Real time voice system design for college political teaching based on virtual SDN network

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Abstract Wireless sensor network technology is the integration of some data identification and transmission technologies in recent years. This kind of information acquisition technology has a very broad market in the civil field. Location information is very important in specific applications, and only the data contains the corresponding location information is effective; At present, political teaching is in a weak position in the college classroom, the course is not paid attention to, the students' attention is not high, the teaching quality is poor. Aiming at this problem, this paper uses relevant technology to build a political teaching system in colleges and universities, so as to improve the current teaching situation. Firstly, this paper uses wireless sensor network technology, combined with the speech samples of political classroom teaching, to build a real-time speech capture and recognition system. This real-time speech recognition system, running through virtual network, together with teachers' online teaching and other Internet technologies, constitutes a complex university political teaching system. In practice, through the combination of classroom teaching and after-class communication, political teaching will be integrated into all aspects of college students' life. The practical results show that the political teaching system in colleges and universities proposed in this paper uses new technology, and students' learning enthusiasm is greatly improved.

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1 Introduction

The most important and the most concerned issues in the information age: How to get valuable information conveniently and quickly. Wireless sensors can collect physical data in reality and transmit corresponding data signals (Maraiya et al. 2011). Wireless sensor network is the fusion and development of sensor technology, microelectronic system and wireless network transmission technology. Wireless sensor network is the application of these technologies in modern mass information (Somov et al. 2011). The development of the Internet has changed the traditional learning mode, and the technology of speech recognition has been added to the online teaching system, which can provide real-time services for students and teachers (Latif et al. 2017). Therefore, this paper studies the real-time speech transmission and recognition, and uses wireless sensor networks to design related patterns, so as to achieve the technical realization. The real-time voice system based on SDN technology is mainly designed and implemented at the voice service level of the architecture, which is mainly divided into three parts: client, server and virtual network controller. The whole real-time voice system is integrated, tested and demonstrated, which makes the whole real-time voice system achieve the expected goal. The real-time voice system based on SDN technology is mainly designed and implemented in the voice service layer. Based on the summary of SDN and real-time voice service research results, a real-time voice server system based on SDN technology is designed and implemented. The evaluation mechanism of combining informal evaluation and network evaluation is established to expand students from school to society, establish the relationship mechanism between school and family, the relationship mechanism between school and society and the joint force system within the school.

2 Related work

Based on the measurement of received signal strength, the paper introduces the principle of determining the position of wireless sensor network by locating the damping source in the same direction (Noel et al. 2017). RSS is composed of adjacent active sensors with known position and wireless connection, which is used to measure signal strength. Literature shows that environmental factors have a significant impact on the real-time value of a specific RSSI wireless node (Pease et al. 2017). How to solve the impact of the actual environment on RSSI is always a problem that this kind of algorithm must solve. RSS based localization is usually based on eliminating the distance between the sensor and the source (Li et al. 2018). Once the baseline power and position factor of IDS are known, these distance data can be directly separated from their respective RSS measurements. This paper introduces the operation of real-time voice system on virtual real-time voice service network (Fujimura et al. 2020). Virtual network controller is responsible for the management and control of data communication equipment and virtual network resources, and provides services such as resource acquisition, path creation and server location cancellation (Mehmood et al. 2020). The literature introduces that the real-time voice system is a better ability to control the implementation of the underlying network infrastructure, which can make optimization decisions according to the actual situation of the network, dynamically control the behavior of the underlying network infrastructure, and provide more quality assurance services for users. Literature points out that the contemporary social environment and family environment affect the development, future and values of college students all over the world. Political education in Colleges and universities can not avoid any negative influence in the process of social development and media development. Literature through the practice and development of political education in Colleges and universities, ideological and political education of college students has achieved remarkable results, but due to the lack of evaluation mechanism. In the current teaching process of colleges and universities, only the method is not feasible. It is necessary to construct a perfect teaching concept and logic (Zhang 2020), and guide the actual teaching behavior with this structured method, so as to fundamentally solve some chaos in the current political teaching in colleges and universities (Jiang 2021). In addition, current college students are different from traditional students. With the progress of the Internet, students can complete a lot of operations through a smart phone, and build a network of relationships for students through intelligent voice systems, social platforms and so on (Zhao and Zhang 2021). These behaviors make the traditional political teaching method out of line with the actual situation and demand of students (Dong et al. 2017). Therefore, teachers need to adjust the political teaching method according to

the actual situation of students, so that it can be integrated into the life of students and improve their interest in learning (Gong 2017). In addition, the current social development also brings more demands for political education (Li and Fu 2020). Political education should adapt to the development of The Times and adjust its teaching objectives, so as to continuously innovate and promote the all-round development of students (Zuo and Yang 2010).

3 Algorithm types

3.1 Algorithm signal data model

If we consider the location of the signal source, we assume that the isotropic source of the location information is p (p is a binary vector in a two-dimensional space), and p is the quantity to be estimated; WSN nodes are distributed at equal intervals in density and have specific This is the previously known condition. The strength of the signal received by the wireless sensor M can be as shown in formula (1):

$$r_m(t) = \frac{ks(t)}{\| \mathbf{p} - \mathbf{p}_m \|^{\beta/2}} + w_m(t) \tag{1}$$

where s(t) is the same direction signal from the isotropic attenuation source, k is a constant, β is the path loss coefficient of the isotropic attenuation source, and the RSS of the sensor node m refers to the received signal strength, which can be expressed as Formula (2):

$$\eta_m = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} |r_m(t)|^2 dt = \frac{\alpha}{\| \mathbf{p} - \mathbf{p}_m \|^{\beta}} + \varepsilon_m \tag{2}$$

The RSS is as shown in formula (3):

$$\alpha = \frac{1}{t_2 - t_1} \int_{t_1}^{t_2} k|(t)|^2 dt \tag{3}$$

For simplicity, the modified formula is used instead of RSS, see formula (4):

$$\gamma_m = \eta_m - \varepsilon_m = \frac{\alpha}{\| \mathbf{p} - \mathbf{p}_m \|^{\beta}} + n_m, m \in \text{Sactsen} \tag{4}$$

Among them, Sactsen is a collection of all active sensors.

For source location, the mean square location error can well represent the estimation performance of some algorithms. If the estimated value of the source position is $\hat{p}$, then its mean square positioning error can be seen in formula (5):

$$\text{m.s.locazation error} = E\{\| \hat{\mathbf{p}} - \mathbf{p} \|^2\} \tag{5}$$

The CRLB of the above formula can be inferred from the probability density function (PDF) of all active sensors

participating in the source location, where these active sensors know the three unknown quantities (p, α, β) of the source.

The corresponding PDF is as shown in formula (6):

$$
\begin{aligned}
&f\left(\gamma_m, m \in \text{Sactsen} | \mathbf{p}, \alpha, \beta\right) \\
&= \frac{1}{\sqrt{2\pi \delta_n^{2\,\text{Mactsen}}}} \\
&\exp\left(-\frac{\sum\limits_{m\varepsilon\,\text{Sactsen}} (\alpha \parallel \mathbf{p} - \mathbf{p}_m \parallel^{-\beta} - \gamma_m)^2}{2\pi \delta_n^2}\right)
\end{aligned}
\tag{6}
$$

The corresponding Fisher information matrix formula is shown in formula (7):

$$
\mathbf{I}_{P,\alpha,\beta} = -\mathrm{E}\left\{\left(\begin{matrix} \frac{\partial^2 \ln f}{\partial \mathbf{p} \partial \mathbf{p}^T} & \frac{\partial^2 \ln f}{\partial \mathbf{p} \partial \alpha} & \frac{\partial^2 \ln f}{\partial \mathbf{p} \partial \beta} \\ \frac{\partial^2 \ln f}{\partial \alpha \partial \mathbf{p}^T} & \frac{\partial^2 \ln f}{\partial \alpha^2} & \frac{\partial^2 \ln f}{\partial \alpha \partial \beta} \\ \frac{\partial^2 \ln f}{\partial \beta \partial \mathbf{p}^T} & \frac{\partial^2 \ln f}{\partial \beta \partial \alpha} & \frac{\partial^2 \ln f}{\partial \beta^2} \end{matrix}\right)\right\}
\tag{7}
$$

The various factors are shown in formula:

$$
-\mathrm{E}\left\{\frac{\partial^2 \ln f}{\partial \mathbf{p} \partial \mathbf{p}^T}\right\} = \frac{1}{\delta_n^2} \sum_{m \in \text{Sactsen}} \alpha^2 \beta^2 \parallel \\
\mathbf{p} - \mathbf{p}_m \parallel^{-2\beta-4} \left(\mathbf{p} - \mathbf{p}_m\right)\left(\mathbf{p} - \mathbf{p}_m\right)^T
\tag{8}
$$

$$
\mathrm{E}\left\{\frac{\partial^2 \ln f}{\partial \alpha^2}\right\} = \frac{1}{\delta_n^2} \sum_{m \in \text{Sactsen}} \parallel \mathbf{p} - \mathbf{p}_m \parallel^{-2\beta}
\tag{9}
$$

$$
-\mathrm{E}\left\{\frac{\partial^2 \ln f}{\partial \beta^2}\right\} = \frac{1}{\delta_n^2} \sum_{m \in \text{Sactsen}} \alpha^2 \parallel \mathbf{p} - \mathbf{p}_m \parallel^{-2\beta} \ln^2 \parallel \mathbf{p} - \mathbf{p}_m \parallel
\tag{10}
$$

$$
-\mathrm{E}\left\{\frac{\partial^2 \ln f}{\partial \mathbf{p} \partial \alpha}\right\} = -\frac{1}{\delta_n^2} \sum_{m \in \text{Sactsen}} \alpha\beta \parallel \mathbf{p} - \mathbf{p}_m \parallel^{-2\beta-2} \left(\mathbf{p} - \mathbf{p}_m\right)
\tag{11}
$$

$$
-\left\{\frac{\partial^2 \ln f}{\partial \mathbf{p} \partial \beta}\right\} = \frac{1}{\delta_n^2} \sum_{m\varepsilon\,\text{sactsen}} \alpha^2\beta \parallel \mathbf{p} - \mathbf{p}_m \parallel^{-2\beta-2} \left(\ln \parallel \mathbf{p} - \mathbf{p}_m \parallel\right)\left(\mathbf{p} - \mathbf{p}_m\right)
\tag{12}
$$

$$
-\mathrm{E}\left\{\frac{\partial^2 \ln f}{\partial \alpha \partial \beta}\right\} = -\frac{1}{\delta_n^2} \sum_{m\varepsilon\,\text{Sactsen}} \alpha \parallel \mathbf{p} - \mathbf{p}_m \parallel^{-2\beta} \ln \parallel \mathbf{p} - \mathbf{p}_m \parallel
\tag{13}
$$

So its CRLB is as shown in formula (14):

$$
CRLB_P = \left[I_{P,\alpha,\beta}^{-1}\right]_{1,1} + \left[I_{P,\alpha,\beta}^{-1}\right]_{2,2}
\tag{14}
$$

where $[\cdot]_{k,k}$ represents an element in k rows and k columns.

3.2 Co-directional attenuation source location algorithm

The basic requirement to confirm the initialization of the algorithm is to ensure that the evaluation of the initial position is correct in the sequential iteration method. If a quantity is provided, the RSS of these selected active sensors can be written approximately as formula (15):

$$
\gamma_i = \frac{\alpha}{\parallel \mathbf{p} - \mathbf{p}_m \parallel^{\tilde{\beta}}}
\tag{15}
$$

Therefore, the ratio of RSS between sensors i and j can be expressed as formula (16) and formula (17):

$$
\frac{\parallel \mathbf{p} - \mathbf{p}_i \parallel}{\parallel \mathbf{p} - \mathbf{p}_j \parallel} = \sqrt[\tilde{\beta}]{\frac{\gamma_j}{\gamma_i}} = \lambda_{ji\tilde{\beta}}
\tag{16}
$$

$$
\parallel \mathbf{p} - \mathbf{p}_i \parallel^2 = \lambda_{ji\tilde{\beta}} \parallel \mathbf{p} - \mathbf{p}_j \parallel^2
\tag{17}
$$

The square on both sides of the equation is shown in formula (18):

$$
\parallel \mathbf{p} - \mathbf{p}_i \parallel^2 \approx \lambda_{ji\tilde{\beta}}^2 \parallel \mathbf{p} - \mathbf{p}_j \parallel^2
\tag{18}
$$

If there is no measurement noise error, then the "approximately equal to" in the above formula will become "equal to", and formula (19) can be obtained:

$$
\lambda_{ji\beta} = \sqrt[\beta]{\frac{\gamma_j - n_j}{\gamma_i - n_i}} = \frac{\parallel \mathbf{p} - \mathbf{p}_i \parallel}{\parallel \mathbf{p} - \mathbf{p}_j \parallel}
\tag{19}
$$

It can be expressed by formula (20) in vector form:

$$
\begin{aligned}
&\begin{pmatrix} 1 - \lambda_{21\tilde{\beta}}^2 & -2\left(\mathbf{p}_1 - \lambda_{21\tilde{\beta}}^2 \mathbf{p}_2\right)^T \\ \vdots & \vdots \\ 1 - \lambda_{M_p1\tilde{\beta}}^2 & -2\left(\mathbf{p}_1 - \lambda_{M_p1\tilde{\phi}}^2 \mathbf{p}_{M_p}\right)^T \end{pmatrix} \\
&\begin{pmatrix} \parallel p \parallel^2 \\ p \end{pmatrix} = \begin{pmatrix} -\parallel \mathbf{p}_1 \parallel^2 + \lambda_{21\tilde{\beta}}^2 \parallel \mathbf{p}_2 \parallel^2 \\ -\parallel \mathbf{p}_1 \parallel^2 + \lambda^2 \parallel \mathbf{p}_{M_p} \parallel^2 \end{pmatrix}
\end{aligned}
\tag{20}
$$

Simply write as shown in formula (21):

$$
Aq = b
\tag{21}
$$

According to its initial value p or further estimated value, the corresponding distances from all active sensors to the wireless sensor source node can be calculated. For the revised RSS values of all active wireless sensor nodes, the

following corresponding relationship can be obtained, such as the formula (22) and formula (23) show:

$$\begin{aligned}
\ln\gamma_m &= \ln\left(\frac{\alpha}{\|\mathbf{p}-\mathbf{p}_m\|^\beta} + n_m\right) \\
&= \ln(s_m + n_m) = \ln s_m + \mu_m \\
&= \ln\alpha - \beta\ln\|\mathbf{p}-\mathbf{p}_m\| + \mu_m \\
&= \ln\alpha - \beta\ln\|\hat{\mathbf{p}}-\mathbf{p}_m\| + \hat{\mu}_m, m \in \text{Sactsen}
\end{aligned} \tag{22}$$

$$\begin{pmatrix} ln\gamma_1 \\ \vdots \\ ln\gamma_M \end{pmatrix} = \begin{pmatrix} 1 & -\ln\|\hat{\mathbf{p}}-\mathbf{p}_1\| \\ \vdots & \vdots \\ 1 & -\ln\|\hat{\mathbf{p}}-\mathbf{p}_M\| \end{pmatrix} \begin{pmatrix} ln\alpha \\ \beta \end{pmatrix} + \begin{pmatrix} \hat{\mu}_1 \\ \vdots \\ \hat{\mu}_M \end{pmatrix} \tag{23}$$

It can also be as shown in formula (24):

$$\mathbf{f} = \mathbf{Dx} + \boldsymbol{\mu} \tag{24}$$

The specific calculation method of the WLS solution is shown in formula (25):

$$\hat{\mathbf{x}} = \left(\mathbf{D}^T\mathbf{W}^{-1}\mathbf{D}\right)^{-1}\mathbf{D}^T\mathbf{W}\mathbf{f} \tag{25}$$

where $\mathbf{W} = \text{diag}\left\{1/\gamma_1^2, \cdots, 1/\gamma_M^2\right\}$ is the weight matrix.

Figure 1 is the simulation result of the initialization proposed in this paper. It can be seen from Fig. 1 that initially, as the number of active sensors involved increases, the corresponding positioning error decreases, but then it will slightly increase.

Figure 2 shows the comparison between the m.s position error and CRLB of the proposed algorithm and other algorithms at different iteration times.

3.3 Real-time voice system design

The main functions that a technology-based real-time voice system server needs to implement include: resource management, admission control, signaling communication, and control communication.As shown in Fig. 3, the following four main functions of the real-time voice system server are introduced:

As shown in Fig. 4, the real-time voice system architecture is divided into two planes. The following describes in detail the real-time voice system architecture designed based on the SDN architecture.

The resource management component ultimately needs to store resource information in a database, so a database table needs to be designed to store resource information. Table 1 introduces the database table design of related resources.

The circuit number resource usage table mainly includes 3 fields. Each row of records indicates the circuit number used by a certain port of a certain switch. For a certain port

of a certain switch, the circuit number is not allowed to be reused. The details are shown in Table 2 below.

The network topology mainly includes a field, and each row of records represents a link in the network topology. A network topology is composed of multiple links. Therefore, all records in the network topology table completely represent the network topology of the virtual network. Details are shown in Table 3.

Combining the network topology preprocessing and the Dijkstra algorithm process together is the complete admission control processing flow. Figure 5 fully describes the admission control processing flow.

As shown in user Table 4, it mainly includes a field, callNum is the phone number of the registered user; updateTime is the user's registration time. Each row of records corresponds to a registered user.

The basic session information table is shown in Table 5, which mainly includes 5 fields, namely sessionId, callerNum, calledNum, status, and bandwith. This table is used to record the basic information of the session.

4 Innovation of political teaching system in Colleges and Universities

### 4.1 Innovation of working methods of political teaching

The progress of Ideological and political work communication of college students reported that we systematically publicized the party's political thoughts. The content and form are relatively fixed and unified, and the communication activities reflect the thoughts of the communicators more, less consideration of the differences in the audience's acceptance ability and the knowledge reserve of thinking habits, which affects the public enthusiasm, stimulates the public's learning potential and has a great impact on Ideological and political education. Media has fully participated in students' study and life, which has a long-term impact on the concept and cognitive structure of colleges and universities.

4.1.1 Two way communication method

The traditional teaching mode is the teacher's unilateral teaching, students can not get interaction, teaching effect is general.Therefore, we should carry out two-way or multi-directional communication education. For example, they can send their opinions and opinions to teachers by email, or exchange feelings with teachers by SMS, or even communicate with teachers directly through QQ, wechat and other quick communication methods. Especially online
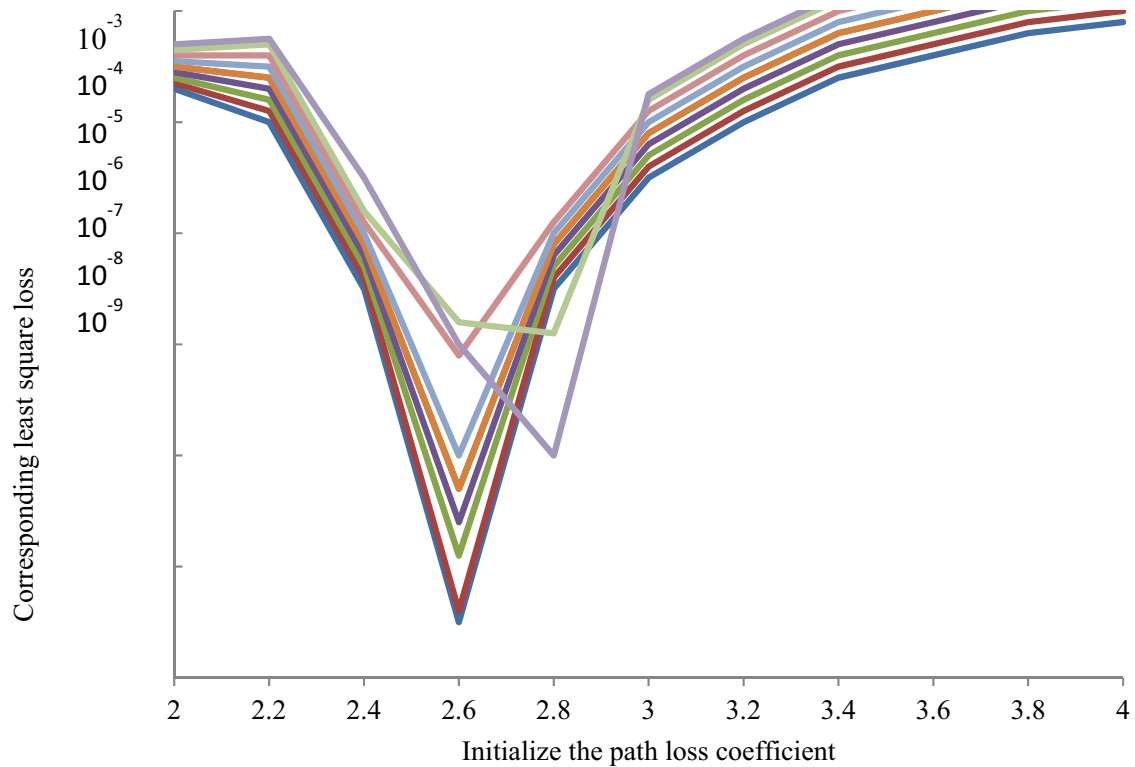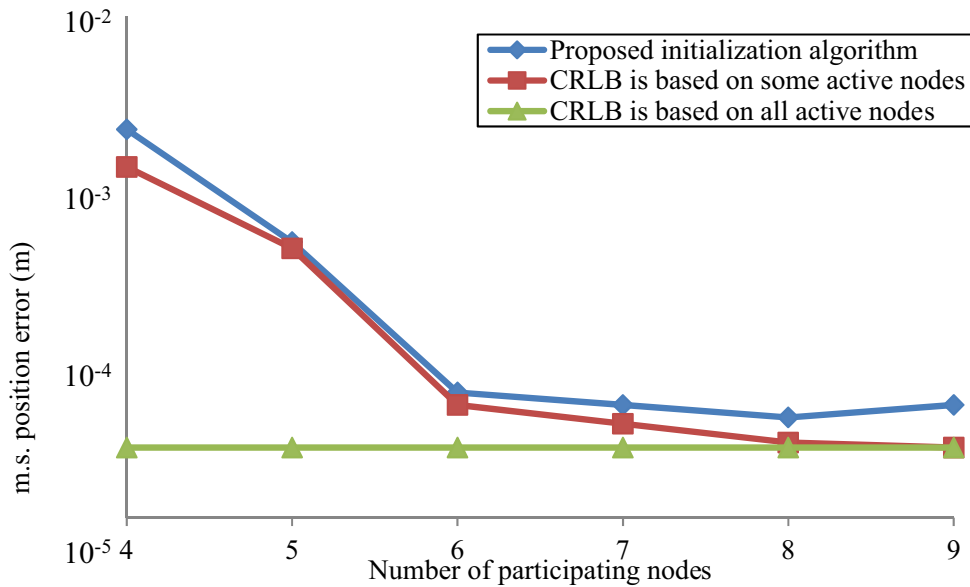
Fig. 1 Positioning performance based on the proposed initial positioning algorithm

communication, because of the anonymity and virtual nature of communication, it reduces the communication with students and teachers. The gap and distance between students and ideological and political workers, students and teachers can open their hearts and exchange equally to form ideological conflicts.

Fig. 2 Various algorithms locate errors at different iterations
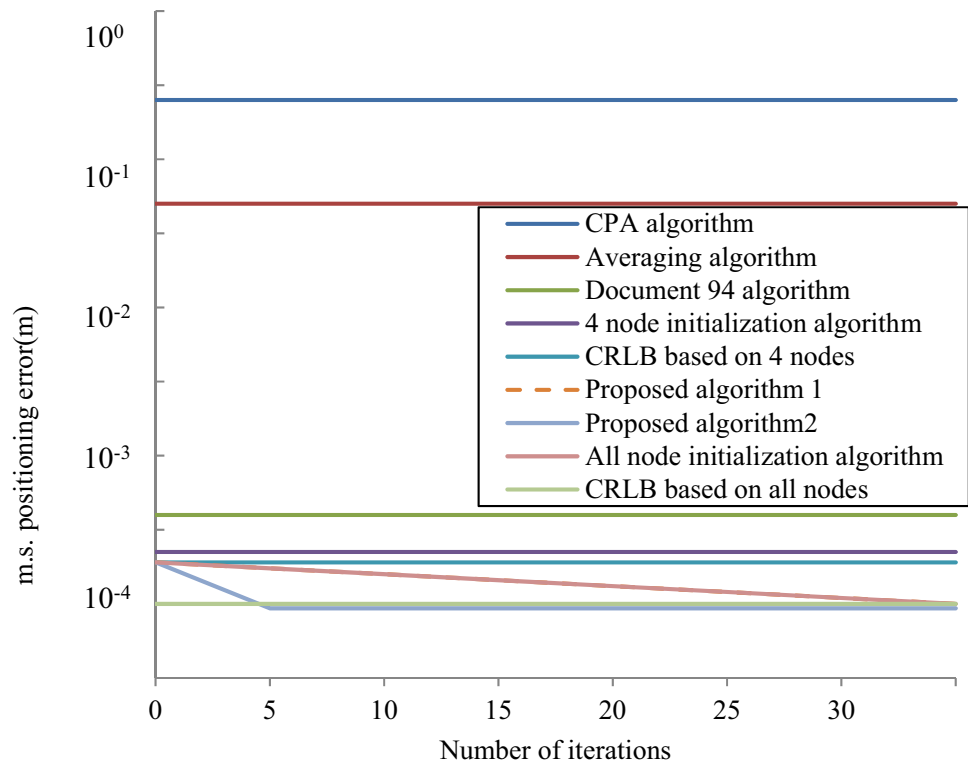
4.1.2 Activity participation law

Participation is one of the effective ways of Ideological and political work. Traditional participation mainly includes listening to reports and lectures, mainly face-to-face contact, and often guiding ideological and political workers to receive ideological and political education in one-way, which gives us the opportunity to actively participate. By using the perceptual factors of social talents for reference, we can really let students participate in it by stimulating the media function, and select the outstanding student representatives with persuasive, charming and influential influence; We can also give full play to the role of campus broadcasting to encourage all young students to grow up, and to reach the students' groups, gather the students' voices and make them become participants. Through planning and design, we can put in place the relevant elements, ideas and scheme design of Ideological and political work, such as the monitoring and report of young volunteers in Colleges and universities, so as to stimulate their emotional resonance and conceptual identity.

4.1.3 Guiding and dredging method

In the past, ideological and political work in Colleges and universities mainly relied on classes, meetings, discussions, notices and other forms. In today's campus life, the management mode of universities, classes and even dormitories has been broken. Relying solely on the traditional education management methods, we can not quickly and comprehensively grasp the ideological trend of students in a short time, and can not effectively carry out ideological and political work. We can make full use of mobile phones, networks and other management and guidance of students. We can use the SMS platform to send certain key political propositions and social focus to students in the form of SMS, interact with students, and help students form correct judgment through continuous communication. In case of emergency, it can also send short messages to students in time, so that students can understand the exact information at the first time, avoid missing information due to poor information transmission, and make full use of the advantages of network and QQ group to help students solve interpersonal problems.

At present, mobile phones are more and more popular among college students. In the study and life of college students, mobile phone has become an indispensable tool, which has the function of contact and mutual flow of information. The information provided by mobile platform has become one of the important influence sources of College Students' values and behaviors.

First of all, we should combine the forms commonly used by current students and choose the way they like to teach, such as building wechat groups, QQ groups, video numbers, public numbers and so on, to shorten the distance between students and students, and also facilitate students to better reflect their own needs.

Fig. 3 Real-time voice system server use case diagram
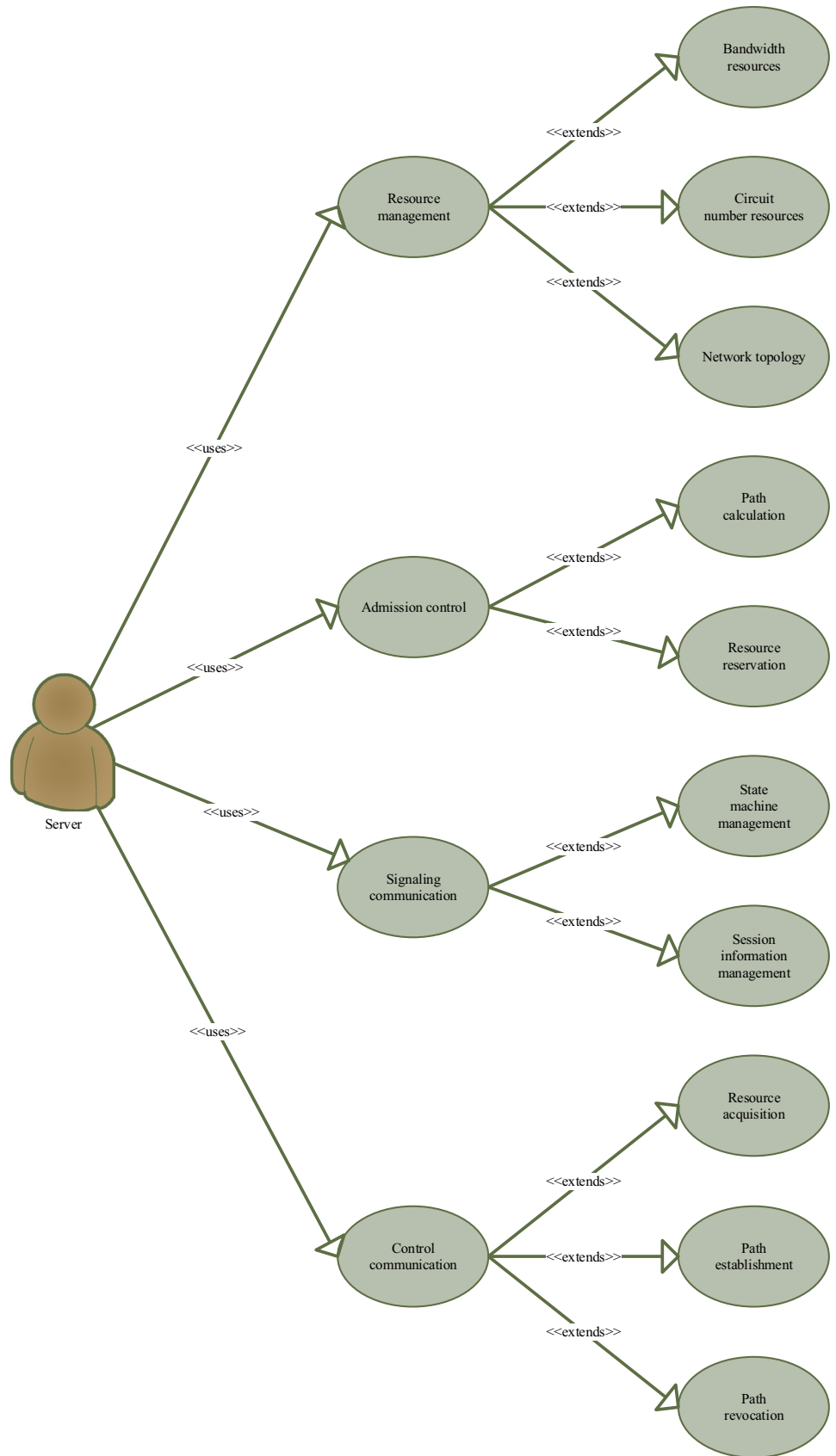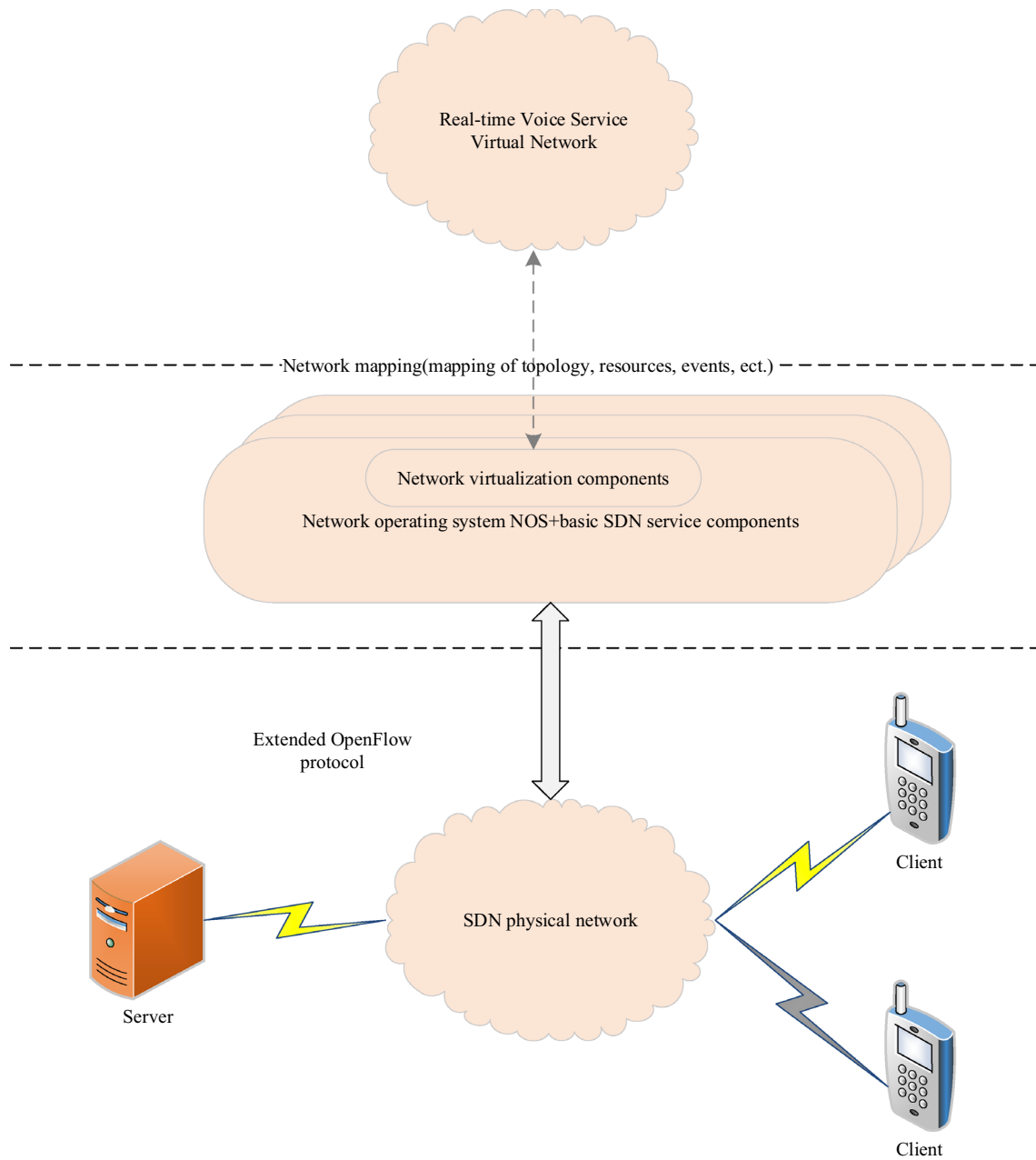
Fig. 4 Real-time voice system architecture

Table 1 Bandwidth resource database table

Field	Meaning
switchNum	Switch number, specify which switch
port	Port number, indicating which port of the switch
TotalBandwidth	Total bandwidth of the port
remainingb andwidth	Remaining bandwidth of the port
usedBandwidth	Port bandwidth

Table 2 Circuit number resource usage database table

Field	Meaning
switchNum	Switch number, specify which switch
port	Port number, indicating which port of the switch
portCircuitNum	Port used circuit number

Second, actively build "mobile party school", organize SMS resources simply, build "mobile party school" SMS platform, and send SMS to Party members of colleges and

Table 3 Network topology database table

| Field	Meaning
srcSwitchNum	Source switch number
dstSwitchNum	Destination switch
srcPort	Source port number
dstPort	Source port number

Table 4 User data sheet

Field	Meaning
callNum	Client user's phone number
updateTime	Update time of client user registration information

universities regularly. In order to educate Party members, we should timely introduce party members' theoretical knowledge and the latest situation of Party construction, and encourage them to play a leading role model better.

Thirdly, in places where mobile phones are sold in particular, ideological and political workers in Colleges and universities can also make special and exquisite pictures and videos, and constantly enrich the ideological and political education materials of college students by integrating media cases and phenomena into Ideological and political work content, To convey correct political concept and media

Table 5 Basic session information data table

Field	Meaning
sessionId	Session id, which identifies the session
callerNum	Calling number
calledNum	Called number
status	State, corresponding to the state machine
bandwidth	Session takes up bandwidth
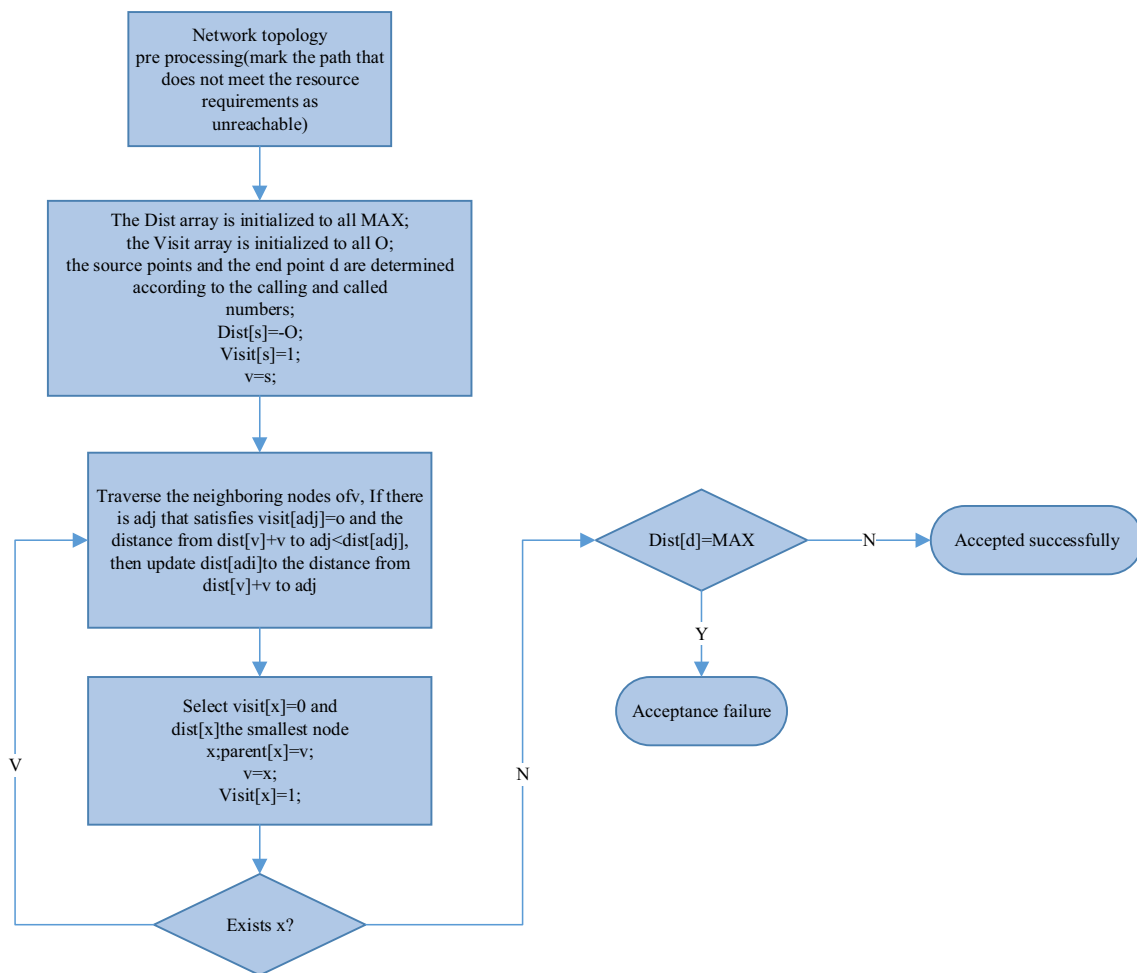
Fig. 5 Admission control process

phenomenon socialist core values, healthy attitude towards life and philosophy of life to the majority of young students.

This paper analyzes and excavates its inherent regularity from the superficial social phenomena through the form of dialectical debate, fully mobilizes its enthusiasm and enthusiasm to participate in the debate, so that young college students can judge the correct values from the internal perception and identification of typical media cases, rather than simply judge whether or not in class, from the direct results to the process education. For example, for the Japanese related March, University TV station can make young college students realize how to be a real patriot, how to treat the relationship between China and Japan correctly, and not be written by some hostile reactionary forces from abroad. We must grasp the emotional hot spot of college students, and have a good pertinence. A persuasive analysis. To give full play to the extensive coverage and pertinence of the media and to deepen the strong advantages of educational effect, it is to organize the backbone of college students to listen to and extend the discussion.

The TV station of university can also make students participate in the competition of "commercial star", "science star" and "incentive star" by stimulating media function according to the reasonable factors in the social talent group; It is the real attraction and effect to select excellent student representatives who can make their own efforts. It encourages all young students to grow up, avoid simple packaging and publicity of advanced numbers, and further improve the effect of leading advanced typical education.

4.2 Innovation of working mechanism of political teaching system in Colleges and Universities

The traditional evaluation method is mainly offline evaluation, which is basically conducted by questionnaire survey. This method is complex in statistics, complex in analysis and not convenient enough, which provides possibility for the realization of the network evaluation of Ideological and political work. On the one hand, the online evaluation survey object can be free from the limit of quantity and location. The final data statistics and analysis are more simple. Only click with the mouse, can make a lot of data work to be completed super easily.

Introducing quality education into the ideological and political work in Colleges and universities can change the traditional ideological and political work and ignore the shortcomings of the ideological and political work in the process. We should have a clear understanding and understanding of the deliberate exaggeration and exaggeration of the media and participants, and also see the reasonable and harmonious development of these love and marriage talent shows. For example, it provides a platform for the general public to show themselves, and gives every member of society a fair opportunity to participate in social activities. We should not only see some bad ideological tendencies reflected by some contestants participating in love and marriage programs, such as crazy hype, only pursuing fun but not making progress, and so on. We can't just see the surface to criticize and deny, we must excavate the reasons from a deeper level, the bad influence of cultural and social factors behind. And how to avoid the influence and restriction of these social factors. At the same time, we can not simply deny this form of program, but also see the inspirational factors contained in some players. Through the analysis of media literacy professional perspective and professional methods.

Media literacy education pays more attention to process education. The introduction of media literacy education into college students' Ideological and political work has greatly changed the traditional situation of Ideological and political work, which focuses on result education, conclusion education and indoctrination education. It really makes college students form resonance in the process of understanding the truth, understanding the reasons and receiving education. Its evaluation of the effect of education is not only reflected in the simple qualitative judgment, but also the enthusiasm of the participants, the energy invested, and the creative activities and passion shown in the process as an important symbol to measure the effect of Ideological and political education.

5 Conclusion

Based on the unknown power factor and signal power measurement trajectory loss, this paper proposes many kinds of compressed source localization algorithms, and uses the signal strength of adjacent active signals to measure the wireless sensor nodes. And the location of these nodes can be determined by the wireless link. In order to solve this problem, an active localization algorithm is proposed, which can solve the problem of the overall transmission loss ratio of the output node trajectory. The iterative algorithm combines the best estimation method to continuously evaluate the unknown location of the wireless sensor source and the other two unknown parameters. RSS is the nearest active sensor node. The biggest measurement of RSS is that in the existing traditional Internet real-time voice services, the real-time research on the voice system server is carried out, and the diversified integration of network services is designed and implemented. Based on the architecture of SDN, the real-time voice service, as a kind of service, runs on the virtual network, which is provided by the architecture. According to the characteristics of the real-time voice service, it provides the functional components needed by the whole voice server in real time, designs and realizes the cooperative work

among the components, and completes the specific work of the voice service in real time. To realize the real-time and timeliness of the voice service, verify whether the voice server can achieve the expected goal in real time, we need to build an environmental experimental platform, and successfully complete a single real-time voice server test, real-time demonstration of the full voice system function.

Declarations

Conflict of interest The authors report no conflicts of interest.

Ethical approval This article does not contain any studies with human participants performed by any of the authors.

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