How do Colleges and Universities Push Forward National "Internet Plus" Strategy?

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Abstract. In 2015, our country put forward the strategy of "Internet Plus", which has stimulated the competition for computer students in all works of life. From the perspective of colleges and universities, this paper discusses how to push forward the national strategy based on the employment of computer students.

Keywords: Internet Plus, Employment, Computer students.

1. Introduction

During the two sessions in 2015, Vice Premier Li Keqiang put forward the concept of "Internet Plus" for the first time in the government work report, and regarded it as a national strategy. Colleges and universities are not only the frontiers of scientific research but also the place of training talents for the country. How should colleges and universities push forward the country's "Internet Plus" strategy? How to push forward the national strategy in the training of computer students?

2. The Survey on the Demand for Computer Talents in All Walks of Life under the National Strategy of "Internet Plus"

As the application of Internet and mobile internet, especially the gradual promotion of cloud computing and big data, a number of new Internet industries have emerged, such as user websites, search engines, online games, animation videos, e-commerce and so on. The emerging of Internet industries have produced JAVA engineer, network architect, game developer, product designer, data operator, online store trainer, online store operation, network marketing and other new occupations, which leads to an increasing demand for post in the Internet industries.

The fourth industrial revolution is now underway. The theme of the World Economic Forum held in Davos, Switzerland in January this year was "Globalization 4.0: building the global structure of the fourth industrial revolution age". Its representatives are the technology of artificial intelligence, autonomous vehicles, Internet of Things and so on. Schwab, chairman of the Davos Forum, said in summer Davos in Tianjin last year that 5G plus the Internet of Things was the fourth industrial revolution. All of these will also breed new careers, most of which are related to computer science.

During the two sessions in 2015, Vice Premier Li Keqiang put forward the concept of "Internet Plus" for the first time in the government work report, and regarded it as a national strategy. And then in July 2015, the State Council formally issued Guidance on actively promoting Internet Plus which put forward 11 specific actions: "Internet Plus entrepreneurial innovation", "Internet Plus collaborative manufacturing", "Internet Plus modern agriculture", "Internet Plus intelligent energy", "Internet Plus inclusive finance", "Internet Plus beneficial service for people", "Internet Plus efficient logistics", "Internet Plus e-commerce", "Internet Plus convenient transportation", "Internet Plus green ecosystem", "Internet Plus artificial intelligence".

It can be seen from these 11 aspects that the Internet can "plus" almost all aspects of life. Besides, the achievement of "Made in China 2025" also relies on the Internet. So computer students are needed in all walks of life.

3. Current Employment Situation of Computer Students

1. The employment range of computer students is wide. At present, although the enterprises recruiting computer students in colleges and universities are mainly software enterprises and Internet

companies, there are also some financial enterprises, manufacturing enterprises, scientific research institutions, medical and health units, government agencies, public institutions and so on.

According to the data of Max's survey of IT graduates employment in 2014, about 45% of graduates found jobs in IT or related to IT, 19% of them found jobs in sales, 9% in real estate enterprises, 8% in manufacturing industries, 4% in tourism and transportation, 3% in government agencies, 1% in finance, securities and insurance, and 11% in other industries.

2. The employment salary of computer students is generally higher than that of other majors.

In "the average monthly salary of the 2017 graduates" announced by China Xinchou.com, the first place is soft engineering with a monthly salary of 9001 yuan.

On May 14 this year, the National Bureau of Statistics announced the annual average salary of employees in Enterprises above the scale in 2018. In terms of different industries, the average salary of information transmission, software and information technology services (all employees) were the highest, reaching 141,962 yuan.

It is the high salary of IT industry that attracts non-computer majors to work in IT industries. They have accumulated some professional skills of computer through various competitions and entrepreneurship activities during the University period. In addition, some non-computer majors have also entered IT enterprises through internships as their employment is not ideal after graduation.

3. For the place of employment, computer students tend to work in first-tier cities. One reason is that software enterprises and Internet enterprises are mainly concentrated in first-tier cities. Besides, the favorable working environment and higher level of salary in the first-tier cities also attract college graduates. On the contrary, the enterprises in second and third-tier cities are finite. And the vision of technology exchange is limited and the industrial environment is backward. These are the main reasons why most computer students are unwilling to go to second and third-tier cities for long-term development.

At present, the market demand for computer students is very large. From the perspective of national development strategy, the demand for computer students will continue to increase. However, many students majoring in computer science are still facing employment difficulties, and enterprises are also facing the embarrassing situation of not recruiting suitable talents. One of the most important factors is that there is a big gap between students' skills and experience in employment and the requirements of enterprises.

4. How do Colleges and Universities Push Forward the "Internet Plus" Strategy in the Training of Computer Students?

1. Setting specialties. With the development of cloud computing, big data and artificial intelligence, some colleges and universities have set up artificial intelligence colleges and added big data specialty. However, some artificial intelligence colleges and big data specialties are still in the initial stage, and there are no corresponding teachers to support the discipline construction. So we must speed up the construction of teaching staff.

2. Enterprise mentors enter the school with the help of school-enterprise cooperation mode. Due to the shortage of teaching staff in some universities, we can carry out school-enterprise cooperation with the entering of enterprise mentors to make full use of resources, which not only achieves the purpose of training students, but also reserves talents for enterprises.

3. Carrying out teaching reform with times. Computer science is a subject whose knowledge updates fast. For example, ten years ago, the mainstream programming languages in the market were the C programming language and the C++ programming language. A few years ago, JAVA became the mainstream programming language in the market. But since last year, Python has leaped to the top in programming language with the help of artificial intelligence. Therefore, colleges and universities should keep up with the pace of scientific and technological progress and carry out teaching reform with times.

In addition, from the strategic advice issued by the state, it can be seen that computer science has been applied in many fields. We should appropriately add optional courses for computer students

according to the actual employment situation, and strengthen their integration with other disciplines to better serve the "Internet Plus" strategy of our country.

4. Expanding and enriching educational resources. Due to the limitation of school course arrangement, the compulsory and optional courses are limited. Therefore, colleges and universities can record online courses with the help of the network platform, so as to provide learning convenience for students who have energy and seek further improvement of their skills.

5. Establishing tutorial system. At present, the tutorial system in most universities is aimed at postgraduate students, while undergraduates only have tutors in individual universities or elite classes. In order to improve the training quality of undergraduate students, colleges and universities should set up or perfect the tutorial system based on their actual situation. Many college students hope to learn more about the knowledge that they are not proficient after class, but the teaching in university is different from that in high school. There are no fixed classrooms and teachers are not always in their office or research room. The tutorial system can solve this problem to a certain extent.

5. How can Colleges and Universities Help Computer Students Improve Their Employability?

1. Improving student's practical ability by taking scientific research as a platform. In traditional campus education, students have lessons once or twice a week. And the teaching method is that students only accept what the teacher teaches and answer what the teacher asks, which is called "forced-feeding" method. In this way, it is very difficult to ensure that students have absorbed knowledge. In addition, there is a few hands-on training in traditional education. By participating in scientific research projects in University laboratories, students not only improve their practical ability, but also benefit the cultivation of innovation ability and team spirit.

2. Helping students find jobs according to their subdivision. For the employment standards of IT industry, its requirements for professional skills are very high. Some college students will take part in professional and technical training and coaching. After professional and technical training, they will improve their employability in a certain technical direction, but the training cost is quite expensive. Therefore, colleges and universities can aim at students with family financial difficulties to improve their employability. It should not be limited to employment subsidies. Colleges and universities with economic conditions can conduct targeted technical training.

For those students who have excellent professional skills but lack the skills of applying for a job, some training should be carried out to improve their employability. For example: the Education Department of Jilin Province has organized training of employability for students with employment difficulties.

3. Encouraging students to find jobs through various channels. In the Internet age, the recruitment of computer students is moving towards diversification. Off-line, on-line and competition provide a wide range of opportunities for students to find jobs. In China, in addition to Baidu and ZTE, which have held competitions for ten years, some other companies also have begun to hold their own competitions in the last two years, such as Tencent Advertising Algorithms Competition which started in 2017, Jingdong JData Algorithms Competition, Huawei Software Elite Competition, MIUI National University Programming Competition starting in 2018 and so on. It is believed that more companies will employ new graduates through competition in the future. But many students still stick to the traditional campus recruitment. Competition compared with the traditional campus recruitment has one advantage: "Do not care where does hero come from". In the process of campus recruitment, some famous enterprises will limit universities, but the competition will not. Competition is very helpful for improving the ability of programming. It is also very helpful for students' employment even if they don't having a prize.

4. Establishing peer employment counseling. Peer counseling refers to the sharing of employment skills and employment experience by senior students who have received an OFFER or by graduates of previous years who have found jobs. For college students, they are eager to know what employment

will look like in the future. Employment experience is a valuable practical material for college students which is shared by their own seniors, especially those with the same major.

6. Summary

Colleges and universities are places of training talents for the country. Only by paying attention to students' training, improving students' employability and pushing forward the national strategy, can we finally achieve a win-win situation for universities, students and society.

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