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Field Theory - Optimization of the Dual-Dimensional Architecture of the Digital Student Community Employment Support System for the Integration of Digital Party Building and Digital Intelligence

Wen Li¹ and Ruiqian Su^{2,*}

¹ Ideological and Political Theory Course Teaching Department, Xiamen Institute of Technology, Xiamen, Fujian, 361021, China

² School of Foreign Languages, Xiamen Institute of Technology, Xiamen, Fujian, 361021, China

Corresponding authors: (e-mail: rqsu12@163.com).

Abstract This paper establishes a “one-stop” student community party building system for universities based on field theory. From the perspective of technological empowerment in field theory, this paper utilizes big data technology to establish a party building digital profile and employment support system architecture, pushing personalized job opportunities to guide students in their employment. The paper selects employment data of college students from a certain university from 2016 to 2025 as the research sample to explore the reliability of the system and algorithm proposed in this paper. Research findings indicate that the employment support system can visually present specific student employment status through charts. Functional testing demonstrates that the system effectively enhances the efficiency of employment management operations. Comparisons between the employment recommendation results of this algorithm and traditional recommendation algorithms reveal higher predictive accuracy.

Index Terms field theory, big data technology, personalization, recommendation algorithm

I. Introduction

As the process of social networking accelerates, the internet has become an indispensable tool for understanding society, accessing information, and communicating, opening up vast new possibilities for educational reform and development. It has brought both new opportunities and challenges to school party building work [1]-[4]. “Digital Party Building” is a new research topic posed by the times and technological development for school Party building work [5], [6]. It is a new Party building model that uses digital information and the internet as its foundation, integrating various information related to Party building activities, Party member management, and Party-mass connections through information technology for collection, processing, integration, and application. This enables the optimal utilization of Party building resources, continuously enhancing the Party's cohesion and combat effectiveness [7]-[10]. “Digital Party Building” represents an innovation in the scope, methods, and approaches of Party building work in schools during the new era, holding significant importance for strengthening Party building work in higher education institutions under new circumstances [11]-[13].

In this context, university graduates' employment has also faced new development opportunities. The employment of university graduates is closely tied to the sustained and healthy development of higher education, as well as the nation's economic construction, social stability, and the fundamental interests of the people [14]-[17]. However, in recent years, the phenomenon of “graduation leading to unemployment” has become widespread among college students in China, and “employment difficulties” have become a significant obstacle to social development [18]-[20]. The Digital Intelligence Student Community Employment Support System is designed to address the current severe employment situation for graduates. It aims to find a new model by focusing on improving employment guidance and service work for college students, providing an information-based solution to assist schools in managing college student employment [21]-[24]. Under the guidance of digital party building, the system leverages internet and mobile application technologies to enable community students to access employment information, vocational training, and employment guidance services, thereby enhancing their employment rates [25]-[28].

Literature [29] introduces a student employment system based on blockchain and artificial intelligence technologies, which provides students with more efficient part-time, learning, and full-time job opportunities while ensuring information security. Literature [30] highlights the development of platforms like Weibo and WeChat, as

well as the challenges of university student employment, and suggests using smart systems like micro-media for student employment. Literature [31] proposes an AI-based student employment counseling system integrated with ideological and political education, which can provide personalized employment recommendations based on student and employer needs, as well as students' employment capabilities. Literature [32] analyzes the current state of employment guidance services in higher education institutions and proposes the construction of a smart employment service system based on big data and IoT technologies. Through the design of modules such as smart employment services and employment data analysis, this system effectively improves students' employment rates. Literature [33] proposes a big data and AI-based analysis scheme for college students' employment and entrepreneurship, aiming to provide a basis for the conduct of employment guidance activities. Through experiments, this method has demonstrated good data classification performance. Literature [34] points out the current employment difficulties faced by students and constructs a student information database and comprehensive talent profiles using methods such as multivariate statistics and network technology, achieving two-way matching of talent supply and demand. Literature [35] proposes an intelligent employment management system aimed at enhancing students' career awareness and career prediction. The application of this system will indirectly improve graduates' employment rates and provide solutions to address employment difficulties. Literature [36] analyzes the factors influencing college students' career preparation and constructs an intelligent system capable of assessing graduates' readiness for future careers, demonstrating high predictive capability. Literature [37] explores the design and implementation of a college student employment management system based on intelligent optimization algorithms, and experimental results demonstrate the system's effectiveness, exhibiting excellent response speed and meeting user needs. Literature [38] addresses the challenges college students face in employment, investigates the relationship between student behavior and employment demands, and proposes an improved algorithm Apriori_S based on the Spark computing framework, targeting recent graduates from multiple universities. It also designs a graduate intelligent job recommendation system to achieve intelligent job recommendations. Literature [39] introduced that with the continuous increase in the number of college students, universities have gradually used system software to achieve intelligent management of employment information and proposed a university employment intelligent management system based on big data tools and data intelligent analysis methods. Literature [40] examines the application of intelligent optimization algorithms in employment service matching systems and proposes an employment service matching system model based on ant colony algorithms to address issues in the employment market, verifying that the proposed method effectively improves college students' employment quality and job satisfaction. The above studies reveal the challenges faced by university graduates in employment and propose smart student employment systems based on technologies such as blockchain, artificial intelligence, and the Internet of Things. These systems offer functions such as employment counseling and career recommendations, effectively enhancing students' employment capabilities and efficiency.

This paper establishes a “one-stop” student community party building system for universities based on field theory and technology-enabled perspectives. It leverages emotional computing technology and intelligent personalized recommendation algorithms to push job opportunities, thereby transforming talent cultivation models. A personalized push function graduate employment support system was developed using a B/S architecture, ASP.NET MVC, and a three-tier structure. The system utilizes recommendation algorithms optimized based on field theory to collect publicly available job postings from enterprises, extract feature values, and perform normalization processing. It calculates the similarity between graduates and enterprises, as well as the job-seeking popularity of enterprises. Finally, it calculates the final comprehensive weighting score to complete job recommendations. Using employment data from university students at a certain institution from 2016 to 2025 as the research sample, the reliability of the methods proposed in this paper is explored.

II. Digital Party Building Based on Field Theory

II. A. The Meaning of Field Theory

Field theory is a systematic framework for social analysis, with its core focus on dissecting the mechanisms of power operation, the distribution patterns of capital, and the dynamic relationships among actors within social spaces. Bourdieu argues that society is composed of multiple “fields” that are both relatively independent and interconnected, each with its own unique operational rules, practical logic, and resource allocation system. Individuals in these fields are not passive adapters but rather engage in strategic actions within certain structural constraints to compete and strive for advantageous positions [41].

II. B. Optimizing the Path of Party Building Work in “One-Stop” Student Communities in Colleges and Universities under Field Theory

Establish a “distributed” party building space system to ensure that party building work comprehensively covers

students' learning, social, and living spaces. Universities can integrate the construction of "one-stop" student communities into their planning, establishing party building workstations in dormitories, academic buildings, university activity centers, training laboratories, and innovation and entrepreneurship bases, thereby creating multi-dimensional educational platforms such as "party building + learning," "party building + research," and "party building + practice."

Innovate a "flat" party building organizational structure to strengthen the embedded governance capabilities of party organizations in communities. Universities can implement a grid-based party building management model within "one-stop" student communities, extending departmental party organizations to community buildings and student dormitories to establish a three-tier organizational network of "community party branch committee—building party branch—floor or dormitory party group," achieving full coverage of party organizations across all student living scenarios. Establish "Party Member Mentor Responsibility Zones," where teacher Party members serve as building Party building liaisons, collaborating with student Party members to provide academic guidance, career planning, and psychological support services, thereby promoting the deep integration of Party building work with students' growth needs.

From a technology-enabled perspective based on field theory, the key to building a smart Party building system lies in breaking away from traditional linear management models, leveraging data-driven decision-making, intelligent management, and personalized services to achieve efficient operation of Party building work and precise matching with job positions. Relying on big data technology, real-time monitoring of student learning situations, social practice, and ideological dynamics is conducted to establish a Party building "digital portrait" system. Learning behavior analysis algorithms are used to push personalized job positions, and affective computing technology is utilized to optimize Party building content supply, achieving precise ideological guidance. University "one-stop" student community Party building work serves as an important practical carrier for innovation in university Party building systems, transformation of talent cultivation models, and modernization of governance capabilities.

II. C. The Practical Significance of Digital Party Building Work for Student Employment

(1) It is conducive to giving full play to the vanguard and exemplary role of Party members.

Student Party members are active and advanced members of the school community and have a significant advantage in employment, making it easier for them to find jobs. Taking college student Party members as the entry point, giving full play to the important role of this group in college student employment can fully demonstrate the fine qualities of college student Party members, motivate other students to seek employment, and further improve the quality and level of the school's employment work [42].

(2) It is conducive to the coordinated implementation of employment work.

Strengthening party building work plays a leading and guiding role in the school's employment work. Forming an employment guidance model based on party branches can solidify the important position of party branches in student employment and entrepreneurship guidance work. Relying on student party branches to carry out diverse and rich party branch meetings and activities can inspire party members' sense of mission and responsibility.

(3) It is conducive to improving the quality of talent cultivation.

In the digital age, society's demands for talent are constantly increasing, and there is an urgent need for composite talents with comprehensive qualities. Therefore, the goal of talent cultivation in higher education institutions is to cultivate composite talents with high professional standards, positive values, worldviews, and employment outlooks, as well as noble professional ethics, to fully meet the needs of enterprise development and achieve high-quality employment for students.

III. Employment support system design

III. A. System Structure Framework

The graduate employment management system based on personalized push functionality is a .NET-based web system developed using a B/S architecture, ASP.NET MVC, and a three-tier structure. During the development and design process using the three-tier architecture, the application is divided into three layers: the user interface layer, the business logic layer, and the data service layer. Among these, the user interface layer is further divided into three layers—the view layer, the model layer, and the controller layer—using ASP.NET MVC. This layered design reduces the complexity of code development, enhances team collaboration among developers, and also lowers the difficulty of system maintenance and secondary development in the future. The three-tier architecture framework of the system is shown in Figure 1.

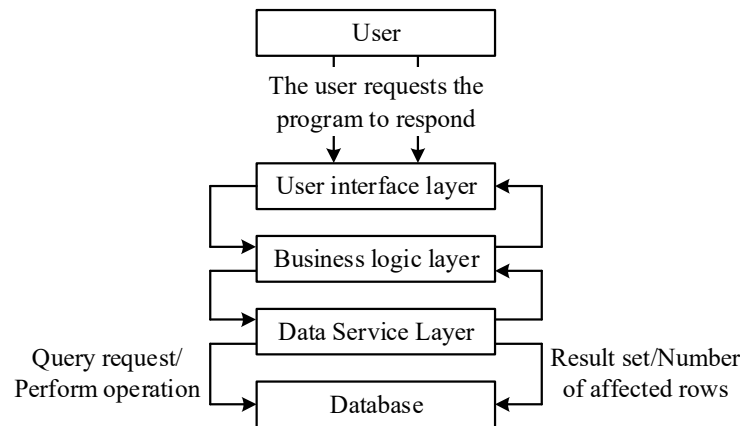


Figure 1: C# ASP.NET Three-tier Framework Diagram

The three-tier architecture design is primarily intended to facilitate layered management of applications, reduce code coupling, enhance system maintainability and scalability, while also strengthening collaboration among developers and reducing development complexity. The following sections provide an overview of each layer within the three-tier structure:

(1) User Interface Layer: This layer, also known as the UI layer, is primarily responsible for user interaction, accepting user commands, and displaying processing results to users.

(2) Business Logic Layer: This layer, also known as the BLL layer, is primarily responsible for processing application business logic and serves as a bridge between the user interface layer and the data service layer.

(3) Data Service Layer: This layer, also known as the DAL layer, is primarily responsible for facilitating interaction between business logic and the database, feeding business data stored in the database back to the business layer or storing business layer data in the database.

The research and design of the graduate employment management system based on personalized push functionality was conducted after thorough preliminary research and detailed analysis of user needs. After analyzing the requirements in detail, the system's functions were divided, and the specific functional implementation objectives of the system were determined. The functional structure of this system is mainly divided into five parts: administrator subsystem, student subsystem, enterprise subsystem, employment data analysis subsystem, and employment information data collection subsystem. The overall structure of the system is shown in Figure 2.

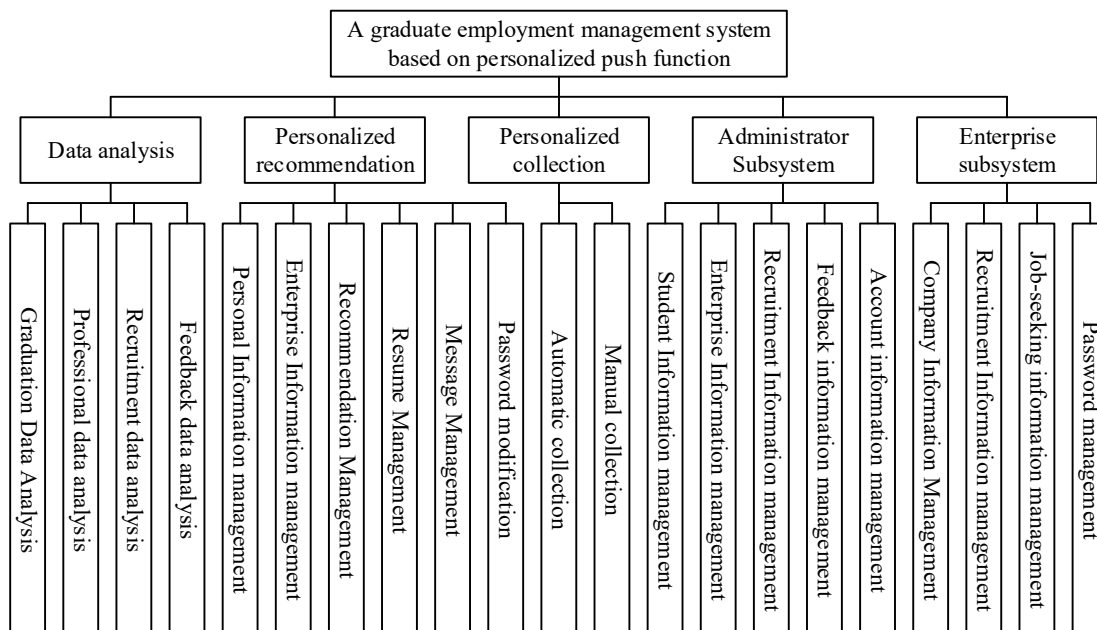


Figure 2: Overall functional Structure diagram

III. B. Field Theory and Algorithm Recommendations

Algorithmic recommendations have completely transformed the traditional dissemination patterns of mainstream ideology through their comprehensive and efficient collection of information, precise and personalized distribution, and dynamic and timely feedback. While significantly enhancing the breadth, precision, and timeliness of mainstream ideology dissemination, they also harbor and give rise to new risks associated with mainstream ideology. Therefore, it is necessary to scientifically assess the risk characteristics of mainstream ideology within the algorithmic recommendation domain to provide practical guidance for subsequent causal analysis and mitigation strategies [43].

III. B. 1) Extraction of graduate employment characteristics and weight calculation

When analyzing recruitment data from corporate entities over the past few years, it has been observed that companies are becoming increasingly precise and meticulous in their hiring processes. Currently, companies typically consider factors such as educational background, language proficiency, computer skills, awards and honors, academic performance, political views, and leadership experience when hiring employees. These factors aid in objectively assessing a candidate's qualifications. In some cases, companies may extract the required qualifications from the employment characteristics of job applicants. The following four characteristics of students have been extracted: educational background, gender, expected salary, and work experience; three characteristics of job positions have been extracted: work experience, salary, and job similarity. Through comprehensive weighted calculations, the overall similarity between job seekers is determined, thereby enabling job recommendations for students.

III. B. 2) Characteristics of job seekers

By analyzing the characteristics of job seekers, we can better tailor job recommendations to suit their needs. This section will analyze the characteristics of job seekers based on their educational background, gender, expected salary, work experience, and other factors:

Educational background: The highest level of education among job seekers is categorized into high school, associate's degree, bachelor's degree, master's degree, and doctoral degree. A job seeker's educational background significantly influences their job search. Educational similarity is calculated by setting the same educational level to 1 and different levels to 0.

The formula for educational background similarity is shown in Equation (1):

$$E(x, y) = \begin{cases} 0 & x \text{ and } y \text{ have different educational background} \\ 1 & x \text{ and } y \text{ have the same educational background} \end{cases} \quad (1)$$

Gender: Job seekers are influenced by the nature of the jobs they are seeking, and gender also affects the results of job recommendations. The gender similarity calculation formula is shown in Equation (2):

$$G(x, y) = \begin{cases} 0 & \text{The genders of } x \text{ and } y \text{ are different} \\ 1 & \text{The gender of } x \text{ and } y \text{ is the same} \end{cases} \quad (2)$$

Expected salary: A job seeker's expected salary is an important factor influencing their desired job position and will affect the recommendation results. Based on the expected monthly salary, job seekers are divided into four categories, with the classification formula shown in Equation (3):

$$I(u) = \begin{cases} 0, & \text{Expected income} < 5,000 \\ 1, & 5,000 < \text{Expected income} < 10,000 \\ 2, & 10,000 < \text{Expected income} < 15,000 \\ 3, & \text{Expected income} > 15,000 \end{cases} \quad (3)$$

Based on this, the formula for calculating the expected salary similarity is shown in Equation (4):

$$I(x, y) = \begin{cases} 0, & x \text{ and } y \text{ are at different levels} \\ 1, & x \text{ and } y \text{ are at the same level} \end{cases} \quad (4)$$

Work experience: Many companies have certain requirements for job seekers' work experience when posting job listings, and different lengths of work experience can affect the accuracy of job recommendations. The formula for calculating work experience similarity is shown in Equation (5):

$$S(x, y) = \begin{cases} 0, & \text{The duration of work experience varies} \\ 1, & \text{The duration of work experience is the same} \end{cases} \quad (5)$$

Therefore, the formula for calculating the overall similarity between job seekers is shown in Equation (6):

$$P(x, y) = aE(x, y) + bG(x, y) + cI(x, y) + dS(x, y) \quad (6)$$

where: $a, b, c, d \in [0, 1]$ and $a + b + c + d = 1$.

III. B. 3) Characteristics of the recruitment position

Job openings are the basic data used by job recommendation systems to recommend positions. This section will analyze the characteristics of job openings in terms of educational requirements, work experience requirements, salary, and career similarity:

Educational requirements: When a company posts a job opening, it will have basic requirements for the highest level of education of applicants. The formula for calculating the similarity of educational requirements is shown in Equation (7):

$$r(x, y) = \begin{cases} 0 & \text{The educational requirements for } x \text{ and } y \text{ are different} \\ 1 & \text{The educational requirements for } x \text{ and } y \text{ are the same} \end{cases} \quad (7)$$

Work experience requirements: Companies prefer to hire employees with a certain level of experience. All other things being equal, companies are more willing to hire employees with experience, as this means lower training costs and faster provision of the same benefits.

Salary: Salaries vary by region and company position. The salary offered will significantly impact the similarity of the position.

The formula for calculating salary similarity is the same as Formula (4).

Occupational similarity: Some companies consider the relevance of a candidate's professional and related skills to the position. To a large extent, occupational similarity also influences job similarity. The formula for calculating occupational similarity is shown in Formula (8):

$$T(x, y) = \begin{cases} 0 & \text{The professional and skill requirements for } x \text{ and } y \text{ are different} \\ 1 & \text{The professional and skill requirements for } x \text{ and } y \text{ are the same} \end{cases} \quad (8)$$

Therefore, the formula for calculating the total similarity between job seekers through comprehensive weighted calculation is shown in Equation (9):

$$J(x, y) = \alpha R(x, y) + \beta S(x, y) + \mu I(x, y) + \kappa T(x, y) \quad (9)$$

where: $\alpha, \beta, \mu, \kappa \in [0, 1]$ and $\alpha + \beta + \mu + \kappa = 1$.

Also, due to the impact of time differences on the employment environment for students, as the interval between internships increases, the similarity between job seekers tends to decrease. The formula for calculating the similarity between job seekers at this time is shown in Equation (10):

$$sim(x, y) = P(x, y) * e^{\alpha(t_x - t_y)} \quad (10)$$

where t represents the student's graduation time, and a represents the coefficient of the time factor, which is a constant value.

The information between job seekers can be matched with the degree of compatibility between employers and job seekers, as well as the degree of conformity with the characteristics of the job position, thereby achieving the desired recommendation effect. At this point, the similarity calculation formula between job characteristics and job seekers is shown in Equation (11):

$$sim(x, S) = \frac{\sum_{i=1, j=1}^n (x_i - \bar{x})(s_j - \bar{s})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2} \sqrt{\sum_{j=1}^n (y_j - \bar{y})^2}} \quad (11)$$

where x represents a set of characteristics of job seekers, and S represents a set of job characteristics of enterprises.

IV. Employment support system implementation

Due to objective limitations in data collection, this paper selects employment data for college students at a certain university from 2016 to 2025 as sample indicators, with a total of 10 samples. The samples are sufficiently representative and meet the relevant requirements. The relevant data on graduates are shown in Table 1. The reason for starting the analysis from 2016 is that China's higher education system began to implement a large-scale enrollment expansion policy in that year, resulting in a significant increase in the number of college students and a gradual intensification of the problem of employment difficulties for college students.

Table 1: The loser outputs the original data

Year	Number of graduates	Employment rate (%)	Initial salary
2016	85.2	80.2	5820.14
2017	95.4	95.6	5824.6
2018	104.3	91.4	6178.3
2019	134.5	80.7	6336.8
2020	189.8	71.4	6556.9
2021	232.8	73.6	6610.8
2022	308.7	72.0	6758.7
2023	378.6	72.2	6846.9
2024	445.9	71.4	7078.8
2025	512.2	70.5	7225.9

IV. A. Management of basic information on graduates

The system's functional implementation primarily utilizes the Python programming language, developed using the Django framework. The frontend of the Employment Data Visualization Management System employs Bootstrap for rapid web application development, with data visualization achieved through Echarts to display data visually on the frontend. The database uses MySQL and other tools to store employment data. MySQL is convenient for development and easy to maintain, providing convenience for the development of the Employment Data Visualization Management System. The system's main functional implementation involves the following modules:

The graduate basic information management module primarily involves administrators maintaining the basic information of school graduates, such as adding or modifying graduates' personal information. When using the system to add graduate information, users should complete all required fields and then click the button. The system backend will submit the information entered on this page to the controller, ultimately adding it to the system's employment database table, enabling real-time transmission between the interface and employment data, and facilitating administrators' management of graduates' employment information.

IV. B. Recruitment and Job Search Management

Graduates can log in to the system to view job postings, click to submit their resumes, and wait for notifications from employers. Employers receive submitted resumes, screen them, and notify eligible graduates for interviews. The recruitment and job search management system establishes a communication bridge between graduates and employers. The system's recruitment and job search module primarily publishes employment information, and graduates can consult employers through their contact information.

IV. C. User Management

In the user management module, a role-permission mapping table is established to assign different usage permissions to users with different roles. In the user management center, relevant operations can be performed on department counselors, department leaders, and graduates, such as resetting user passwords and modifying the class permissions managed by department counselors, thereby achieving flexible allocation of system permissions. This facilitates the management of employment data.

IV. D. Graduates submit employment information

In the graduate employment information submission module, graduates log in to their accounts, enter their personal center page, and click to submit their employment information.

IV. E. Employment Data Visualization Platform Management

The system's functional implementation primarily utilizes the Python programming language, developed using the Django framework. The frontend of the employment data visualization management system employs Bootstrap for rapid web application development, with data visualization achieved through Echarts to display data visually on the frontend. The database uses MySQL and other tools to store employment data. MySQL is convenient to develop and easy to maintain, providing convenience for the development of the employment data visualization management system. The work data visualization display page is shown in Figure 3.

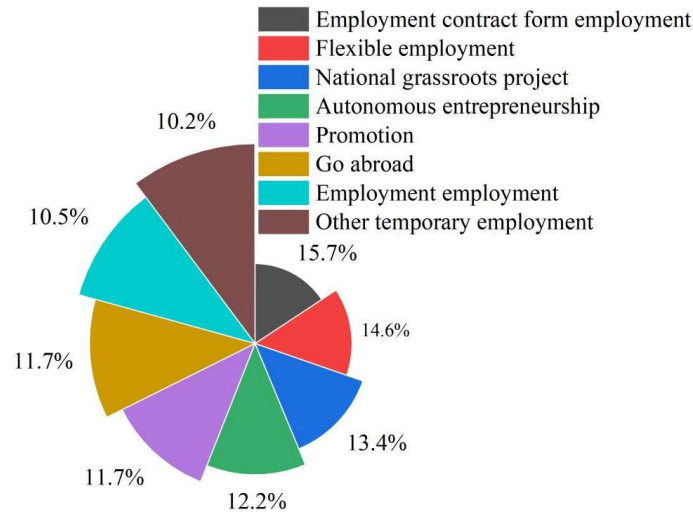


Figure 3: The job data visualization job shows the page

Users can log in to the employment system and view the employment status results on the system page, as shown in Figure 4. Since the employment system has many functional modules, this module primarily implements data visualization functionality, which will be continuously improved in the future. The employment data visualization platform displays the proportion of different employment methods for annual graduates and visualizes employment data from previous years. The information displayed on the data visualization page includes employment information for the current year and previous years. The page for comparing and analyzing employment data from previous years shows trends in graduate employment types. Employment department staff can obtain more visual information from the visualization page, which facilitates the development of corresponding employment guidance plans by the school.

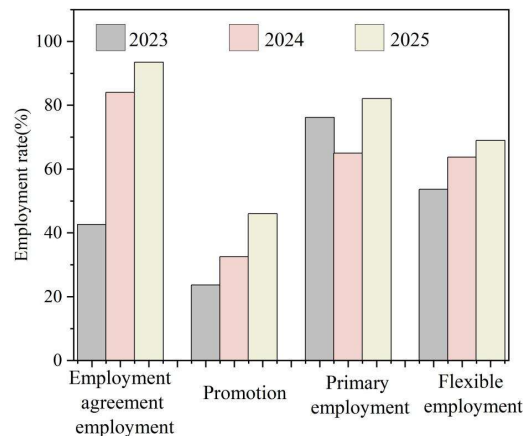


Figure 4: Data comparison analysis page

IV. F. Optimized System Testing

During the testing of the system database and data access layer, all corresponding access functions were listed based on the constructed data tables. These access functions were then combined with the entity data

corresponding to each function as keywords to facilitate the completion of functional testing. Throughout the testing process, various data within the system were detected. The system testing environment described in this paper is the testing environment constructed for the management platform testing. The test environment has a detailed execution process: test data is processed in an extensible and distributed manner, involving six data tables. Operations such as queries, modifications, additions, and deletions are distinguished based on the data tables, including SQL operations with selection conditions, resulting in 32 data access functions. Each data access function must be used for testing, and each test case must meet the requirements.

Functional testing is conducted after the system functionality is implemented, with the primary objective of promptly identifying issues in system operation and implementing targeted modifications to address system defects, ultimately enhancing system stability and performance through optimization.

The results of the functional testing experiments are shown in Table 2.

After testing all system functions, including basic employment system functions such as user login, submission of employment and archive dispatch information, data visualization display, and password modification, it was found that all system functions could be operated smoothly according to the original design. The expected goals of the employment system optimization design were achieved, effectively improving the efficiency of employment management work.

Table 2: Functional test instance table

Operation name	Operation step	Expected result	Test results
Login system	Enter the account, password	New login data	Succeed
Employment information registration	Submit the employment agreement	New employment information	Succeed
Archive information	Fill in the file and send the information	Add a new file to send information	Succeed
Data visualization	Click on the display page to view	The page displays the employment data chart	Succeed
Reset password	Enter the user password and submit it	Login password reset successfully	Succeed

Concurrent response time and the number of concurrent connections a system can support are two important performance metrics. We used a black-box testing method to conduct a comprehensive test of the online employment service system for university cloud-based employment management described in this paper. The test results for the system's concurrent performance are shown in Table 3. The data indicates that the employment support system of a certain undergraduate university discussed in this paper can meet the requirements proposed in the needs analysis in terms of concurrent performance.

Table 3: test data for the management platform concurrency situation

Test id	Test director	Test time	Concurrent quantity	Concurrent response time (ms)	Meet the standards
55741	XXX	2025.1.7	250	12420	×
55742	XXX	2025.2.3	250	98546	×
55743	XXX	2025.2.9	250	19253	×
55744	XXX	2025.2.20	250	16528	×
55745	XXX	2025.3.8	250	6528	×
55746	XXX	2025.3.14	250	989	√

This section of the experiment primarily verifies the accuracy and efficiency of the employment recommendation algorithm's computational optimization. Therefore, this section employs a comparative approach for verification. A traditional recommendation model and the recommendation algorithm model based on field theory designed in this paper are selected for comparison. The comparison results primarily examine running speed and accuracy, with accuracy represented by success rate. To achieve the comparison effect, this paper primarily conducts two sets of experiments:

First, a comparison experiment is conducted using a database from a certain university.

Second, a comparison experiment was conducted using the overall database of universities within and outside the province. The survey results are shown in Table 4.

Table 4: clustering algorithm arithmetic speed contrast

Serial number	Algorithm	Operating speed (s)	Success rate
1	Traditional recommendation algorithm	470	78.2%
2	This article recommends algorithm	110	90.8%

This paper compares the employment recommendation results of the proposed algorithm with those of traditional recommendation algorithms. The specific results are shown in Table 5. As can be seen from the table, the accuracy of the recommendation results obtained using traditional models decreases with increasing statistical years, compared to the method proposed in this paper.

Table 5: Comparison of employment quality evaluation

Statistical age	1	2	3	4	5	6
Traditional recommendation algorithm	5.79	10.9	164	1586	2825	3658
This article recommends algorithm	5.48	9.46	12.8	24.0	82.9	128

V. Conclusion

This paper optimizes “one-stop” student community digital party building and student employment support-related work under the field theory, using big data technology and related algorithms to establish an employment support system architecture and computational optimization. By selecting 10 sample employment data sets of college students from a certain university from 2016 to 2025, the following conclusions can be drawn:

(1) After testing all system functions, the system developed in this paper possesses basic functionalities including user login, submission of employment and archive dispatch information, data visualization display, and password modification. Its operational speed and accuracy can effectively meet complex requirements.

(2) Compared to traditional recommendation algorithms, the employment recommendation results of the algorithm proposed in this paper exhibit higher accuracy.

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