Research on the Construction of Intelligent Employment Platform for College Graduates Based on Big Data

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Abstract. In recent years, with the increasing number of college graduates year by year, the employment problem of college graduates has aroused widespread concern of society and relevant scholars. With the development of smart earth, smart city and smart campus, smart employment intelligently integrates the existing employment resources through monitoring, integration and analysis, using the new generation of Internet technologies such as big data, cloud computing and Internet of Things. This paper designs a smart employment platform for college graduates based on big data, which includes four modules: data acquisition, data analysis, data evaluation and data feedback. Users can access the smart employment platform through browser or mobile terminal, and then enjoy the services brought by the smart employment platform.

Introduction

In recent years, intelligent employment is an important direction for the government and universities to carry out public service construction. In 2017, the State Council issued the Thirteenth Five-Year Plan for the Development of National Education, which clearly states that "Internet + Education" is an important grasp of national education. In May 2017, at the national teleconference on employment and entrepreneurship, Premier Li Keqiang made an important instruction: "We should make full use of the new model of "Internet + Employment" to send policies, guidance and information to graduates, so as to realize "wise employment." With the development of science and technology, improving the use of resources and improving people's livelihood services has become the focus of employment management departments in the new era, and the exploration of intelligent employment services throughout the country is constantly advancing.

The Development of Intelligent Employment

Intelligent employment is the product of a new round of knowledge development and technological change, and it is the inevitable result of the development of information technology. It applies the new generation of Internet technology, such as big data, cloud computing, Internet of Things, to all aspects of employment work, and deeply integrates traditional employment platforms, employment websites, employment forums and other information networks. It is the upgrade and extension of traditional employment informationization.

The biggest difference between informationization and intellectualization is that one of the characteristics of intellectualization is sharing, which can effectively connect with other systems. Employment is not a closed environment, but is closely related to social development, market changes and industry trends. In the construction of their own systems, we should fully consider the efficient docking with other intelligent systems. Intelligent employment platform can effectively provide suitable job information for college graduates and improve job satisfaction. Whether it is for the society or for the students themselves, it has a vital practical value and social significance.

The Basic Structure of Intelligent Employment Platform for College Graduates Based on Big Data

This paper designs a smart employment platform for college graduates based on big data. The platform structure is shown in Fig. 1. The platform includes four modules: data acquisition, data
analysis, data evaluation and data feedback. Each module is divided into sub-modules according to needs. Users can access the intelligent employment platform through browsers or mobile terminals, and then enjoy the services brought by the intelligent employment platform.

Figure 1. Architecture of Intelligent Employment Platform for College Graduates Based on Big Data.
The main functions of the intelligent employment platform for college graduates based on big data are as follows.

**Data Collection**

The main task of data acquisition module is to read and store data. Graduates can fill in basic personal information and job-hunting information through relevant webpages of the platform. Enterprises can publish basic information and job demand information of enterprises through webpages of the platform. These information is read and stored by the data acquisition module, as shown in Fig. 2.

![Data Acquisition Module](image)

**Data Analysis**

Statistical analysis of data shows the changing situation of employment in a multi-dimensional and three-dimensional way through pretreatment of a large number of data. According to the statistics of past employment students' information, the intelligent employment platform analyses the employment situation of students from the perspectives of students' majors, interests, specialties, places of origin and the nature of employment units. According to the basic personal information and job-hunting information of the graduates, combined with the market demand of the employment environment, students are given directional guidance and related posts to promote, so as to further improve the quality of students' employment. Pushing relevant posts will further improve the quality of students' employment. Employment precise push is divided into two parts. According to the matching of previous student data and job attributes of employment companies, a recommendation model is established to recommend similar company information and job information to users with the same or similar attributes of previous students. The precise promotion of jobs is divided into two parts. Employment precise push is divided into two parts. The former student data are matched with the job attributes of the employment company, and a recommendation model is established. Finally, the company information and job information matching the student attributes are recommended to users. When users use the system to generate part of the data, according to the company and job attribute labels visited by users, combined with the attributes labels of current students, job and employment information push is completed. Intelligent employment platform can use QQ group, Wechat public number, web page, mailbox and other information channels to ensure so that students get employment information timely and accurately. In addition to employment information and other news, there is job information push for each student with a higher degree of matching. This kind of information is suitable for the use of Wechat public number, platform website and student email, which can be precisely pushed to individual channels.
Data Evaluation

The data evaluation module evaluates from three aspects: graduates, enterprises and schools. Graduates mainly evaluate the degree of matching between their majors and their posts, their competence for their posts, and the practical application of their majors in their posts. Enterprise unit evaluation mainly includes the identifying of graduates' majors and positions, the practicability of graduates' majors, and the contribution of graduates to enterprises. The school evaluation mainly assesses the employment rate of graduates, the hot majors of graduates, the practicability of the learning content of each major and the matching of the needs of enterprises, etc.

Data Feedback

The data feedback module also provides feedback from graduates, enterprises and schools. Graduates mainly feed the employment satisfaction, professional knowledge application, job treatment and so on. Enterprise units mainly feed graduates' knowledge reserve, working ability, personal accomplishment and so on. The school mainly gives feedback on the rationality of students' professional learning knowledge structure and the feasibility of talent training programs.

The Realization of Intelligent Employment Platform for College Graduates Based on Big Data

![Diagram]

Figure 3. Design of Intelligent Employment Platform for College Graduates Based on Big Data.
The core task of building a platform for intelligent employment of university graduates based on big data is to study how to integrate big data technology, Internet technology, cloud computing technology to realize data acquisition, data analysis, data evaluation, data feedback function modules. The design of the platform is shown in Fig. 3, which includes Data storage, data invocation, data processing, data control and users.

Summary

"Intelligent employment" is the sublimation of traditional employment informationization. The "wisdom" of employment should not only be reflected in a certain period of job hunting, not only effective information push, but also carry out more personalized and comprehensive services. The intelligent employment platform constructed in this paper relies on information technology such as big data, cloud computing, Internet and so on. It sets up data storage and data analysis module. In addition, it also sets up data evaluation module. This module can let students better understand themselves, recognize their professional interests and abilities. Graduates plan their careers and understand their career orientation according to the evaluation results. A data feedback module is also set up in the platform to track and investigate students' career development for more than half a year, so as to feedback and summarize the employment situation of graduates. Feedback the results of previous surveys to students so that they can understand their position and career development. In this process, students are encouraged to explore their personal needs more actively, understand their career development, perceive the job market and changes, and ultimately obtain jobs.

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