### Application of Artificial Intelligence in the "2+1" Talent Training of Higher Vocational Secretarial Majors in Biological Information Collection and Monitoring Software

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Abstract:Exploring and practicing the "2+1" talent training mode of combining work and learning in higher vocational secretarial majors has become a new topic in the education of higher vocational secretarial majors. This paper expounds the meaning of the "2+1" talent training mode combining engineering and learning in the secretarial specialty of higher vocational colleges, and from the course teaching practice, the implementation and management of the talent training mode, and uses the moving average filter to process the signal, which improves the signal-to-noise ratio of the signal; And design FIR filter to achieve the filtering of baseline drift. The filter design is simple and easy, which can not only meet the system filtering requirements, but also keep the original waveform as much as possible for researchers to use. Use artificial intelligence technology to carry out technological innovation of projects and develop and develop innovative projects of "mass entrepreneurship and innovation" studios to promote the cultivation of "mass entrepreneurship and innovation" talents in colleges and universities and support the multi-objective-driven talent training model of college discipline competitions.

Keywords: Artificial Intelligence, "2+1" Talent Training, Higher Vocational Secretarial Majors, Biological Information Collection

### **1. INTRODUCTION**

The fermentation process is a complex process involving the growth and metabolism of microbial cells. It is a nonlinear time-varying system with complex influencing factors and serious parameter correlations [1]. Therefore, the parameter measurement, operation monitoring and automatic control of the fermentation production process have become the key issues in the optimal management and automation of bioengineering. Through our understanding of the animal nervous system and the research on the biological movement control of the nervous system, we can implant electrodes in specific nuclei of the animal brain and control the animal's brain by sending "specific pulses" to affect the neural activity in the animal's brain. Behavior [2].

In order to achieve this goal, finding effective "specific pulses" has become a very important work for us [3]. In recent years, machine vision technology has developed rapidly and plays an important role in the industrial field. In terms of quality inspection, if relying on manual inspection, there are three main defects [4]: one is that the differences between people make it difficult to unify the standards, and the other is that the daily status of the same person will also affect the test results [5].

As a traditional major with strong practicality and application, the main task of the secretarial major is to cultivate outstanding secretarial talents with solid professional skills, good comprehensive quality and strong adaptability that meet the requirements of the society [6]. While firmly grasping professional theoretical knowledge, teamwork ability, etc.; the requirements of marketing for secretarial professional ability are reflected in professional ethics level, social etiquette level, marketing knowledge, etc., and the requirements for secretarial general ability and professional quality ability are reflected in integrity literacy [7]. That is to say, under the premise of building a curriculum system with the application of technical ability as the main line, through the integration of the curriculum [8], it takes two years to complete the teaching tasks of 1600-1800 hours of teaching hours for higher vocational colleges stipulated by the Ministry of Education, and the remaining [9]. The one-year teaching time is carried out in enterprises, and the rapid development of Internet technology and artificial intelligence technology provides more technical directions and application innovation options for undergraduate students majoring in computer science [10]. The technical characteristics of "Internet +, artificial intelligence +". It marks that vocational education has entered a new stage of rapid development of quality improvement and value-added empowerment [11].

Through deepening the integration of production and education and school-enterprise cooperation, we will continue to cultivate talents that meet the needs of new industries, improve the supply of human resources [12], and enhance the ability of vocational education to serve economic and social development. A college of applied technology is a kind of local undergraduate and junior colleges that meet the needs of economic and social development, take local applicationoriented talents as the main training goal, and have specific school-running concepts, school-running models, and schoolrunning rules [13]. Applied technology colleges and research colleges constitute the main system of higher education in my country. By 2020, a new innovation and entrepreneurship education system in colleges and universities will be established, and talents with high quality and strong innovation and entrepreneurship ability will be cultivated. [14]

At the same time, the rapid development of artificial intelligence in recent years has continuously changed people's work and lifestyle [15]. The communication between the upper computer and the lower computer adopts the wireless

communication module PI'R2000, which realizes the real-time remote monitoring and optimization of the production process of the fermentation system. Improve the production process and improve the availability of equipment [16]. The system has a high degree of automation, good reliability, and strong practicability, and has a good market application prospect. At present, the system is not perfect, so cockroaches implanted with pulse-emitting electrodes still act on their own volition and even don't respond to pulsed signals [17].

### 2. THE PROPOSED METHODOLOGY

### 2.1 The Cultivation of "2+1" Talents in Higher Vocational Secretarial Major

Assistant Professor Isao Shimoyama said: "Insects can do many things that humans cannot. The potential applications of this work have huge implications for humans." Since it is impossible to obtain the precise location of precision parts with manual operation, vision technology can be used to quickly find precision components Parts and positioning, guide the robotic arm to grasp accurately. The "2+1" talent training model for secretarial majors in higher vocational colleges means that during the three-year study, students will conduct theoretical study and basic skills training necessary for the secretarial professional group in the school in the first two years and enter the enterprise and public institution in the last year. While familiar with the enterprise working environment and workflow, in the field of semiconductor packaging, the equipment needs to adjust the pickup head according to the chip position information obtained by machine vision

Internship stage to improve professional quality and skills. The "1" in the "2+1" model is a crucial year. After the twoyear theoretical study, there is a one-year internship. This stage is an important stage for the comprehensive quality and professional ability of secretarial students to be fully cultivated. Using network terminals to conduct threedimensional teaching for students, secretarial students can adapt to future jobs in advance with the help of network technology. In the process of professional training related practical training, other students can also play the role of the boss, making various problems to make things difficult for the "secretary" experimental teaching at work to deepen the students' understanding of the relevant course content.

It is extremely important to have a firm grasp of what you have learned, but the best experiment is. It is also just imitation, and there is a certain gap between the form and scale and the real practice. The technological development in the era of artificial intelligence has brought qualitative changes and new challenges to educational teaching content, teaching forms, teacher-student relationships, and educational concepts [4]. The training of artificial intelligence professionals must keep pace with the times to meet the requirements of the artificial intelligence era. When the understanding is vague, the positioning is not accurate. Simply and roughly, innovation and entrepreneurship education are equated with employment guidance, and it is believed that innovation and entrepreneurship is an expedient measure to temporarily relieve employment pressure. Innovation and entrepreneurship education is separated from professional education, ignoring professional characteristics, and thousands of people have one side. The brain is a very important organ for vertebrates.

# **2.2 The AI-Based Bioinformatics Collection**

When receiving a certain nerve impulse (whether from inside the brain or afferent from nerve fibers), a series of electrical activities will occur in the relevant nuclei of the brain, process various impulses according to physiological needs, and make various responses (such as reflection and thinking). Real-time tracking of students' internships, and targeted training and training for students according to the individual job requirements of the enterprise. Students learn in a real working environment, their professional skills are improved, and the basic theoretical knowledge, professional knowledge and basic skills learned in school can be integrated through practical exercises.

The system uses a single-chip microcomputer as the lower computer and is designed to automatically select two operating modes: offline (disconnected from the upper computer) or parallel. Because the single-chip microcomputer operates reliably, once the upper computer has a problem, it will not affect the normal operation of the lower computer. From the above analysis, it can be seen that in the process of signal extraction, various electromyography (cardiac, eye, skeletal muscle) interference from the animal body, vigorous activities of the animal, and power frequency interference from the outside world will make the system. The signal-tonoise ratio of the signal will decrease, and even the weak signal will be submerged, which will inevitably have a considerable impact on the next step of signal analysis.

Comprehensive training in several courses of office automation. Most of these practical trainings are conducted in special training rooms, and some project trainings are conducted in the form of virtual companies in simulation training rooms. This setting makes the implementation of practical teaching more solid and effective. First of all, the construction of the curriculum system must highlight the ability goals. The secretarial majors in many vocational colleges are developed and constructed on the basis of the traditional Chinese language and literature majors, which has resulted in excessive imitation of the Chinese language and literature majors in the construction of the curriculum system. The reason for this is that on the one hand, it is due to the consideration of the preparation of teachers. During the winter and summer vacations every year and when students are working as internship instructors, the school will provide professional teachers with opportunities to practice in counterpart enterprises and institutions. Summary of teaching experience and feedback with employers.

Innovation and entrepreneurship education is not a simple education of knowledge and skills, but a brand-new quality training for students. The school has transformed the talent training model of a single computer major into a broad-caliber professional education model based on innovation and entrepreneurship. The image acquisition system includes light source, camera, supporting lens, data transmission line and terminal server, which is mainly used for high-speed acquisition and storage of images. In machine vision systems, CCD (Charge Coupled Device) cameras are mainly used to generate images.

# **2.3** The Bio-Information Collection and Monitoring Software

During this period, a variety of digital filter structures were proposed, some characterized by the smallest operation error, some pursued the goal of high operation speed, and some had both. Various approximation methods and realization methods of digital filters are proposed, and two main types of filters, recursive and non-recursive, are compared comprehensively, and the basic theories and concepts of digital filters are unified. Therefore, in the fermentation process, quality-related variables, such as temperature, stirring speed, pH value, dissolved oxygen, ventilation, foam, etc., are mainly used as controlled variables.

Aiming at the importance of various environmental parameters that affect microbial metabolism in the fermentation process, the system only responds to temperature, pH value. Vision is an important means for humans to observe and recognize the world. With the development of information technology, humans gradually endow this skill with computers, robots, or other intelligent machines. At present, machine vision technology has been commercialized and practical, lenses, high-speed cameras, light sources, and image software. To successfully implement the post-internship link, we must first do a good job in the construction of an internship base. Only by choosing a good internship position and determining a good job field can ensure that the student's internship is truly rewarding. Vocational colleges should actively cooperate with enterprises and learn from foreign advanced experience. Secondly, strengthen the construction of double-qualified teams and strengthen the construction. To strengthen the construction of double-qualified teachers, a high-quality double-qualified teacher team is an important guarantee for the implementation of the apprenticeship system for aircraft maintenance.

It is recommended that schools regularly arrange for teachers to go deep into the front line of enterprises to participate in production practice. Various forms of teacher skills competitions have become platforms for teachers to improve their practical ability and be recognized. As secretarial teachers, they should also actively participate in national, provincial, prefecture-level, and school-level vocational skills competitions. The physiological signal collected by the acquisition system is actually a dynamic nuclear group electrical signal, because the animal is free to move in an awake state. The electromagnetic environment, the amount of exercise and the intensity of the activity are different, and the electrical signals of the nuclear clusters collected by the system are also inconsistent.

### 3. CONCLUSIONS

Design and build the biological signal acquisition, amplification, filtering analog hardware circuit. In order to accurately extract the target nuclei activity signals of animals, the design concepts of some non-invasive EEG and ECG acquisition systems are referred to, and an electrical signal acquisition circuit and a 50Hz notch filter are implemented. In addition, VC++ is used to realize the upper computer monitoring of the fermentation process. The monitoring system interface has data collection of parameters such as tank temperature, pH, dissolved oxygen DO, and foam level. Produced and continuously developed and improved due to the demand for high-quality and high-skilled talents. This model aiming at cultivating students' professional quality and ability will surely promote the teaching reform of higher vocational secretarial major.

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