

Retraction

Retracted: Research and Analysis on the Cultivation of Intelligent Transportation Technology Professionals under the Background of Integration of Production and Education

International Transactions on Electrical Energy Systems

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This article has been retracted by Hindawi following an investigation undertaken by the publisher [1]. This investigation has uncovered evidence of one or more of the following indicators of systematic manipulation of the publication process:

- (1) Discrepancies in scope
- (2) Discrepancies in the description of the research reported
- (3) Discrepancies between the availability of data and the research described
- (4) Inappropriate citations
- (5) Incoherent, meaningless and/or irrelevant content included in the article
- (6) Manipulated or compromised peer review

The presence of these indicators undermines our confidence in the integrity of the article's content and we cannot, therefore, vouch for its reliability. Please note that this notice is intended solely to alert readers that the content of this article is unreliable. We have not investigated whether authors were aware of or involved in the systematic manipulation of the publication process.

Wiley and Hindawi regrets that the usual quality checks did not identify these issues before publication and have since put additional measures in place to safeguard research integrity.

We wish to credit our own Research Integrity and Research Publishing teams and anonymous and named external researchers and research integrity experts for contributing to this investigation.

The corresponding author, as the representative of all authors, has been given the opportunity to register their agreement or disagreement to this retraction. We have kept a record of any response received.

References

- [1] Y. Zhang and Y. Zhu, "Research and Analysis on the Cultivation of Intelligent Transportation Technology Professionals under the Background of Integration of Production and Education," *International Transactions on Electrical Energy Systems*, vol. 2022, Article ID 9622264, 11 pages, 2022.

Research Article

Research and Analysis on the Cultivation of Intelligent Transportation Technology Professionals under the Background of Integration of Production and Education

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In order to improve the training effect of transportation technology professionals, this paper combines the intelligent digital signal processing method to process the data of the integration of production and education, and explores the training process of transportation technology professionals. In the process of data processing of industry-education fusion, this paper demodulates the nuclear magnetic resonance signal obtained after A/D conversion from the carrier frequency signal and places it at zero frequency. At the same time, this paper realizes the separation of the real part and the imaginary part of the nuclear magnetic resonance signal and constructs the digital sine table and digital cosine table of the carrier reference frequency. In addition, the data output by the ADC is subjected to quadrature detection to become two data signals, which are the in-phase component and the quadrature component. Finally, this paper constructs an intelligent analysis model. The simulation results show that the talent training method of intelligent transportation technology based on the integration of production and education has good effects, which can effectively improve the training effect of transportation technology professionals.

1. Introduction

Professional technology professionals are an important part of innovative talents. The so-called innovative talents refer to talents with innovative ability and innovative spirit, which are closely related to the following conditions. The first is to have solid basic knowledge and profound professional quality, accurately grasp the latest achievements and development trends of scientific and technological development in this field, and understand the necessary knowledge of adjacent disciplines and horizontal disciplines, which are the basic conditions for continuous innovation and contribution. The second is to have a very keen observation, to be able to discover and identify problems in a timely manner from the source, and to proactively promote the solution of cutting-edge and forward-looking problems. The third is to have rigorous scientific thinking ability and accurate

comprehensive judgment ability to analyze and solve problems according to scientific laws. The fourth is to have the courage to innovate, to stand on the forefront of the tide to meet challenges, to face difficulties and solve problems, to dare to take the road that others have not taken, and not to hold back because of the fear of failure. In response to these conditions, high-level talents have a certain knowledge reserve and ability accumulation in their respective professional and technical fields, are sensitive to relevant information inside and outside the industry, and objectively have the foundation and conditions required for innovation. Therefore, from the perspective of the relevant elements of innovative ability and innovative spirit, innovative talents must exist in the professional and technology talent team [1]. This requires that the construction of talent team should focus on enhancing the innovation ability of talents and strengthen the construction of new talent team. Professional

technology professionals are the quintessence of transportation talents, and the key force and leader to realize the rapid, sustainable, and healthy development of transportation. However, there is an obvious shortage of top-notch talents in the field of highway and waterway transportation, and the proportion of professional technology talent with senior technical titles in the entire system is relatively low [2].

In a narrow sense, school-enterprise cooperation refers to enterprises and universities as the main body, on the basis of common interests, on the premise of resource sharing or complementary advantages, and through the exchange of information and materials to achieve common goals. In a broad sense, school-enterprise cooperation consists of basic innovation subjects, auxiliary subjects, and external environment. The auxiliary subjects include the government, financial institutions, consumers, etc., and each subject jointly realizes technology research and development and achievement transformation through interaction with the external environment [3]. School-enterprise cooperation refers to school-enterprise cooperation in a narrow sense [4]. With the popularization of higher education, university education has also changed its elite teaching mode. The increasing number of students has brought certain pressure to the teaching work of colleges and universities. School-enterprise cooperation is a supplement to the current mode of talent training in colleges and universities. It fully solves the contradiction between the lag between the training of talents in colleges and universities and the actual needs of enterprises. As one of the successful experiences of running schools in developed countries, this talent training model has been proven by many practices. It is a good model for cultivating applied talents with flexible operation mechanism and complementary resource advantages. It reflects schools and enterprises. The clear division of labor in theoretical knowledge teaching and vocational skills training reflects the close combination of theory and practice. Under the principle of resource sharing, through the cooperation of production and learning, production and education, it has cultivated enterprises that place equal emphasis on vocational skills and professional knowledge [5].

School-enterprise cooperation is an educational model based on professionalism and practice. In essence, it reflects the core elements of school-enterprise cooperation: the cooperative relationship between the government, enterprises, and schools. From the guidance of government laws and policies to promote healthy cooperative relations between schools and enterprises [6]. The study believes that school-enterprise cooperation requires the government to use administrative laws and regulations to guide and also requires government financial subsidies. Through the full integration of academia and industry, the output of school human resources can be directly connected with the needs of enterprises, so as to achieve the ultimate goal of school-enterprise cooperation [7]. At present, the cooperation between enterprises and universities is an inevitable trend of enterprises in the process of market competition and development. Realizing the integration of production, learning, and research between enterprises and universities, enterprises can obtain the support of school scientific

research through the scientific and technological projects of school-enterprise cooperation, and then successfully convert their research results into economic benefits [8].

Under the background of the continuous development of public theory, the research on school-enterprise cooperation has also been further developed, and its research is carried out in-depth on the basis of public management theory [9]. For scientific and technological innovation in various fields of school-enterprise cooperation, the government needs to encourage school-enterprise cooperation, so that school-related research resources and enterprise production practices can be linked, thereby promoting a win-win situation for both parties [10]. In the process of rapid economic development of schools, school-enterprise cooperation not only requires a series of government funding requirements, but also requires enterprises to provide specific practice platforms for universities, which just solves the problem of lack of school practice resources in school-enterprise cooperation, and ultimately achieves the most win-win situation among the three parties [11]. In order to survive in the fierce market, enterprises need to fully rely on the advanced technology and concept platform of colleges and universities to enrich their own development productivity [12]; the development of the world economy is mainly reflected in the cultivation of experts and talents in various fields. The demand for labor force in today's society is also increasing. This puts forward higher quality requirements for school-enterprise cooperation. At this time, the government needs to play a promoting role as an invisible hand to enhance the gold content of school-enterprise cooperation [13]. In the process of development, enterprises not only need to rely on their own strong scientific research capabilities to develop new products and new projects, but also need to cooperate with some colleges and universities to accelerate the improvement of enterprises' innovation capabilities through direct results conversion into economic benefits [14].

If the government wants to give full play to the leading role in the process of school-enterprise cooperation, it needs to play a full role in policy guarantee, supervision and management, evaluation, and acceptance [15]. The role of the government in school-enterprise cooperation is particularly important and it is mainly responsible for three aspects: publicity and guidance, policy guidance, and policy support [16].

This paper combines the intelligent digital signal processing method to process the data of the integration of production and education, explores the training process of transportation technology professionals, and improves the training effect of transportation technology professionals.

2. Data Processing Algorithm in the Process of Integration of Production and Education

The main research route of this paper is shown in Figure 1.

2.1. Realization of Sampling Rate Conversion of Digital Downconverter. Sampling rate conversion is the main purpose of software radio. Sampling rate conversion can be

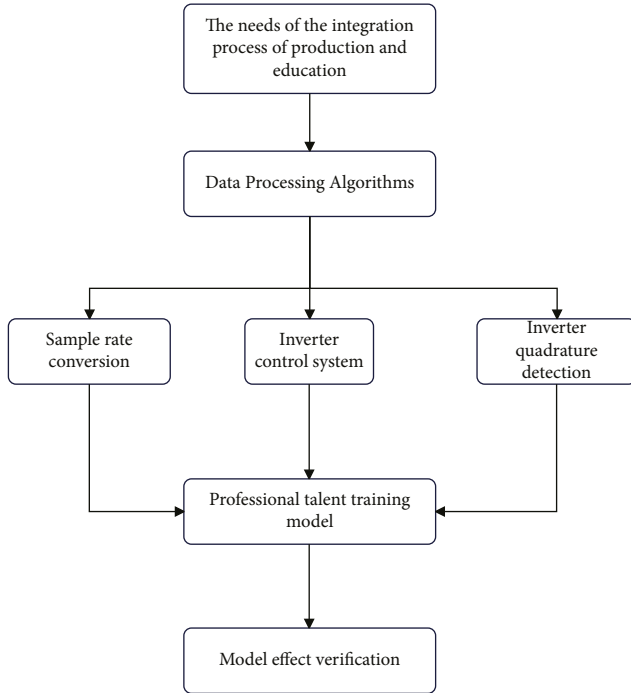


FIGURE 1: Research framework.

divided into two categories, one is digital downconverter, which reduces the sampling rate, and the other is digital up-conversion, which increases the sampling rate. The digital receiving system of the production-education integration system mainly realizes the function of digital downconverter [17]. The digital downconverter is the extraction of fractional multiples, and there is another type of extraction of integer multiples. In the digital system of the integration of production and education, the sampling rate is reduced from 32MSPS to 2MSPS, so the digital downconverter technology of integer multiple extraction is applied [17].

Multistage sampling rate conversion is applied in the digital receiving system of the production-education fusion system. The multistage sampling rate transformation has the following characteristics. It reduces the amount of computation, reduces the amount of storage, simplifies the design of the filter, reduces the requirements for the transition bandwidth of each stage, and can reduce the finite word length effect of digital quantities. There are advantages as well as disadvantages. The system is more complex and uses more storage space; the control system is more complex.

In general, the multilevel implementation is still more efficient, as can be seen in the following example, multilevel is more efficient than single-level. According to the design method of the equiripple filter in the previous section, the sampling frequency of the input signal $x(n)$ is 10 KHz, the sampling frequency of the output signal $y(m)$ is 100 Hz, and the sampling factor is $M=100$. Its passband is from 0 to 45 Hz, the transition bandwidth is 5 Hz, the passband ripple is 0.01, and the stopband ripple is 0.001. The system needs to

perform 50,800,000 multiplication operations per second. Due to the extraction, the extracted signal does not participate in the operation, so the system actually performs 254,000 multiplication operations per second [18].

The system is divided into two stages to complete the operation, assuming that the extraction factor of the first stage is 50, and the extraction factor of the second stage is 2, which also completes the work of the total extraction factor of 100. Then, the transition bandwidth of the first stage is from 45 Hz to 150 Hz, and the transition bandwidth of the second stage is from 45 Hz to 50 Hz. The order $N_1 = 263$ of the first-stage filter can calculate the calculation amount of the first-stage 52600 MPS. The second-stage filter order $N_2 = 110$, the calculation amount is 1000 MPS, and the total calculation amount is 63600 MPS. If the symmetrical characteristics are considered, the total calculation amount is 318000 MPS. It can be seen that the amount of calculation is reduced by eight times [19].

First, it can be seen that the reason for the reduction in the amount of multistage decimation operations is that the order N of the filter is proportional to $D_\infty(\delta_p, \delta_s)$ and F , and inversely proportional to the transition bandwidth ΔF of the filter. For the previous example, in the first stage, although the decimation rate is large, the transition bandwidth is also large, which reduces the order of the filter. In the second stage, the decimation rate has been reduced, and even if the transition bandwidth is small, it can be seen that the filter order is still reduced. In a multistage system, the amount of computation at each stage is greatly reduced [20]. In a multistage system, the transition bandwidth of each stage is determined according to the sampling rate. Therefore, the last stage of the multi-stage system can only be realized by using an FIR filter. The reason is that the transition bandwidth of the last stage is determined according to the design requirements and has nothing to do with the sampling rate.

The structure of sampling rate transformation is not as simple as mentioned above, here is just a brief introduction, we can intuitively see the benefits of multilevel operations. In the following chapters, we will continue to discuss the specific implementation of multilevel transformation. It involves the number of decimation stages, the decimation factor, the selection of filters at all levels, and the realization of filters [21].

If the total decimation factor of the decimator is M , the sampling rate of the i -stage output can be expressed as [22]:

$$F_i = \frac{F_{i-1}}{M_i}, \quad i = 1, 2, 3 \dots \quad (1)$$

If the initial input sample rate is F_0 and the final output sample rate is F_I , then

$$F_I = \frac{F_0}{\prod_{i=1}^I M_i} = \frac{F_0}{M} \quad (2)$$

The useful frequency range of the output signal $y(m)$ is defined as follows:

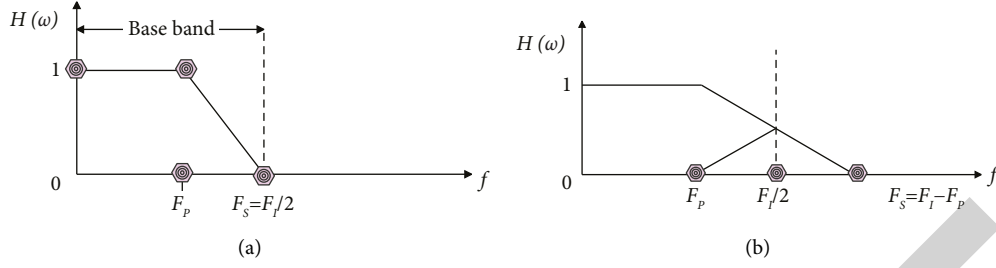


FIGURE 2: No aliasing and aliasing spectrum in transition band. (a) No aliasing in the transition. (b) Aliasing is allowed in the transition.

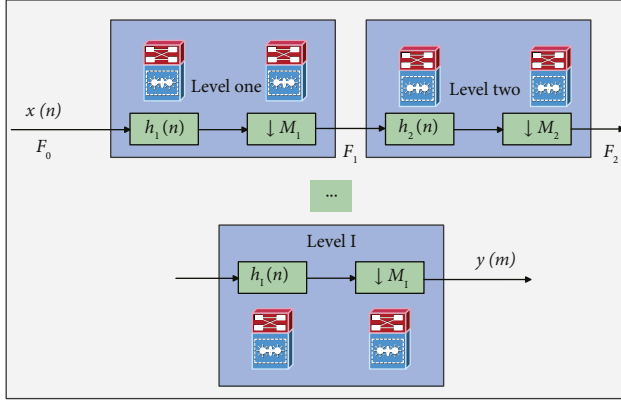


FIGURE 3: Schematic diagram of the workflow of the multistage decimation filter.

$$\begin{aligned}
 &0 \leq f \leq F_p, \text{ passband,} \\
 &F_p \leq f \leq F_s \leq \frac{F_I}{2}, \text{ belt of transition.}
 \end{aligned} \tag{3}$$

As can be seen from Figure 2, the stopband edge frequency is required to be less than or equal to $F_I/2$, and Figure 2(a) is the case of $F_I/2$, so that the entire baseband of $y(m)$ is prevented from being aliased. In actual design, great attention should be paid to this point, and the baseband signal must be well protected, otherwise the desired signal cannot be recovered, because once aliasing occurs, it cannot be removed. For any other frequency band except baseband, aliasing is allowed in the design of the previous stage. The reason is that subsequent processing can eliminate aliasing [23].

In Figure 2(b), aliasing is allowed in regions larger than F_p . At this time, $(F_I/2) \leq f \leq F_I - F_p$ can be applied so that a filter with a wider transition band can be used. The advantage is to reduce the order of the filter and reduce the amount of calculation, but the baseband signal must be well protected and cannot be interfered.

The block diagram of the multistage decimation filter and the frequency spectrum of each stage are shown in Figure 2. After the signal is extracted by M_1 times of the first stage, aliasing will occur, and the aliasing area is limited between F_s and $F_I/2$. It is to protect the baseband signal from aliasing.

$$0 \leq f \leq F_p, \text{ Level 1 bandpass,}$$

$$F_p \leq f \leq F_I - F_s, \text{ First stage transition zone,} \tag{4}$$

$$F_I - F_s \leq f \leq \frac{F_0}{2}, \text{ First stage stopband.}$$

In the second stage processing, the baseband signals 0 to F_s are also protected to avoid aliasing. For all levels in the system [24],

$$0 \leq f \leq F_p, \text{ Class I passband,} \tag{5}$$

$$F_i - F_s \leq f \leq \frac{F_{i-1}}{2}, \text{ Stage I stopband.}$$

It can be seen from Figure 3 that the transition bandwidth of the last stage is the same as that of the single-stage system, because the computation load here has been greatly reduced by the multistage processing.

In addition to paying attention to the various requirements of the frequency band, it is also necessary to pay attention to the amplitude index, otherwise the useful signal will be difficult to identify, that is to say, the signal can be annihilated by the noise in the passband. Formula (6) gives the requirement of the passband amplitude index, and formula (7) gives the requirement of the stopband amplitude index.

$$1 - \delta_p \leq |H_{LP}(e^{j2\pi f/F})| \leq 1 + \delta_p, \quad f \in \text{passband,} \tag{6}$$

$$0 \leq |H_{LP}(e^{j2\pi f/F})| \leq \delta_s, \quad f \in \text{stopband.} \tag{7}$$

Spectrum diagram of decimation filter at all levels is shown in Figure 4.

The passband ripple δ_p is the maximum excursion from 1.0, the stopband ripple δ_s is the maximum excursion from 0.0, and F is the sample rate of the filter [25].

$$|H_0(e^{j2\pi f/F_0})| = \left| \prod_{i=1}^I H_i(e^{j2\pi f/F_{i-1}}) \right|, \quad f \in \text{passband.} \tag{8}$$

The $H_i(e^{j2\pi f/F_{i-1}})$ pair is the system function of the first stage filter, and the $H_0(e^{j2\pi f/F_0})$ pair is the total system function. If under approximately ideal conditions, that is, the passband of the filter can be well matched, δ_p can be much smaller than 1, then there is:

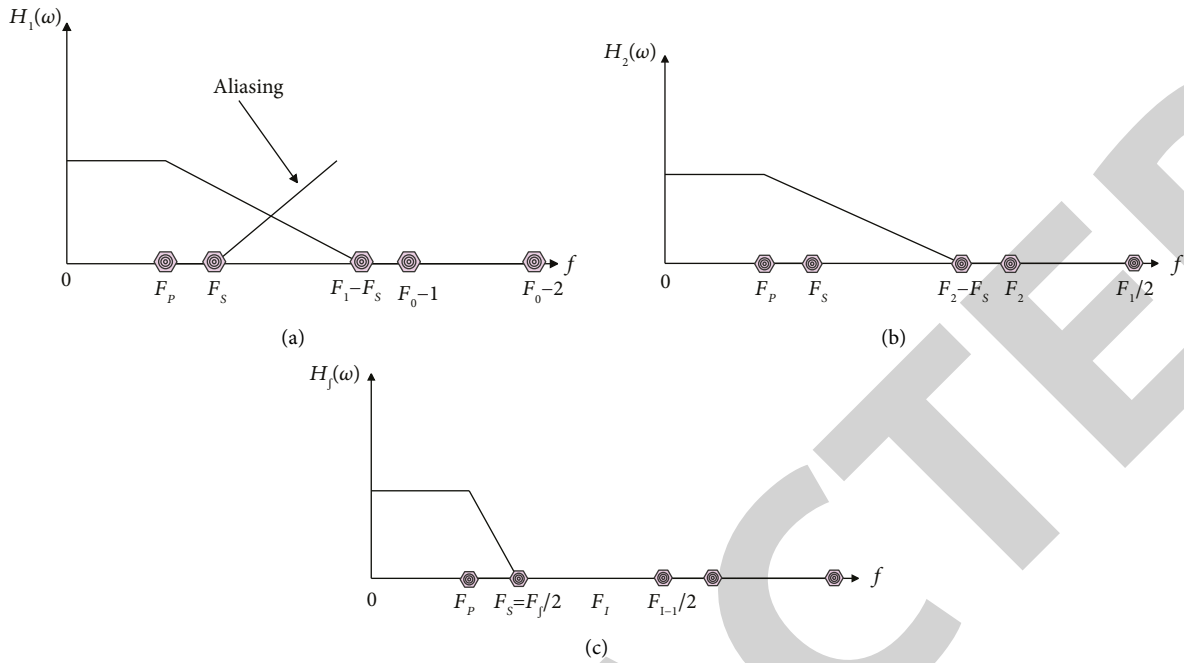


FIGURE 4: Spectrum diagram of decimation filter at all levels. (a) The first level of filtering parameters. (b) The second level of filtering parameters. (c) The I th level of filtering parameters.

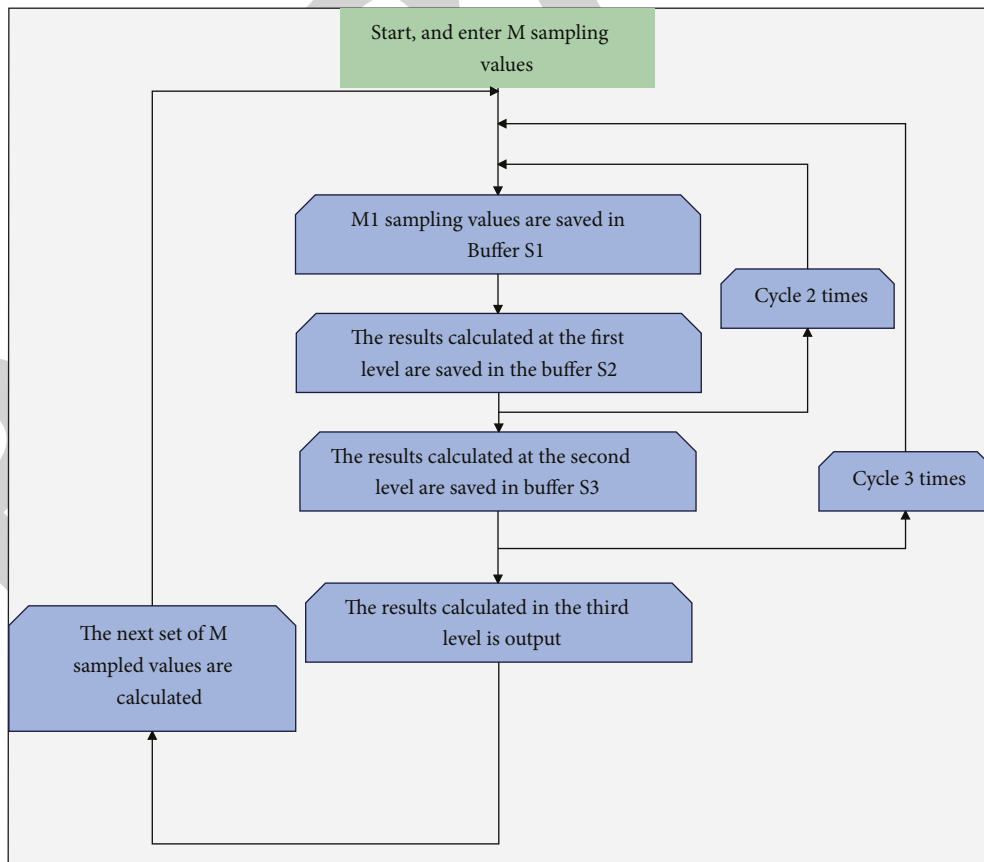


FIGURE 5: Flowchart of the three-stage extraction system.

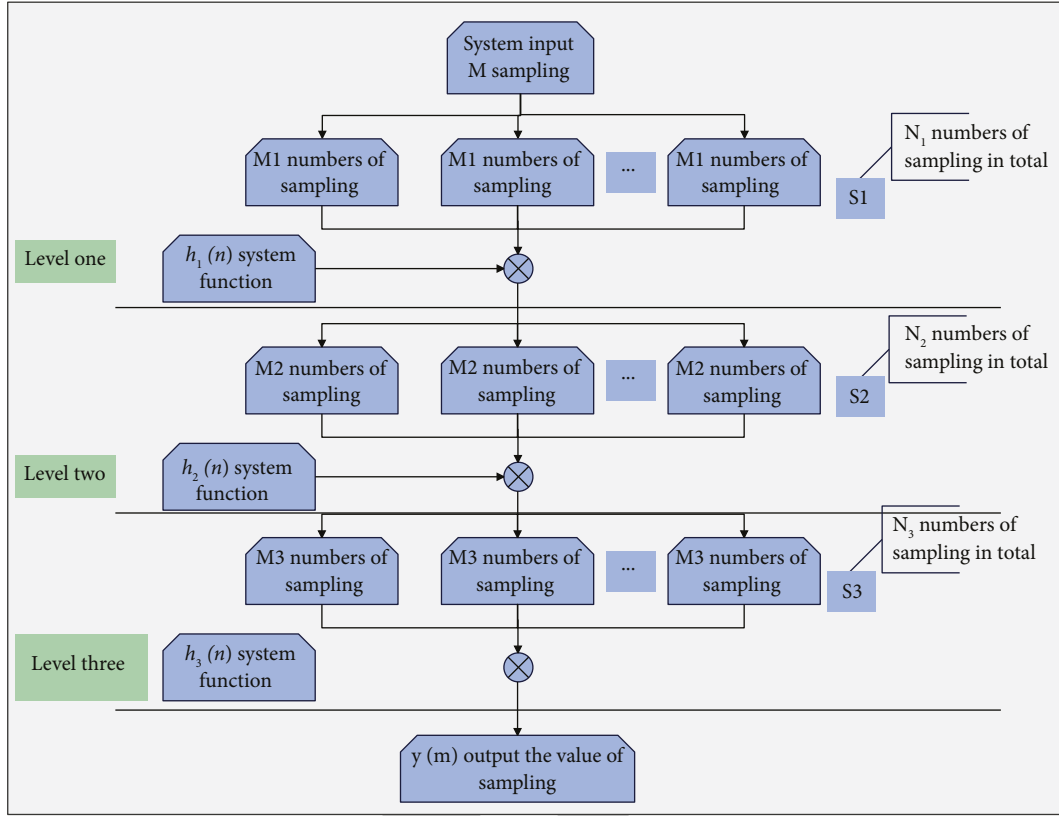


FIGURE 6: Structure diagram of the control system of the three-stage extraction system.

$$1 - I\delta_p \leq |H_0(e^{j2\pi f/F_0})| \leq 1 + I\delta_p. \quad (9)$$

Therefore, in order to compensate for the increase of the band-pass ripple with the increase of the number of stages, the amplitude of each stage of the filter must meet the requirements of formula (10).

$$\frac{1 - \delta_p}{I} \leq |H_i(e^{j2\pi f/F_{i-1}})| \leq \frac{1 + \delta_p}{I}. \quad (10)$$

In this way, the passband ripple of each stage, that is, the amplitude index, can meet the design requirements.

For resistance bands, it is different. The reason is that when the two stop bands overlap, the stop band ripple will be reduced. Therefore, no special treatment is required for it.

2.2. Control System of Digital Downconverter. This chapter mainly describes the control structure of the digital downconverter in the digital receiving system of the production-education fusion system. In the realization of the system, the amount of computing, storage, and cost of the system is minimized. Figures 4 and 5 show the flow chart and structure diagram of the three-stage extraction system, respectively.

For example, half-band filters are suitable for decimation-by-2 systems and pipeline structures, where many repetitive structures of decimation-by-2 are easier to implement. The cascade application of special comb filters and half-band filters is suitable for systems where the ripple index is large and the cost of multiplication greatly exceeds the cost of shifting and adding.

In addition to these considerations, in a multistage system, the cost of the control system is also considered. In many multilevel systems, the cost of the control system will be significantly higher than the cost of the computing system.

This paper designs a 3-stage decimation filtering system, the decimation factors of each level are M_1 , M_2 , and M_3 , respectively, then the total decimation factor is $M = M_1 M_2 M_3$. Then, the designed control system flow is shown in Figure 5 and structure in Figure 6. As can be seen in Figure 6, buffers S1, S2, and S3 are used for each stage, and there is also a memory for storing coefficients, which is not marked in Figure 6. The size of the buffer S of each level is determined according to the amount of data input at this level. The specific number of bits in each space should be designed according to the number of bits of the input data. For example, S1 needs at least M buffer spaces, S2 needs M_1 buffer spaces, and S3 needs M_2 buffer spaces. Then, by performing the third-level decimation filtering operation, one of the M data in this group can be obtained, that is, the M sampled values to be input. After the decimation filtering operation, a sample value is finally input. This completes the operation with a decimation factor of M . After that, a decimation filtering operation is performed on the next set of M data [26].

As can be seen from Figure 6, each stage has system functions and sampled values to operate. These system functions are the impulse responses of the filters. These filters can be comb filters, half-band filters, and FIR filters.

According to the above conclusions, this design scheme is adopted in the digital receiving system of the integration of production and education. The first stage is an integrator

comb filter, the input signal of this stage is no longer a band-pass signal, and it undergoes quadrature detection before entering the integrator comb filter. However, the sampling rate of the data has not changed, and the sampling rate of the signal at this time is the sampling rate of the band-pass signal $f_s = 32$ MSPS. The first stage integrator-comb filter reduces the signal sampling rate from 32 MHz to 8 MHz, and then uses a half-band filter to reduce the sampling rate from 8 MHz to 2 MHz. Finally, the output signal is shaped using an FIR filter. The following will specifically describe how to implement this function.

2.3. Quadrature Detection of Digital Downconverters. The band-pass signal quadrature detection is the first link of the digital receiving system of the production-education fusion system, as shown in the figure, and its purpose is to move the spectrum of the digital signal. The band-pass signal becomes a baseband signal for subsequent processing. The sampling rate of the signal processed by the quadrature detection does not decrease. At this time, the sampling rate of the signal is the sampling rate of the band-pass signal $f_s = 32$ MSPS. For the useful signal, the sampling rate of 32 MSPS produces too many useless signals. Moreover, the quadrature detection does not have the function of sampling rate conversion.

The received signal $x(n)$ is the modulated signal. The purpose is to restore the original signal. First, it needs to demodulate the received signal $x(n)$ and use the NCO digital oscillator to generate the local oscillator signal $e^{-j\omega_0 n}$. Moreover, it demodulates $x(n)$ to obtain the in-phase component $a(n)$ and the quadrature component $b(n)$, respectively, as shown in Figure 6. After that, through the filter, the desired $y(m)$ is obtained, as in formula (11).

$$a(n) + jb(n) = [x(n)\cos(\omega_0 n) - jx(n)\sin(\omega_0 n)] * h(n). \quad (11)$$

In formula (11), $a(n) = x(n)\cos(\omega_0 n)$ is the quadrature component and $b(n) = x(n)\sin(\omega_0 n)$ is the in-phase component. That is, the signal is decomposed into real part signal and imaginary part signal, and the two groups of signals are processed separately, which is beneficial to improve the operating frequency of the system, and finally the required signal can be obtained through logical operation. It can be seen that the frequency of the modulating signal is ω , and the frequency of the demodulating signal is ω_0 , so there is a problem.

$$x(n)e^{-j\omega_0 n} = \hat{x}(n)e^{-j(\omega+\omega_0)n}. \quad (12)$$

If the condition $(\omega + \omega_0 = 0)$ is satisfied, the original signal can be completely recovered, otherwise the original signal cannot be recovered. This part of the content involves the content of digital modulation and demodulation, and will not be repeated here. At this time, the modulated signal is demodulated into a baseband signal.

The first step in the operation of processing a digitized NMR signal is to detect it in quadrature. The so-called quadrature detection is to demodulate the nuclear magnetic resonance signal obtained after A/D conversion from the

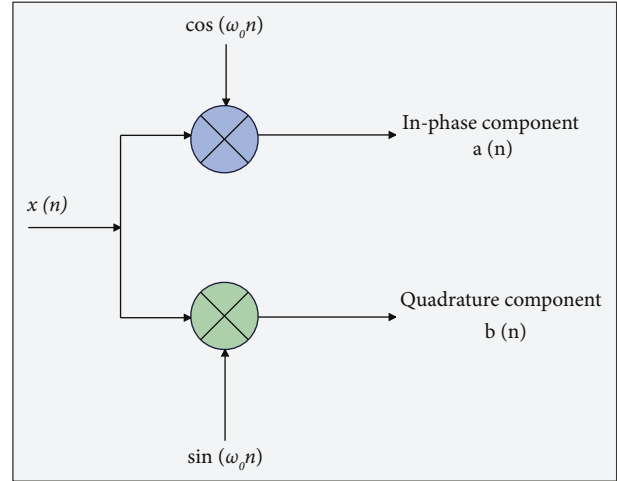


FIGURE 7: Digital quadrature detection.

carrier frequency signal and place it at the zero frequency, and simultaneously realize the separation of the real part and the imaginary part of the nuclear magnetic resonance signal, as shown in Figure 7.

In order to realize quadrature detection, the digital sine table and digital cosine table of the carrier reference frequency should be constructed first. Then, a set of A/D data is multiplied with the digitized sine table and cosine table, respectively, to obtain the real and imaginary components of the nuclear magnetic resonance signal without the carrier signal. This is what a numerically controlled oscillator (NCO) does.

In the 0.35 TMRI system, since the carrier frequency is $f = 14.9$ MHz, the carrier phase offset is 312.5 KHz. In order to obtain the digitized carrier, a carrier signal with a frequency of 14.9 MHz should be sampled first. In order to satisfy the sampling theorem, the sampling frequency is determined to be $f = 32$ MHz. The carrier reference frequency and carrier reference phase offset are input to the numerically controlled oscillator, so that the digital sine table (cosine table) can be obtained.

In the digital receiving system of the industry-education fusion system, there is another way to use the output of the frequency synthesizer (DDS) of the transmission system of the industry-education fusion system to directly serve as the receiver carrier reference. It directly applies the digital sine table (cosine table) of the transmission system of the production-education fusion system to the receiving system of the production-education fusion system, and the two use the same digital sine table (cosine table). This eliminates the need for a digital oscillator block.

The data output by the ADC is subjected to quadrature detection to become two data signals, which are the in-phase component and the quadrature component. The benefits of this are reduced data volume, faster processing, and higher signal ratios. The sampling rate of the quadrature-detected signal is not reduced, and the amount of useless data is too large for the back-end signal processing. This is an “oversampling” situation, and the data must be properly decimated and filtered to achieve a suitable sampling rate.

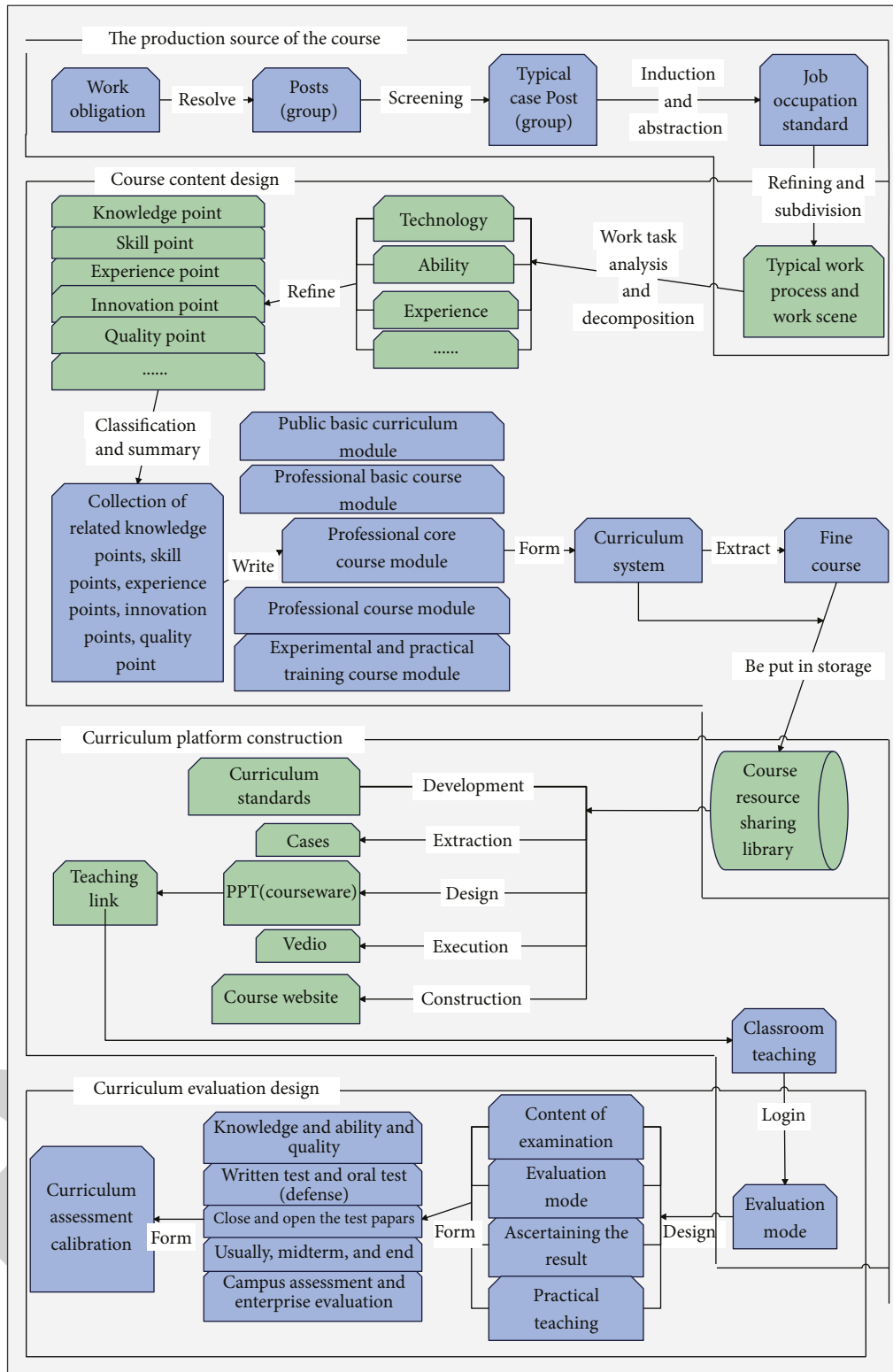


FIGURE 8: The training process of intelligent transportation technology professionals under the background of integration of production and education.

3. Research and Analysis on the Cultivation of Intelligent Transportation Technology Professionals under the Background of Integration of Production and Education

The motivation for constructing the curriculum system of “integration of production and education” is that the transportation technology specialty can choose the appropriate curriculum system construction ideas for the specialty according to the specialty characteristics and the enterprise employment needs. The curriculum system includes four stages of designing curriculum content, curriculum system construction, curriculum platform construction, and curriculum evaluation. Of course, according to the actual requirements of the enterprise for vocational skills, these professional skills and professional qualities derived from the actual production process of the enterprise are integrated into the design of the curriculum content, and then a complete independent curriculum system is formed, and the curriculum system is integrated to form a curriculum platform. After the platform of the course is built, the course resources can be used by teachers in the teaching process. Finally, the relevant departments of teaching management will carry out the course assessment to form and improve the course assessment standards. The training process of intelligent transportation technology professionals under the background of integration of production and education is shown in Figure 8.

The model in this paper can be applied to the training model of intelligent transportation talents, and the existing teaching system can be optimized and fault detected through the filter, so as to further improve the training effect of intelligent transportation talents.

This paper obtains data through the network, and combines the model of this paper to analyze the training effect of intelligent transportation technology professionals, and explores the reliability of the model in this paper. The simulation test results are shown in Figure 9.

As can be seen from Figure 9, this paper uses the simulation model to evaluate the effect of intelligent transportation technology professional personnel training. From the simulation evaluation results, the lowest evaluation result is 77.0163 and the highest is 85.9971. From the simulation results, the talent training effect of the model in this paper is very good.

From the simulation results in Figure 8, it can be seen that the talent training method of intelligent transportation technology based on the integration of production and education has a good effect and can effectively improve the training effect of transportation professionals.

School-enterprise cooperation is the only way in the development of vocational education, and it is also a bridge between the development of vocational education and economic development. School-enterprise cooperation cultivates comprehensive talents with professional knowledge and professional skills, and the state should increase the implementation of school-enterprise cooperation in vocational education. At the same time, the existing laws and

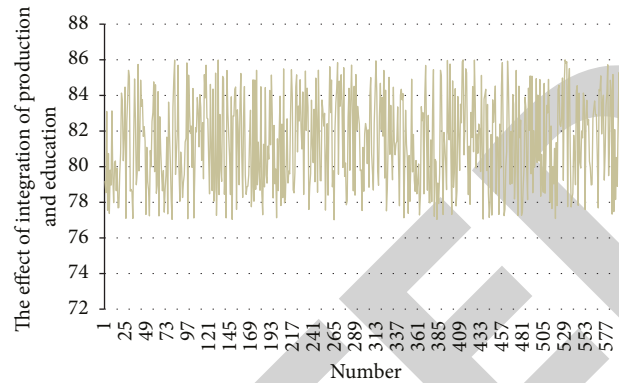


FIGURE 9: The training effect of intelligent transportation technology professionals.

regulations and related guarantee systems should be refined, and the government should also promote the in-depth development of school-enterprise cooperation according to local conditions. It can carry out vocational education to a farther and broader level. Combining the intelligent model for talent training data processing is conducive to further improving the training effect of intelligent transportation technical talents.

4. Conclusion

The transportation industry is a basic industry for social development and national economic development, and it is also a leading industry, and a smooth transportation network is prerequisite for promoting economic development and social progress. This paper combines the intelligent digital signal processing method to process the data of the integration of industry and education, and explores the training process of transportation technology professionals. Call it out and place it at the zero frequency, and realize the separation of the real part and the imaginary part of the nuclear magnetic resonance signal at the same time, construct a digital sine table and a digital cosine table of the carrier reference frequency, and convert the data output by the ADC into two channels after quadrature detection. The data signals are the in-phase component and the quadrature component, respectively. We establish an intelligent analysis model to evaluate the training effect of transportation talents. This paper combines the intelligent digital signal processing method to process the data of the integration of production and education, and explores the training process of transportation technology professionals. From the simulation results, it can be seen that the talent training method of intelligent transportation technology based on the integration of production and education has good effects, which can effectively improve the training effect of transportation professionals.

In this paper, the research on the specific functions of the government on school-enterprise cooperation is often based on qualitative research, and there is still a lack of quantitative model calculations. In addition, there are still some deficiencies in the construction of intermediary institutions for

school-enterprise cooperation and the research on school-enterprise cooperation policies. A series of relevant policy measures have been proposed to determine whether they can truly help the government functions in the process of school-enterprise cooperation. Effective play and provide important help, which is also a question that needs to be carefully considered in this paper.

Data Availability

The labeled dataset used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

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