

Online System QoS Enhancement of Flipped Classroom for Intelligent Manufacturing Specialty Based on Intelligent Information Platform

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Abstract: In-depth analysis of the online teaching mode of the "Machine Vision and Inspection" course of the intelligent manufacturing major, and research on the teaching work of the machine vision and inspection course from the teaching objectives and positioning and the key content of the course. And in our school network engineering major Corresponding experiments were carried out. The pilot results show that, for ordinary colleges and universities aiming at cultivating applied talents, the characteristic reform of the original network engineering-related majors can effectively meet the local demand for talents in this field. It is an end-to-end QoS monitoring solution that combines deployment and centralized management.

Keywords: Online System QoS Enhancement, Flipped Classroom, Intelligent Manufacturing Specialty, Intelligent Information Platform

1. INTRODUCTION

During the epidemic, in the face of the new situation, the teaching method was adjusted to realize "suspended classes and non-stop learning", to ensure students' learning efficiency, and to explore and think about the online teaching mode of machine vision and inspection courses. Effective integration, improve teaching effect. Professional characteristics, and actively adapt to the needs of local economic development for the professional talents. On the basis of in-depth research, combined with the school's experience in running a school, it is clear that the professional orientation is to rely on Hefei College, based in Anhui, and facing the whole country, to cultivate computer engineering applied talents with wide adaptability, strong practical ability, innovative thinking and professionalism.

Reference [1] Aiming at the network quality problem when the system is laid on the basis of the existing metropolitan area network, a solution based on the network model is proposed, which can guarantee the service quality of the system on the basis of little impact on the traditional business. There are currently two bandwidth allocation algorithms: Dynamic Bandwidth Allocation (DBA) and Static Bandwidth Allocation [2] The automated production line course is a comprehensive practical course for related majors such as electrical automation, mechatronics and industrial process automation, [3] Learning in professional knowledge The intelligent information platform is the main information platform of ITS, and it is the core hub of traffic management information transmission. Almost all traffic management information must be processed and forwarded through this platform. Therefore, the stability and efficiency of this information platform is the key to the success of the entire system.

[4] The functional requirements of the intelligent information platform will be analyzed in detail below. According to the middle-level mechanism of the broadband wireless access standard, a scheduling structure combined with the wireless channel state is proposed in the literature, and the scheduling strategy under this structure and the corresponding structure

are analyzed. The designed scheduling algorithm model. Thus, plug and play of ONU is supported. The ranging of the EPON is initiated and completed by the OLT through time stamping while monitoring the ONU's plug and play [5].

Accurately measure the distance from each ONU to the OLT and accurately adjust the ONU's sending delay [6]. Students can communicate and interact with the instructor better. They need to have a high degree of concentration and participation. Otherwise, they cannot complete classroom exercises in real time [7]. If you don't understand the homework [8], you can deepen your understanding of the knowledge points by watching the replay of Tencent Classroom. The guiding ideology and basic ideas of professional construction are under the background of vigorously developing fine chemical industry in Liaoning Province [9] and the basic situation of key industrial clusters in Liaoning Province.

Guided by the spirit of the relevant documents of the Ministry of Education's discipline construction and professional construction, adhere to the people-oriented and continuous reform. Through the intelligent information platform, all illegal vehicles can be monitored in real time. After a front-end system in a city finds the license plates of illegal vehicles [10], the license plate will be sent to the command center for comparison. If the relevant records of the vehicle are confirmed, the front-end system will be notified to start processing, and the commander can find the nearest law enforcement officer through the electronic map [11]. Acts of defaulting electricity use, such as moving and operating power supply equipment, will cause short-circuit, tripping and other faults, which will lead to casualties in serious cases, and can easily cause power supply interruptions, affecting the electricity demand of other electricity customers.

is defined as "in one. The overall subjective acceptability of the application or service used by the end user", it can be seen that the end user's service usage experience is more emphasized. The use of upper-layer protocols cannot solve the service differentiation and delay control of the data link layer in EPON. Therefore, It is an essential function of EPON to support the differentiation of business levels to ensure

different levels of service quality [12]. An overview of machine vision and detection technology, 2 class hours, introduced machine vision through case analysis of the application of machine vision and detection technology in various industrial neighborhoods in [13], the media streaming indicator is considered as a simple and extensible standard to evaluate the impact of the transmission network on the quality of video and end-user experience.

2. THE PROPOSED METHODOLOGY

2.1 The Intelligent Information Platform

It is composed of two parameters, the delay parameter and the media loss rate. The composition of elements. Literature [14] based on the analysis of the nature of the chaotic change of network traffic, evaluated the network traffic using the chaotic prediction method. The ranging of EPON is initiated and monitored by the OLT through the time stamp while monitoring the plug and play of the ONU. Complete [15]. Accurately measure the distance from each ONU to the OLT and accurately adjust the ONU sending delay.

Among them, R is the interpolation function, and R is the value of the function $f(x, y, z)$ at the node.

Software platform introduction and image processing operator analysis, 26 class hours, using LabVIEW platform for software programming platform, focusing on Visual Assistant 2014 visual software, through operator analysis, case explanation, students [16] can complete their homework by themselves. Significant achievements have been made in the construction of practical training and teaching equipment. However, since many higher vocational colleges were upgraded from secondary vocational colleges [17], the "splicing" of the actual training and teaching system is very serious and lacks a systematic approach. ITS is a large and complex system. The system involves multiple subsystems and multiple front-end devices [18].

It is quite complicated to make this system work correctly and in an orderly manner. Therefore, this system must have the ability of self-detection and recovery of faults. When a system problem occurs, it must be able to quickly locate the location of the fault. find out the solution to the fault. The orthogonal table is the analysis table that records the orthogonal test design scheme and test results in detail. Generally, it contains the following three characteristics: the number of different numbers in each column appears equal. Small and micro logistics enterprises are developing rapidly, but the overall logistics technology is still backward and the level of informatization is low. Most small and micro logistics enterprises rely on manual operations and do not have the ability to use modern information technology to process logistics information.

The rapid development of the Internet. The rapid development of the informatization level of ship equipment has brought convenience to the crew's work, and also generated a large amount of perception data. Massive sensory data has the characteristics of large data scale, heterogeneous data formats, and diverse data sources.

2.2 The Intelligent Manufacturing Professional Flipped Classroom

With the introduction of cognitive decision-making functions, the data processing process becomes more and more complex. Basic image processing functions: including histogram, line profile, measurement, 3DView, brightness and contrast adjustment, establishing coordinate system, image mask,

geometric transformation, image cache, image acquisition, image calibration, image calibration, image identification, etc.

Since many higher vocational colleges were upgraded from secondary vocational colleges, after the upgrade, there were more teachers of basic courses. In order to take care of the original teachers of basic courses, practical training was carried out at a later stage, which separated the teaching of professional courses. Public security traffic management the department obtains information on new roads from relevant departments, and designs, constructs and installs signs and markings and traffic control equipment in a timely manner.

2.3 The Online System QoS Enhancement of Flipped Classroom

It obtains road construction information, major event information, and service information from relevant departments, and formulates corresponding traffic control measures and traffic control plans in a timely manner. The value in the orthogonal table is directly brought into the equation of the mathematical model to solve the stress of each stage of the unbalanced tension in the ice-covered state, and the corresponding stress difference in the adjacent two stages is the unbalanced tension percentage. Professional characteristics, based on network communication technology and computer technology, highlighting the cultivation of interdisciplinary comprehensive technologies such as industrial control networks, wireless sensor networks and the Internet of Things, so that students trained in this major not only have the ability to design commercial network application systems and network engineering.

The packet classification feature enables network managers to formulate policies for dividing network traffic into several priority or service levels. The network manager can define six levels by using three priority bits in the service type information field of the packet header. There is no cache management in the figure, in fact this step is done before all QoS work. After the cache management sets the number and size of ONU queues, priority mapping and queue scheduling can be performed. Employment prospects: Keep up with national development and talent demand orientation (in the next five to ten years, there will be a huge demand for talents in ubiquitous network construction for industry and commerce, and there is currently a shortage of talents in this area).

The accuracy and security of freight information are not high, causing serious losses to enterprises and individuals. The freight APP has been recognized by individual retail investors, but for small and micro logistics enterprises, from the perspective of operators, it is not only concerned with service quality. Definition, more practical significance is how to quantify service quality, how to establish service quality index system to guide the quality operation and maintenance of the existing network. All management information of the QoS module is reflected in the QoS MIB table. Node information corresponds to a management function, and also corresponds to a type of command of the command line network management. For example, the nodes in the table point SLA table correspond to all the functional parameters of the SLA.

3. CONCLUSIONS

There is not much difference between online teaching and offline teaching content of machine vision and inspection courses for intelligent manufacturing majors. The content of offline courses can be taught in the way of online teaching. Fully implement the requirements of intelligent manufacturing in the construction of curriculum resources for automated production lines Compared with the practice in practice, the results show that compared with traditional resources, the course resources can be closer to the development needs of intelligent manufacturing talents to a large extent, and the course teaching is more in-depth and autonomous, which reflects the student-centered educational philosophy. User QoS, which requires a good load balancing technology, its accuracy and efficiency directly determine the overall efficiency and performance.

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