High Level Talent Training Platform Based on Artificial Intelligence Algorithm

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Abstract. With the rapid development and application of artificial intelligence technology, in the training of high-level talents, more and more needs to be solved is how to transform it into actual productivity. Therefore, based on the current research situation at home and abroad, this paper proposes a set of platform architecture related to AI algorithm. This paper first studies the environment of high-level talent cultivation, then expounds the importance of high-level talent cultivation and construction, then studies the artificial intelligence algorithm, and based on this, designs a high-level talent cultivation platform. Finally, the performance of the platform is tested by simulation experiments. The test results show that the high-level talent training platform based on intelligent algorithms has short response time and delay time, high software compatibility and security. This shows that the platform has complete functions and good performance.

Keywords: Artificial Intelligence · High-level Talents · Talent Cultivation · Platform Research

1 Introduction

With the development of artificial intelligence, intelligent robot has gradually become a research hotspot. It is the general trend to build a high-level talent echelon based on AI algorithm platform. Based on the existing foundation, this paper establishes a hierarchical model and analyzes the problems existing in China's senior management and related fields [1, 2]. On this basis, combined with the actual needs, targeted solutions are proposed to solve the problems in the current talent training, provide technical support for the development of intelligent robots in the future, and promote the construction of high-quality application-oriented talents [3, 4].

In recent years, more and more attention has been paid to the research of artificial intelligence in the world, and the related fields of intelligent machine technology developed earlier and have been relatively mature abroad. South Korea, Japan, China and other countries have successively carried out intelligent robot and AI development projects [5, 6]. When foreign experts and scholars have applied computers to the field of human life and production, they have found that it is an important direction to use biosensor technology to sense and process the information of the surrounding environment, which can improve the work efficiency and reduce the pressure of workers, but also reduce

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the environmental pollution problem. Artificial intelligence is one of the ways. A large number of related system research and development have also started in China. In the middle of 2010, the United States first proposed the concept of "robot". China began to explore this area in the 1980s and made certain achievements [7, 8]. In recent years, some universities and research institutes in China have carried out scientific research in related fields, established China Institute of automation industry (hereinafter referred to as "Shandong Institute of engineering and technology") and robot research center to jointly carry out a series of academic activities and research achievements related to high-level talent training. Therefore, based on the artificial intelligence algorithm, this paper studies the high-level talent training platform.

With the development of artificial intelligence, high-level talents play a very important role in improving the national comprehensive strength and innovation and entrepreneurship ability. Based on the basic theories and methods of computer technology and network communication, a set of high-quality personnel training platform is constructed. The platform will promote the adjustment of China's high-tech industrial structure and the transformation and application of scientific and technological achievements, can provide enterprises with a new round of information technology revolution power, can effectively promote the construction process of China's independent innovation capacity, and lay a solid guarantee for the realization of the goal of socialist modernization with Chinese characteristics. It has practical significance for national development, and can improve students' practical work skills and comprehensive competitiveness.

2 Discussion on High Level Talent Training Platform Based on Artificial Intelligence Algorithm

2.1 Environment for Cultivating High-Level Talents

The cultivation of talents needs a good environment, which is also a very important link. First, the school should provide students with a safe, comfortable and convenient place for study and life [9, 10]. Secondly, we should establish a perfect, reasonable and effective system in teaching management. Finally, as for the construction of teachers, firstly, the training of computer technology application ability should be strengthened; secondly, various multimedia teaching activities should be organized; thirdly, various academic exchanges or lectures should be held regularly to improve the professional level and practical skills of teachers; at the same time, distance education and training can be combined through the network platform to realize the self-development of students' knowledge. Computer network equipment, communication facilities and related software and hardware are necessary conditions for platform construction. Infrastructure includes basic information network, including broadband network, wireless LAN, etc. These are the material conditions required for the cultivation of high-level talents, while the soft power is mainly reflected in the low requirements on technology and experience and the poor team cooperation ability in the process of talent cultivation, so it is necessary to further improve its hardware environment level to meet the actual work needs and development goals. In the work of cultivating high-level talents, in addition to having good software and hardware conditions, it also needs to have a good software environment. At present, many colleges and universities in China are dependent

on the technology and equipment required for the development of high-tech industries. However, due to the lack of high-level R & D institutions or teams with sufficient specialization and strong strength, and with certain economic basic ability, hands-on operation experience and skill level, to support the platform construction and provide guarantee for it. In the training of high-level talents. In addition to software conditions, there should also be a good soft environment.

2.2 Importance of High-Level Talent Training Platform Construction

The cultivation of talents is one of the most important, challenging and basic requirements in the construction of high-level talents [11]. Under the background of the great development of "Internet +" vigorously promoted by the state, the high-quality composite application technology specialty in China needs comprehensive senior technical personnel with better information technology ability and practical operation level. At present, China still pays more attention to the construction of computer science. With the continuous deepening of artificial intelligence theory research, the gradual improvement of expert systems in related fields and the continuous strengthening of international exchanges and cooperation, at present, the training mode of high-level talents in China is mainly based on the combination of "theory + practice". However, this method has many problems in practical application. First of all, due to the low level of economic development, the different social environment and cultural background, and the inconsistent understanding of people's educational concepts, the current phenomenon of the knowledge structure of Chinese college students is relatively serious. Secondly, under the imperfect employment market mechanism, enterprises cannot provide the number and quality of personnel on the corresponding posts according to the needs of college students. The high-level talent training platform is based on the education of "making the best use of people". In the current era of global economic integration and knowledge explosion, traditional enterprises can no longer be satisfied. Therefore, China must actively promote the implementation of the strategic layout and policies and measures for the development of innovative, scientific and technological, composite high-tech industrial chain and related service industries proposed in the national construction. At the same time, China must strengthen the construction of high-level talent cultivation mechanism system, further improve the national intellectual property management system and patent protection system, and strengthen law enforcement to safeguard social and public interests.

2.3 Artificial Intelligence Algorithm

Artificial intelligence refers to the ability of intelligence and simulation when people conduct some biological, natural and even human activities, such as learning, decision-making and action. Artificial intelligence algorithm is a kind of traditional computing method, which is simple, easy to understand and easy to understand. It also has strong applicability when processing data, but its disadvantage is that it needs strong and perfect functions. Therefore, we suggest that AI technology and computer-aided learning should be combined to carry out the construction of intelligent talent training platform and the teaching of relevant professional courses, and students should be the main object

of education training and follow-up studies. At the same time, we should strengthen the research, development and application of artificial intelligence algorithms. It is mainly realized by computer processing information and reasoning. With the development of computer science and technology and the continuous expansion and deepening of people's research field, the application of computer in various industries has become one of the high-level disciplines. At the same time, it can be said that artificial intelligence algorithm is a process in which a new high-tech scientific and technological achievement is widely used in society and has achieved good results. It is an indispensable part of human scientific and technological progress, innovation and sustainable development.

Artificial intelligence algorithm is a kind of intelligent language that processes the input information through computer technology and expert knowledge under the known, fuzzy and complex uncertain problems in the system, and converts it into understandable expression or can be described by mathematical methods. It mainly consists of the connection and coordination function between neurons in human brain. The human brain is a complex nonlinear functional body. The internal structure and function of the neural system constitute a highly adaptive ability formed and developed under the joint action of many factors such as the objects, problems and objectives that the artificial intelligence algorithm needs to solve.

$$X_{\mathrm{j}} = X_i + random(visual) \tag{1}$$

$$\mathrm{if}\left(Y_i < Y_j\right) X_{inext} = X_i + random(step) * \left(X_j - X_i\right) \tag{2}$$

Artificial intelligence algorithm uses the combination of machine learning technology and computer vision technology to simulate the cognitive process of human brain to objective things. In this way, complex, diverse and challenging problems can be transformed into simple and easy to understand problems that can be solved in practice without a large number of experimental verification. At the same time, it is also a human-centered scientific method, which is highly intelligent and can make judgments according to specific conditions and automatically give solutions.

3 Experimental Process of High Level Talent Training Platform Based on Artificial Intelligence Algorithm

3.1 Structure of High-level Talent Training Platform

As shown in Fig. 1, the structure of the high-level talent training platform is composed of different functional modules. It is mainly divided into two subsystems, which are the basic data collection of high-level talents and the knowledge base construction and application support of managers. The most important one is the basic information processing layer. The advanced software development technologies discussed in this paper include database technology and computer language programming, while for the management information system, its core task includes the two aspects of providing corresponding services after analyzing user needs to realize the overall control function of the platform system. The system is a complete structural framework based on the work practice of

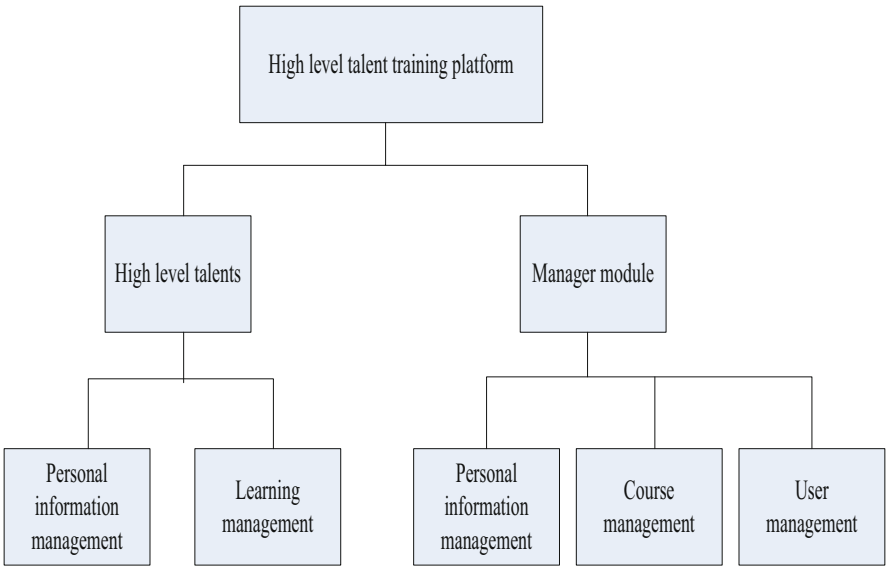

Fig. 1. High-level talent training platform structure

high-level personnel, project management and human resources management system. This framework is composed of high-quality, high-level and compound professional and technical personnel.

3.2 Experimental Test of High-Level Talent Training Platform

During the whole development process of the high-level talent training platform, problems are found and solved through testing, and whether the test program can operate normally. Firstly, the function and performance of the program are analyzed. Secondly, the data quality is tested and analyzed according to the requirements and the feasibility of the corresponding file verification software is provided. Therefore, we can analyze and process the laboratory database by various means, At the same time, computer technology should also be used to realize the analysis and Research on the parameters of the experimental process and the changes of the state information of various complex systems and the professional ability of operators. The data required for the testing of the high-level talent training platform should be obtained through the test data collection equipment to complete the testing of the comprehensive quality training objectives of high-level talents. On the basis of different stages and levels. Experiments are conducted to test students' mastery of learning knowledge in actual work and life.

4 Experimental Analysis of High Level Talent Training Platform Based on Artificial Intelligence Algorithm

4.1 Functional Test Analysis of High-Level Talent Training Platform

Table 1 is the functional test data table of the platform.

Table 1. Functional test of the high-level talent cultivation platform

Test times	Platform reaction time (s)	Platform delay time (s)	Software compatibility (%)	Software security (%)
1	3	2	98	90
2	2	1	96	95
3	3	1	95	98
4	4	2	97	95
5	3	1	97	99

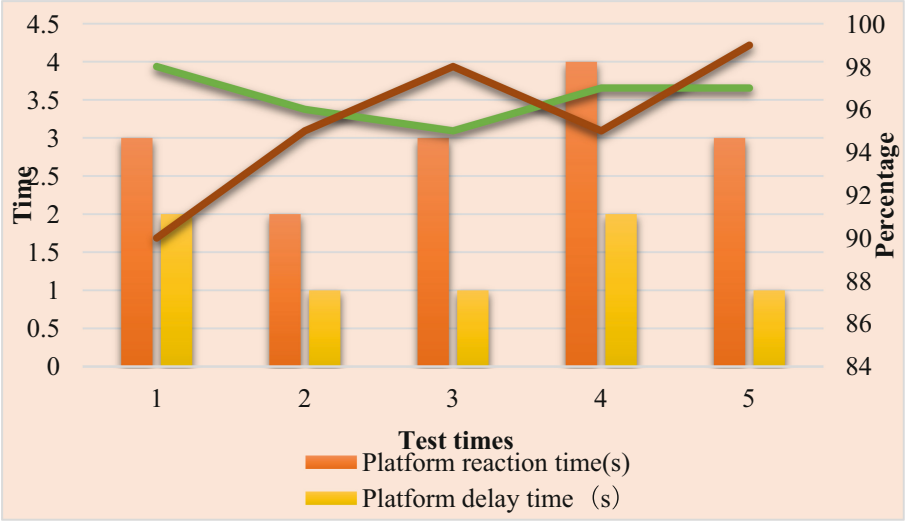

Fig. 2. Function testing

The function test is mainly to test the performance, stability and security of the platform to ensure the normal operation of the system. Functional testing includes related technical issues involved in the software development process. Many problems found in practical application are not caused by design errors, but by incorrect codes caused by improper programming, and some are caused by unreasonable, unstable and uncontrollable factors in hardware circuit design, which affect or even destroy the operation of the platform. According to the test results, analyze whether the overall performance and operation capability of the platform have been improved, and formulate corresponding plans. During the test process, ensure the normal and stable operation of the system and the mutual cooperation of various modules to complete the tasks. Finally, conduct a comprehensive test of the entire experimental process, including hardware equipment and software. It can be seen from Fig. 2 that the high-level talent training platform based

on intelligent algorithm has short response time and delay time, high software compatibility and security. This shows that the platform has complete functions and good performance.

5 Conclusion

With the continuous development of artificial intelligence technology, high-level talents are becoming more and more important for intelligence and informatization. On the basis of computer, it is urgent to build a high-level talent system that can fully mobilize the enthusiasm and initiative of students. This paper mainly introduces the current research situation and problem analysis of the comprehensive quality training platform for high-level talents cultivation in China, and focuses on the models and theories put forward by domestic experts and scholars in relevant fields. Then, starting from the artificial intelligence algorithm and combining with the actual situation, a set of relatively perfect and systematic intelligent promotion methods and schemes are established.

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