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Research on the influence of AI development on college students' employment

Gang Yang, Wei Li, Mengshi Huo

Chengdu University, Chengdu, Sichuan Province, 610106, China

Abstract: *With the continuous development of science and technology, the application of AI in society is more and more extensive and in-depth. From a macro perspective, AI technology will have a substitution effect on existing related labor positions, and will form new industries, new industries and new positions in the continuous development. In the micro direction, AI will also have different degrees of impact on the employment of college students with different professional and knowledge levels. At present, the employment situation of college graduates is not optimistic. In order to cope with the impact brought by AI, colleges and universities should focus on improving the professional ability and thinking quality of college students, actively explore the new mode of cooperation and practice between enterprises and campus associations, provide targeted guidance to theoretical and practical talents, and improve the all-round understanding of college students on employment. Guide them to be fully prepared for employment.*

Keywords: *AI; College graduates; Get a job; Personnel training*

1. Introduction

In recent years, the rapid development of AI technology has brought challenges to the employment college students, but also nurtured new opportunities. On the one hand, under the impact of AI, some traditional industries and jobs are undergoing changes, making the job market more competitive; On other hand, the development of AI has also promoted the transformation and upgrading of the industry, resulting in emerging positions such as big data analysts and intelligent programming, providing new employment opportunities for college students.

2. The employment environment of college students and the development status of AI

Employment is the foundation of people's livelihood. In the "13th Five-Year Plan" period, China's employment trend is relatively stable, the working-age population continues to decrease, and the total number of employed people in the country has changed. At present, China's domestic economic is also affected by the economic downturn in foreign countries, the number of jobs provided by enterprises will decrease, resulting in some fresh graduates in a state of unemployment, and the social employment pressure of college students will increase. In the past three years the domestic employment situation is more severe due to domestic employment itself is in short supply[1].With the continuous development of AI technology in China, the structure of social labor employment in our country is also changing. In this regard, the Chinese government has formulated a detailed three-step strategy around the development of AI. At present, with the arrival of the "14th Five-Year Plan" China has completed the first step, and we will have entered the second step by 2025.The basic theory of AI has achieved a major breakthrough, some technologies and applications have reached the world's leading level, AI has become the main driving force for industrial upgrading and economic transformation in China.

3. The impact of AI technology on the employment of college students

3.1 Increased competition in the job market

The rapid development of AI technology has brought no small impact on traditional employment positions, and has a profound impact on the existing employment pattern. AI technology is gradually replacing some relatively simple, repetitive and high-risk work, such as robots can complete some repetitive and high-risk work in the production line, improving production efficiency and safety. In

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other areas, AI technology can improve the accuracy and efficiency of work through image recognition, natural language processing, data analysis, and more. The upgrading of the intelligent industrial structure has also intensified the competition in the job market.

3.2 Creating new jobs

Although the development of AI technology has replaced some traditional jobs, its development has also driven the optimization and upgrading of the industry, spawned new industries such as AI development and big data analysis, as well as new positions such as AI engineers and we-media operation and maintenance, providing more choices and opportunities for college students' employment. In addition, the development of AI has also brought about changes in the working style and nature of many jobs, especially those involving large amounts of data processing and using the network, such as telecommuting and holding video conferences.

3.3 Put forward higher requirements for personnel training

Facing the rapid development of society and the change of talent demand, college students' professional knowledge or skills in a certain subject are no longer enough to cope with the complex and changeable working environment. In the new employment situation, college students not only need to master interdisciplinary professional knowledge and skills, understand the latest development of relevant positions, but also need to have some AI-related abilities. In addition, college students should have good communication skills, teamwork skills, innovation skills, etc., to improve their overall quality, in order to cope with future challenges.[2]

4. The factors that AI affects the employment of college students

4.1 Macro factors

Macro factors are mainly divided into two types: domestic environment and international environment. In China, due to the trend of economic development and national policies, and based on the development of domestic technologies, in order to save the cost of social operation and improve the efficiency of social operation, national policies will favor technologies conducive to improving social productivity and reduce cumbersome procedures. At the international level, due to the development of economic globalization, there are strict requirements for information transmission, information analysis and other technologies, and compared with human beings, AI can analyze and share information more quickly and accurately around the world. At the same time, the development of high and new technology is an important factor in the development of comprehensive national strength of all countries in the world. Now the world is in the upsurge of AI development, and the field of AI is a half blue ocean for the economic development of various countries. The United States, China, Germany and other countries have become the first echelon of the development level of this field, but the real development of AI technology is relatively short, and there are more uncontrollable factors in the technology in various countries, so the demand for talents in this field is greater, which increases the employment of college students to a certain extent.

4.2 Industrial factors

Industry is the main body of economy and society. Industry develops with the development of human society, industrial development from primary to senior, different industries from simple to complex. In the modern economic and industrial system, some service industries of the secondary industry are also classified as the tertiary industry, and we classify the electricity, heat, gas and water supply industries of the secondary industry and the transportation, information services, public management and social security industries of the tertiary industry as basic industries, so the links between industries are criss-cross. AI can orderly connect these connections through calculation and data to provide services for human society. [3]At the same time, AI has a certain degree of flexibility, adaptability and learning, and can change its own parameters as the environment changes, get used to and promote the development of the new environment. In contrast, it is difficult for college students who are just entering the workforce to acquire these characteristics quickly - it takes time for them to become useful.

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4.3 Micro factors

In order to save operating costs and improve operating efficiency, many enterprises gradually and widely use AI technology to do basic work, which fully reflects the substitute effect of AI. This has broadened the development of AI to a certain extent, but it has also reduced some traditional jobs to a certain extent. In the short term, the labor economic value brought by employing an employee is less than that brought by using a high-tech, and high-tech can also play a role in some mid-level positions. Therefore, AI has an impact on the employment of college students.

5. Suggestions for promoting college students' employment in the era of AI

The vigorous development of AI technology is both an opportunity and a challenge to the employment of college students. In order to promote the employment of college students, it is necessary to start from the government, colleges and universities, college students and other aspects.

5.1 Government level

We will promote the transformation and upgrading of the industrial structure and increase the supply of jobs. The in-depth application and development of AI technology plays an important role in promoting the transformation and upgrading of industrial structure and increasing employment supply. On the one hand, the government should increase its support for traditional industries and emerging industries, promote the transformation and upgrading of industrial structure, and make new jobs and new occupations show scale effects. On the other hand, the government and all sectors of society should help college students to expand their employment fields, open up more jobs in the fields of social service, life production, public administration and so on, and provide more employment space for college students. We will improve the employment policy system and the employment service system. The employment of college students is a complex systematic project, which needs to improve the employment policies of college students to the grassroots, enterprises and remote areas, as well as the policies of college students' self-employment, so as to promote the in-depth development of employment work. The government should coordinate and adjust the service resources, perfect the employment service system of college students, and improve the quality and efficiency of employment service. The government should strengthen employment guidance to help college students understand the job market and make reasonable career plans; Strengthen employment training, improve the vocational skills and comprehensive quality of college students. We will accelerate the exchange and sharing of employment information, and strengthen employment monitoring and feedback evaluation mechanisms. The government should build an information platform covering employment service departments, reduce the cost of obtaining employment information, improve the allocation efficiency of market resources, and provide a solid institutional guarantee for the collection, sharing and utilization of information. At the same time, the government should promote the application of blockchain technology in the employment system, ensure the authenticity and reliability of employment information, and improve the efficiency and accuracy of employment information registration. The use of these data can not only help colleges and universities optimize the structure of talent training, but also become the basis for college professional adjustment and evaluation, enrollment planning and other related work, so as to better train talents to meet the needs of society.

5.2 The university level

5.2.1 Explore a new mode of cooperation practice between enterprises and campus associations

Colleges and universities should develop reasonable student training programs for related majors, such as science and technology or literature, and encourage students to choose appropriate campus associations to conduct work drills in order to adapt to their jobs after graduation in advance. At the same time, well-known employees of relevant enterprises can also be introduced to help students better achieve the effect of learning and adaptation in work drills. Relying on this way, the universities need to form a results-oriented, practical problem-solving teaching method, which effectively combines basic learning with applied practice to avoid the phenomenon of theoretical learning until graduation.While helping college students to adapt to their jobs in advance during community work exercises, it is also necessary to actively cultivate their creative thinking, break the knowledge boundary, expand interdisciplinary knowledge, and let students understand each other, so that they can quickly master the method of controlling robots in the face of AI and avoid the psychological

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resistance to new things. Exploring new ways of cooperation between enterprises and societies is to let students explore the unknown, dare to make mistakes, have their own space to play, and minimize the cost of trial and error for students. In order to realize the value of students' learning, universities should overcome the short-term utilitarian tendency and strive for a better and higher value orientation.[4]

5.2.2 Provide classified guidance and training for different types of students

All colleges and universities should take the initiative to strengthen the employment guidance for the whole graduates, carry out various forms of thematic education activities, and improve graduates' job-hunting skills and employability. Employment guidance should be targeted, and stratified guidance should be given to different types of students in different majors. In addition, various forms of employment guidance lectures can be held by inviting professional human resources consultants of enterprises to serve as employment mentors and inviting successful employment alumni to explain various job-hunting skills in real society employment, share successful employment experience and cases, guide students to "find employment first, then choose a career", and finally help students choose their favorite and suitable jobs. For theoretical learning talents, college teachers need to guide students to understand the AI technology that has the dual identity of competitors and partners in the digital age - what is its working principle, what are its technical limitations, and what is its development trend. To cultivate the scientific literacy of college students, it is necessary to bring scientific literacy into the whole process of school education and teaching, and give full play to the role of the basic path of school education. Moreover, at the level of college students themselves, they need to have internal motivation, and encourage students to fully mobilize their own enthusiasm through classroom learning, practical activities, scientific research, competition training and other ways. The employment requirements brought about by AI require college graduates to have deep interdisciplinary knowledge, and colleges and universities need to train students' systematic disciplinary thinking and improve their understanding of knowledge. Systematic discipline thinking can be called the overall control of knowledge and the rational integration and application of interdisciplinary knowledge. A series of robots represented by AI are fully capable of understanding the components of complex systems and the transformation of variables between elements, but the current level of AI does not have the function of situational generality. College students need to abandon the conservative and stable concept of work in the past, learn to apply the system as a whole in work and study, and actively respond to the changes in the form and content of work brought by AI. The single manual labor in the past will be replaced by AI, and students can better adapt to the needs of society only if they have systematic disciplinary thinking. College students should pay attention to the cultivation of practical ability and actively participate in various forms of internship, practice, skill competition and so on. Schools and social enterprises should organize various practices and competitions, set up "double innovation" centers, and carry out various innovation, entrepreneurship and practical training activities such as cutting-edge technology research and development, innovation and entrepreneurship education incubation, employment project practice, and social services. At the same time, we should actively select and focus on cultivating outstanding student projects and teams to participate in provincial and national competitions, forming a new situation of promoting learning and teaching through competition. Through the deep integration of production and education and the innovation of the system and mechanism, we can give full play to the kinetic energy of teachers and students, leverage the resources of social enterprises, achieve the improvement of the quality of student training, so that students can better match the new requirements of today's society for the employment of college students, and better connect schools and enterprises. For practical majors in colleges and universities, this paper puts forward three employment directions for innovative training, and colleges and universities can guide students of relevant majors to carry out practice.

5.3 The personal level of college students

Attach importance to the development of career planning and establish the concept of lifelong learning. With the rapid development of economy and the optimization and upgrading of industrial structure, college students are forced to develop towards compound talents. In order to adapt to this rapid change and stand out in the fierce competition, college students must attach importance to career planning and establish the concept of lifelong learning. Career planning enables college students to clarify their employment goals, tap their potential, and improve their ability and quality. Establishing the idea of lifelong learning can not only make college students renew their knowledge and skills, but also broaden their horizons, enhance their adaptability and improve their competitiveness. Change the traditional employment concept. AI has promoted the transformation and upgrading of industrial structure, produced new jobs such as AI operation, big data analysis, and anchors, and put forward

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higher requirements for the personal ability and quality of college students. Faced with such a situation, college students should not be limited to traditional employment concepts, but should give full play to their own subjective initiative, understand the development of all walks of life and the development of cutting-edge technologies, constantly learn and master new knowledge and new skills, better understand the needs of society and market changes, constantly improve their comprehensive quality, keep up with the pace of The Times, Lay a solid foundation for career development.

6. Conclusion

Employment is the foundation of people's livelihood, and college graduates are the top priority in employment. In the digital era of post-epidemic and AI coexistence, ensuring more secure employment for students is one of the important work of universities. Only by grasping the key problem of students' employment fundamentally, can we better solve many problems such as students' life planning, college talent training and discipline construction. Colleges and universities should take full advantage of the rapid development of AI, organize students to practice and study related to employment, so that students have enough employment competitiveness, and better solve social practical problems.

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