

# Development of Rural Social Governance Intelligent System Based on Multi-Data Integration Algorithm and Realization of Multi-Platform Interaction of Mobile Terminals

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**Abstract:** This paper needs to uphold the concept of governance community "according to the times", "according to local conditions" and "according to people's conditions", and by improving the integration ability of rural social governance resources, building an embedded rural social governance ecology, and promoting the rational layout of rural social organizations, the application of the most optimal band combination is obtained by the optimal band index method, and the above optimal bands are classified and studied by using unsupervised classification, maximum likelihood method, support vector machine classification method, and decision tree classification method. 's research and development.

**Keywords:** Rural Social Governance, Multi-Data Integration, Multi-Platform Interaction, Mobile Terminals

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## 1. INTRODUCTION

At present, under the background of rapid urbanization, consolidation and expansion of poverty alleviation achievements [1], and the comprehensive implementation of the rural revitalization strategy, rural social organizations are developing vigorously, not only functionally expanding the original traditional village social connection method based on blood and mutual assistance [2], but also establishing On the basis of organizational rules, new content has also been added to rural social governance. In the context of "governance community" [3], the purpose of remote sensing image classification is to divide each pixel in the image into different categories according to a certain rule or algorithm, to obtain the corresponding information of the remote sensing image and the actual objects [4], how to classify these Classification and extraction of information has always been one of the important topics in remote sensing research.

A natural area with a certain scale has diverse material compositions, and the ground objects are intertwined in time and space, and they transform each other to form complex mixtures with different structures and forms [5]. The phenomenon of the same spectrum occurs. To realize the further development of smart highways, it is necessary to clarify the concept and theory [6], and start from the data architecture form, the mechanism and method path of the data fusion algorithm to achieve innovation. With the continuous maturity of highway engineering [7], the integration with informatization construction is also becoming more and more close. In order to realize the informatization of highway construction [8], the rational and efficient use of digital technologies such as BIM and GIS must start from the theory of data processing, and have an in-depth understanding of data processing algorithms and platform architecture techniques. The decision on several major issues concerning comprehensively [9] deepening the Reform (referred to as the "Decision") pointed out that the overall goal of comprehensively deepening the reform is "to improve and develop the socialist system [10] with Chinese characteristics, and to promote the modernization of the country's governance system and governance capacity [11]."

Accordingly, governance can become an important factor to reflect and evaluate the effectiveness of deepening reforms. The concept of "governance" reshapes the social management system. Systematic governance [11], legal governance, comprehensive governance, and source governance will become the development trends in different reform areas. This proposal It has almost mobilized the entire social landscape in the context of the big data era [12], but the role and role that the local government should interpret in it is not clear enough. The description of "local government" in the "Outline of Action for Promoting the Development [13] of Big Data" is as follows: one is "combining the implementation of information benefiting the people with the construction of smart cities, and promoting [14] the integration and joint pilot of central departments and local governments" in Chinese characteristics In the socialist government governance system structure, the social governance innovation [15] of rural grassroots party organizations is an important part of the overall goal of advancing the national governance system. It is related to the realization of "four comprehensive strategic layouts" and the sustainable development of my country's rural economy and society [16].

The innovation of rural social governance is conducive to safeguarding the rights and interests of rural development. First of all [17], the village party branch committee is required to innovate the concept of rural grass-roots social governance, and be good at educating and guiding the villagers to protect their legitimate rights and interests with the concept of the rule of law. Secondly [18], the village party branch committee is required to innovate the rural grassroots social governance model. Mobile learning (Mobile Learning, M-Learning) is a kind of online learning that can be carried out at any time and any place with the help of mobile terminals such as mobile phones, PDAs, iPods, and iPads [19]. Mobile learning originated abroad. At that time, Desmond Keegan, an international distance education authority and an Irish education technology expert [20], came to a rule when he studied distance learning: "It is not that the technology itself has the characteristics suitable for teaching, and the same user on multiple platforms. The development of the interface

brings extra burden to the programmer [21]: not only need to strive to implement roughly the same user interface code in the programming language corresponding to different platforms in an application project, but also bear the maintenance workload caused by this [22].

## 2. THE PROPOSED METHODOLOGY

### 2.1 The Multi-Platform Interactive Realization Of Mobile Terminal

The principal component change of the remote sensing image is the transformation of the centralization and orthogonalization of the multiple bands of the remote sensing image. In order to achieve the purpose of information integration and enhancement [23], Openfire is an open source real-time collaboration (RTC real time collaboration) server application developed using Java and based on the XMPP protocol. It is an open source project under igniterealtime. Openfire is very convenient and simple to install and use. Since it is based on the XMPP protocol, it is compatible with various IM client software login services that support the XMPP protocol, such as spark [24].

It is managed using web pages. First of all, if you want to describe a user interface at an abstract level, it is different from describing the interface on a specific platform, which requires using a specific platform to describe the interface (for example, Android is described in XML and iOS is described in X. Old S file description), if you want to describe an abstract user interface, you need to provide the description of the abstract interface components at this abstract level. Such as Android will use the component description textView. iOS has an elegant and intuitive interface, and you'll know how to use your iPhone, iPad, and iPod touch the first time you get started. It is also because of its excellent interface, coupled with its ease of use.

The device's near-perfect appearance design, smooth operation, and powerful performance make iOS mobile devices have a high market share, and are also loved and praised by the majority of users. Through the first two sections, we can see that the XAML language in the virtual platform has the ability to describe the abstract user interface, such as defining the component and the properties inside the component, and also proves that it has the ability to interact with the specific platform programming code. Then the description language of the abstract user interface on the virtual platform should also have the capabilities that the specific platform interface description language does not have. On the virtual platform in this paper, the proposed XAML is used to define abstract user interface components and its properties.

Syntactic analysis develops the grammatical expression of physical objects, collects data of various features of physical objects in a structural relationship, and realizes the conversion of physical models to three-dimensional entity models. Applying this method requires the development of specific language and syntax for each object, which is cumbersome. The estimation analysis method uses Kalman filtering, maximum likelihood estimation, and least squares method to achieve the rough construction of the physical model.

### 2.2 The Multivariate Data Integration Algorithms

Analysis plays an increasingly important role in remote sensing classification and recognition. This paper mainly applies the more mature texture extraction based on gray level

co-occurrence matrix. It represents the texture by calculating the second-order joint conditional probability density  $p$  between the gray levels of the image. The common data algorithms based on information theory are the entropy theory method in the data fusion system, and the neural network proposed in modern neurological theory. Network algorithms, clustering analysis algorithms that reasonably classify large volumes of data, etc. The entropy theory algorithm reflects the amount of information by calculating the probability and expected value of a random thing. In this theory, the entropy of events with small probability of occurrence is extremely large, and the time entropy of events with high probability of occurrence is extremely small.

In multi-source data fusion, the use of entropy theory algorithm to measure the overall benefit of a system has great advantages. As the source of streaming media data, the publishing center needs to collect streaming media data, encode and compress it, and then send the compressed encoded data to the server through socket communication with the data server. At the same time, it is also necessary to store the encoded data in a specific file format, such as the avi media file format. After the recording is over, the entire file can be uploaded to the server so that the production center can make edits to the course content. In this paper, principal component analysis, various vegetation index extraction, remote sensing image texture extraction based on gray level co-occurrence matrix and other methods are used to extract as much information as possible from the image. The optimal combination is to prepare the data for the subsequent classification. In this study, the band with larger information entropy is selected first.

The Bayesian inference algorithm weakens the unshakable position of the prior function on the basis of the classical inference algorithm. The algorithm uses the given pre-likelihood estimation combined with the additional condition of the observation as the basic model of the minimum risk cost. The Bayesian inference algorithm greatly reduces the prior requirements. Based on this feature, the difficulty of the Bayes algorithm is reflected in the need to define the maximum likelihood estimation more accurately; like the classical inference algorithm, if there are multiple assumptions or variables, the definition of the maximum likelihood estimation function will be more complicated. It seems that the attribute element will be longer and more complicated than the original method, which is indeed the case in the example, but when the value of an attribute is complex, it cannot be represented as a simple string. In the properties element, you can define another component and set the properties of the component, such as the following example.

### 2.3 The Development of Rural Social Governance Intelligent System

The relationship between rural social organizations and the government is very close. Rural social organizations play a bridge role in communication and interaction with rural residents, rural communities and government departments in the formulation, advocacy, implementation, monitoring and evaluation of social policies. . In recent years, the policy advocacy of rural social organizations in rural social governance can be described by user interface language through interaction with government departments, and the interface description language has a standard interface model definition. The definition of a standard interface pattern requires these parts: context, problem, solution, example, and so on.

The schema in this paper needs to be described in XAML language. As for the original schema, whether it is a picture, a prototype or a natural language description, as long as the description can be understood by developers, it can be converted into an interface schema described by XAML. The collaborative governance system aims to form an interconnected social operation mode, thereby realizing intelligent governance innovation. Focusing on the smart governance process of Xi'an local government, the dynamic collaborative governance system is extremely imperfect. Due to various reasons such as unclear positioning and the interests of departments and regions, the process of smart governance has its own system, and different regions or even different departments in the same region have established their own independent sets of systems. Rural areas are the combination of the power control of the party and the government and the self-governance of villagers, and the frontier of social governance. The rural grass-roots party organization is the basic cell of the party, and it is the bridge for the ruling party to closely contact the expression of interests and emotional appeals of the masses and villagers.

### 3. CONCLUSION

Through the value of technical tools of big data, it can promote the ingenious sharing of internal information of government departments, improve scientific decision-making capabilities, and strengthen internal self-correction mechanisms, thereby affecting government governance capabilities; from the macro level, it affects the driving mechanism of governance model reform, and the development of big data technology. The application makes the government governance pattern from single to multiple. Both the amount of information contained in the bands and the correlation between the bands are considered, which not only improves the classification accuracy but also avoids information.

### 4. ACKNOWLEDGEMENT

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