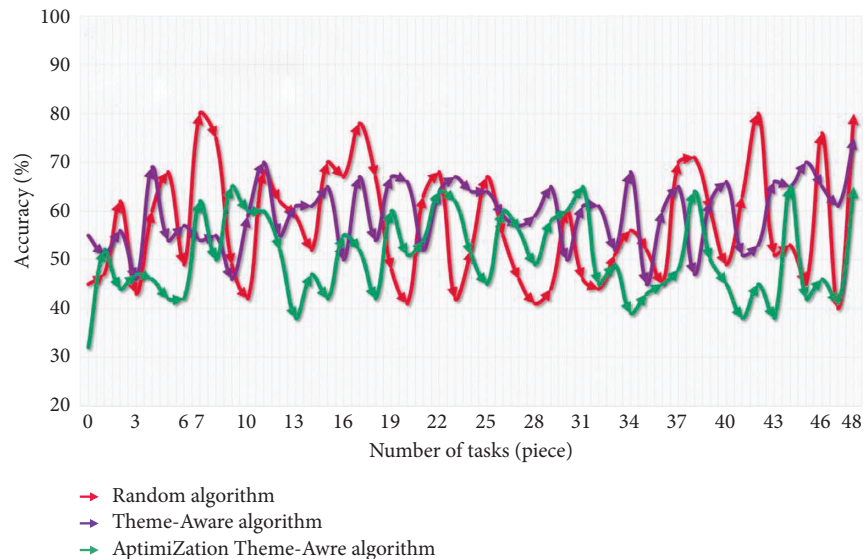


FIGURE 4: Accurate diagram of different task scales processed by each algorithm.

accuracy rate findings of each algorithm when the task scale is increased (see Figure 4). According to the assignment algorithm examined in this work, when the quantity of assignments rises, the topic awareness algorithm becomes fully trained, and the topic capture and user matching become more and more precise. As a result, as the job scale has grown, so too has the precision of completion, and steady results have been preserved, as shown in Figure 5.

Three related task sets of music real data, example 2, example 3, and example 4, were used in the experiment, and three different algorithms were used to process the tasks. Figure 5 shows that after completing the number of music style guessing tasks based on the music melody of example 2, the company or enterprise releases similar group tasks such as song name guessing and singer name guessing based on the music melody. On various task sets, the accuracy rate of users completing corresponding tasks changes. According to the analysis of the experimental results, it can be seen that when the random assignment algorithm is used to deal with

similar tasks, the accuracy rate is still not higher than 65%, and the randomness of the accuracy rate results is large. The analysis of the accuracy rate of users completing music tasks in real experiments shows that the final accuracy rate can be improved to 100%. Based on the assignment algorithm studied in this paper, it makes full use of the accurate perception mechanism of the user to the task topic, reasonably recommends similar tasks to users with a professional background for processing, and publishes similar tasks to users with high accuracy of task answers submitted in the previous round, thus obtaining a high task completion accuracy rate, and the accuracy rate can even be close to 100% in specific cases.

In order to provide effective and timely entrepreneurial services for college students of e University, it is necessary to first analyze the needs of college students for entrepreneurial services, so as to identify the shortcomings of the current service system of e University, better conduct service positioning, and meet the needs of college students for

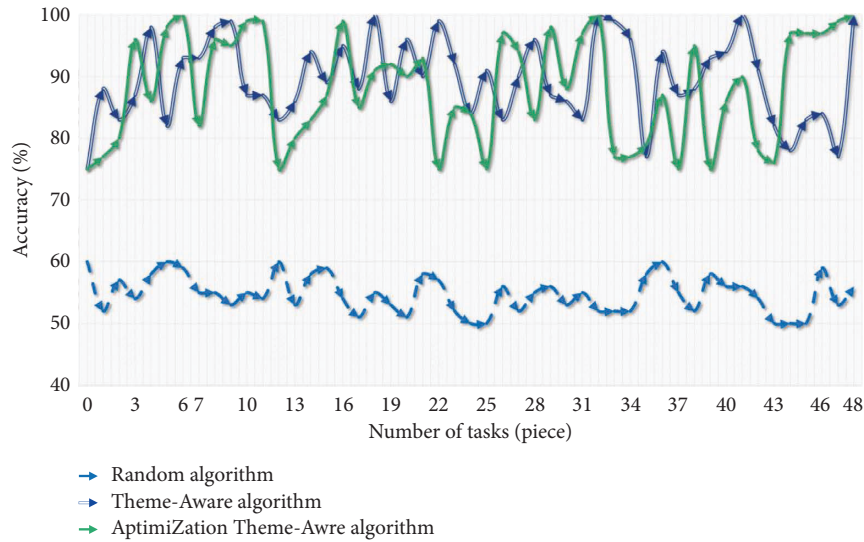


FIGURE 5: Accurate illustration of each algorithm handling different similar tasks.

entrepreneurial services. As for the policy incentives for college students’ entrepreneurship, some investigators have chosen very strong ones. Some students think that the incentives are strong, others think that the incentives are general, and others think that the incentives are insufficient, as shown in Figure 6. This shows that the entrepreneurship service policy of the university is acceptable, but there are still shortcomings and room for improvement.

For the question of what incentive measures you hope the school can provide, the selection statistics of the investigators are shown in Table 1.

Regarding the question of how you think how to promote the effective use of scientific and technological achievements by the entrepreneurial teams of our university students, the selection statistics of the investigators are shown in Table 2.

From the above results, we can see that college students hope that the school can provide entrepreneurial teaching funds and other incentives, which is a factor in the guarantee of entrepreneurial funds. In addition, many students have chosen policy support such as credit for entrepreneurial learning and training and increased investment in software and hardware for entrepreneurial teaching and time. For the reform of the teaching management system, it is obvious that the investigators have also expressed certain needs, mainly reflected in the need to allow interdisciplinary course selection. Students hope to enhance their comprehensive knowledge through multidisciplinary and multidisciplinary learning. In the choice of how to promote the effective use of scientific and technological achievements by college students’ entrepreneurial teams, more students prefer to give certain rewards to the teams that use scientific and technological achievements to start businesses. This is a more direct way. Of course, the definition of intellectual property rights is also very important, with 33.3% of the respondents choosing. Through this analysis, we find that the university can have greater development space in the service support of entrepreneurship policy to meet the needs of entrepreneurs.

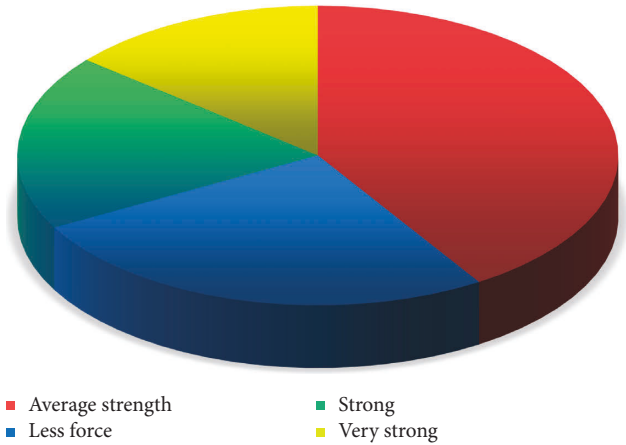


FIGURE 6: Survey results of entrepreneurship policy incentives of a school.

TABLE 1: Statistics of entrepreneurship incentive needs of college students in E.

Incentives	Percentage (%)
Entrepreneurship teaching funds (based on guarantee)	37.5
Entrepreneurship learning and training are included in credits	25.0
Increased investment in software and hardware for entrepreneurship teaching and practice	29.2
Provide basic living security and employment assistance to college students who fail to start their own businesses	8.3

For the problem of what are the shortcomings of the entrepreneurship education courses offered by the school, the selection is shown in Figure 7. Among them, the demand for teaching contents and forms is the strongest, accounting

TABLE 2: Demand for measures to promote the transformation of scientific and technological achievements.

Measures to promote entrepreneurship teams of college students to make effective use of scientific and technological achievements	Percentage
Give certain rewards to the teams that use scientific and technological achievements to start businesses	25%
Clear intellectual property rights	37.5%
Provide sufficient economic returns to professors who promote the transformation of scientific and technological achievements	33.3%
Other	4.2%

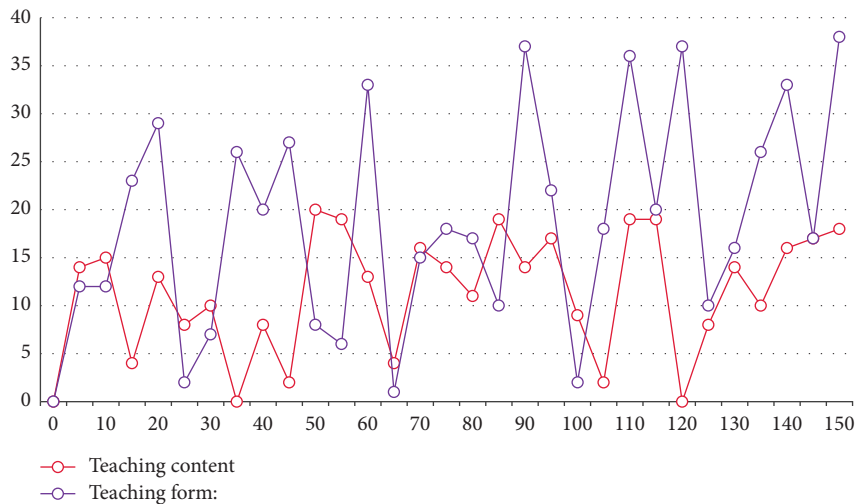


FIGURE 7: Demand for entrepreneurship education courses of school E.

for 37.5% and 35.4%, respectively, which indicates that students are not very satisfied with the teaching contents and forms of entrepreneurship education.

Do you have the need to participate in entrepreneurship-related training lectures or competitions? 85% of the students choose yes, and 15% of the students choose no, which indicates that the students of our school have a strong demand for entrepreneurship-related training or competitions. Although school E has carried out rich training lectures and competitions, it still needs to be strengthened and deepened.

We strengthen the contact with various departments of enterprises, be able to understand the information of enterprises and relevant industries, obtain effective recruitment information of enterprises, and provide internships and employment opportunities for students. We strengthen the contact with employment service institutions to provide professional employment guidance and obtain employment advice for students. Through contact with these social organizations, the important role of social forces in guiding and supporting the employment work of Shaanxi private colleges and universities will be brought into play, and professionals with rich experience will be employed to establish the “employment guidance Advisory Committee,” which will help students understand the employment market, exchange work experience, and impart interview experience by arranging special lectures and other forms. Through the participation of social forces, the employment guidance work of Shaanxi private colleges and universities

will be closely combined with the social reality and guided more effectively.

5. Conclusion

The national economy and people’s means of subsistence are directly impacted by the entrepreneurship of college students. Local colleges and universities should continue to deepen the integration of educational resources within local colleges and universities and further enhance their soft and hard power while completing the reform of their own educational system and the revision of talent training programs. Big data presents both opportunities and difficulties. Effective big data processing technology may easily resolve challenging big data jobs and fully exploit the potential of resources. As a result, both businesses and academics are interested in big data processing technologies. The demands placed on the effectiveness and precision of data processing technology are increasing as society develops. As a result, it has become crucial to aggressively address the issue of training and advising college students on finding jobs. In addition to effectively employing graduates in line with the national legislation and requirements, a higher education institution has a responsibility to actively investigate, develop, and improve the entire employment guidance process. We aim to combine ongoing career counseling with staged employment training, advance the reform and development of employment work in colleges and universities, and foster the

development of all-around skills that address social demands.

Data Availability

The data used to support the findings of this study can be obtained from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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