

Information Platform Design and IOS Software Implementation of Sino-Japanese Cultural Exchange Based on the Hierarchical Fusion Algorithm of Internet Information

Xiaorong Jiang
School of Foreign Languages
China West Normal University
Nanchong, Sichuan, China, 637002

Abstract: Aiming at the characteristics of multi-source information in network security, this paper establishes a hierarchical network research based on information fusion to realize the project quality management function on the IOS platform. The elements extraction, situation assessment and situation prediction modules in the model are analyzed respectively. China's cultural symbols are still in ancient culture, which is not conducive to the establishment of China's national image. Only by working with the world's advanced cultural industry institutions to develop cultural products with both universal value and Chinese cultural elements, can we achieve cultural export to Japan and achieve a good cultural exchange between the two countries. The initial division of the community is completed according to the local maximum potential value nodes; the initial community is iteratively merged according to the distance between the local maximum potential value nodes, until all communities are merged into one community.

Keywords: Information Platform Design, IOS Software Implementation, Sino-Japanese Cultural Exchange, Hierarchical Fusion Algorithm

1. INTRODUCTION

With the rapid development of Internet technology, the scale of the network has become increasingly large, the network applications [1] have become more complex and diversified, network security incidents have emerged one after another, and network security threats have become increasingly severe [2]. Traditionally, a single security defense means such as Firewall, IDS, VDS, etc. can no longer meet the new development needs of network security [3]. Research shows that community structures widely exist in various social networks. Nodes within the same community are closely connected, while different communities The connections between the nodes are looser [4].

Mining the community structure in social networks is helpful for studying the topology and properties of social networks [5], understanding the functions of social networks, and predicting the behavior of social networks. Give birth to love. The respectful, humbly and studious spirit of studying has been deeply appreciated by the seniors in the Jiangnan calligraphy circle in his "study tour" process [6]. He visited famous calligraphy masters in the south of the Yangtze River, his humble foundation. In the 1980s, Liu Hongyou, with great ambitions, began to work hard, study hard and practice hard, laying a solid foundation [7] for his future personal artistic development to follow the footsteps of the masters and learn the style of the masters. After the end of the Cold War, the concept of "soft power" appeared in international relations, and China has paid more and more attention to the growth of "soft power" in the [8] process of its rise. Through the survey of Japanese people about Chinese culture and its soft power, it is found that: in general, Japanese society lacks recognition of Chinese cultural values [9]. The subject of this thesis comes from the design and development work of Michao iOS version. The iOS platform is a smartphone operating system

launched by Apple, and one of the current mainstream smartphone operating systems [10].

Mi Chat is an instant messaging software based on social relations running on mobile terminals. Network security situation assessment can comprehensively [11] analyze various situational elements of network security, dynamically reflect the overall situation of network security, predict the development trend of network security [12], and provide important support for network security emergency response and active defense. Now a lot of even the code of communication software is not open to the public [13], and some software still needs to be charged. With Apple's iPhone and iPad products occupying a place in China, there are relatively few iOS-based software [14] development in the domestic market. We use Apple's products, and good application software needs to go to Apple's official website. Comprehensive categories Instant chat tool [15]: It has all the functions required for instant communication, such as text chat, file transfer, voice chat, video chat and other functions. In addition, it also has social functions such as space, circle of friends, groups, music, and games [16]. There is no specific user group for this type of software, and users have no specific purpose for using the software [17].

The interface and operation of Windows Mobile (Microsoft) are very close to Windows on the computer, which is very familiar and familiar [18] to the computer friends; all kinds of information and data saved in the computer or mobile phone can be easily shared; there are a large number of application software available [19] User choice. It just takes up high system resources and is prone to system crashes. Establish the concept of integrated development, realize the effective integration of various media resources and production factors [20], realize the sharing and integration of information content, technology applications, platform terminals, and talent teams, and form an integrated organizational structure

[21], communication system and management system; real social network The community structure is often hierarchical. Communities in the network can be divided into different levels. Large communities can contain small communities, and small communities can contain smaller communities [22], that is, low-density large communities nest high-density small communities. Cohesion method is a typical method of social network hierarchical community discovery [23]. The method adopts a bottom-up approach, first treats each node in the network as a separate community, and then iteratively merges these communities until all nodes are in one community [24].

2. THE PROPOSED METHODOLOGY

2.1 The Internet Information Hierarchical Fusion Algorithm

Complex network nodes are not isolated, but interact and connect. The topological potential field can be used to describe this effect and connection. This information is exchanged between communicating entities in XML form. It plays the role of the general transmission layer of XML structured data, so that the data can be transmitted to the most suitable resources with high efficiency. Because the application established based on XML has good semantic integrity and expansibility. Therefore, the XMPP protocol has good scalability. The full control of the project cost has a substantive content of the system, including the responsibility network of each department and each unit and the economic accounting of the team. It requires that the various stages of the construction progress of the project should be carried out continuously, neither omissions nor slack, and the cost of the construction project should be under effective control from beginning to end. On the basis of fully absorbing the advantages of the above models, a hierarchical network security situation assessment model based on information fusion is designed for multi-source heterogeneous data and large-scale backbone network security requirements.

The model consists of three modules: element extraction, situation assessment and also situation prediction. Situation assessment can become an important part of the process of information fusion processing. The key is: first, the purpose of situation assessment and the comprehensive processing of large amounts of the information by information fusion is consistent; second, situation assessment is between users and automated processing. It provides an interactive interface and builds a bridge; thirdly, the situation assessment focuses on the collection and management of the information, and implements the process of information fusion.

2.2 The Design of Information Platform for Sino-Japanese Cultural Exchange

Comprehensive and accurate extraction of network security situation elements is an important basis and premise for network security situation assessment. The elements of network security situation mainly include static network environment configuration information, dynamic network operation information and network traffic information. The data input by the network security situation assessment system comes from diverse data sources, usually with different data formats, so data preprocessing and data integration operations are required. Fundamentally speaking, the growth of China's cultural soft power mainly depends on the benign integration of China's domestic society and the implementation of foreign policies that can be accepted by the international community.

To improve the quality of cultural exchange, it is necessary to create internationalized mass cultural products, and to take the

form of non-governmental exchanges as much as possible. The instant communication on the mobile platform is very difficult, and the mobile network situation is complicated. Especially in China, due to the problems of interoperability between Internet access providers and mobile network operators, some networks are not reachable at all in many cases. How to solve the connectivity problem is a problem that must be considered as an instant messaging software on a mobile phone. There is no clear definition of data resources, and there are different types of data resources in all walks of life, so their understandings are not the same. Broadly speaking, data resources are a general term for all databases and data objects in them. Data objects of various themes, structures and forms can be classified into the category of data resources. Open an eclectic channel of thought, and promote the unity of principle and openness.

Confucius' concept of "harmony but difference" is the foothold and starting point for the international dissemination of Chinese culture. The concept of "seeking common ground while reserving differences" put forward by Premier Zhou Enlai should also be used for reference. Different from the traditional method, this algorithm starts iterative merging from the initial community after division, instead of starting from a single node, which can greatly reduce the number of iterative merging.

2.3 The Information Platform Design and IOS Software Realization

Specifically, it is first necessary to extract logs and scanning information from security devices such as IDS, Firewall, Snort, Ntop, and NetFlow, as well as multi-source heterogeneous data such as real-time alarms, virus logs, device status, and user-reported information. Cohesive hierarchical community discovery methods mostly reveal the hierarchical structure of the network through optimization techniques, which include modularity-based methods and random walk-based methods. Modularity is used to measure the proportional density of connecting edges within a community and connecting edges between communities. Modularity is used as a quality function of community discovery to open up new strategic channels for cooperation and promote the unity of locality and globality.

Kobayashi Yotaro, the leader of Fuji Xerox in Japan, believes that cultural exchanges are an important feature of Sino-Japanese relations in history. Enjoy the power of cost control; at the same time, the project manager should regularly check and evaluate the performance of each department and each team in cost control, and implement rewards and penalties. The FN algorithm performs community merging according to the increment of modularity, and the efficiency has been greatly improved. However, with the increase of the network size and the number of nodes, the time of the FN algorithm increases rapidly, so it is not suitable for super-large-scale networks. Promote in-depth cultural exchanges. Cultural exchange, in the final analysis, is the exchange of minds. Through cultural exchanges, we can transcend language barriers and build a bridge of friendship and understanding in the hearts of the two peoples.

We can't just take it, but also export it, because cultural-based advantages are the most fundamental, situational assessment is the core of situational awareness, and cybersecurity situational assessment focuses on the confidentiality, integrity and availability of the network. In the situation assessment stage, the obtained massive network security situation element data is firstly correlated and analyzed, and then the network

basic operation situation, threat situation, vulnerability situation and risk situation are respectively analyzed.

3. CONCLUSIONS

This paper proposes a hierarchical community discovery algorithm HCDTP fused with topological potentials. The algorithm firstly divides the initial community according to the topological potential of nodes. The dissemination of Chinese culture enriches the connotation of world culture. In turn, the vitality of Chinese culture is enhanced in the contact with other cultures of the world. Then the obtained initial communities are iteratively merged until all nodes in the network are in one community, and finally the community corresponding to the maximum modularity is selected as the final community structure.

4. ACKNOWLEDGEMENT

Foundation project:

Nanchong City Social Science Research "13th Five-Year Plan" 2020 Annual Project

Project Name: The Origin and Evolution of Emperor Saga's Chinese Poetry in Japan's "Three Collections of Edicts"
Project Number: NC2020B169

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