Data-Oriented Intelligent Judgment Platform for Red Tourism Industry in Northeast Guangdong Based on Tourism Big Data Clustering Algorithm

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Abstract:Defining big data in the context of tourism forecasting, summarizes the changes it brings to tourism business decision-making. The experimental part deals with the tourism metadata shared by the website, and applies a suitable clustering algorithm to generate the density pattern of the most frequently visited places by tourists. At the same time, it proposes a method to obtain local core categories through the discovery of maximal cliques, and proposes a parallelization of the maximal clique discovery algorithm. strategy, and then propose a parallel strategy for the entire algorithm and experiment on real datasets. Realize the intelligence, intelligence, and semantics of the video surveillance network, so that the police can be freed from the labor of watching video surveillance. Through the extraction and correlation of data feature attributes, the collision can obtain "object laws", so as to make efficient and accurate decisions.

1. INTRODUCTION

Big data is one of the more popular and frequently used terms to describe the exponential growth and availability of modern data, which is expected to remain, or even accelerate, for the foreseeable future [1]. Big data is a broad term referring to datasets that are too large or too complex. In recent years, the rapid development of information science and technology has promoted the continuous progress of various fields such as society and economy [2]. With the support of a series of new technologies, such as the Internet of Things, a series of new applications such as social networking and collaborative creation have emerged, which have greatly improved the scope and form of human creation and utilization of information. Gannan, an old revolutionary base area, has unique red resources [3].

In recent years, the development and utilization of red resources in southern Gansu has achieved certain results, but it still remains at a low level and low-level tinkering [4]. Some scenic spots are still virgin fields to be developed. In recent years, the rapid development of information science and technology has promoted the continuous progress of various fields such as society and economy [5]. With the support of a series of new technologies, such as the Internet of Things, a series of new applications such as social networking and collaborative creation have emerged, which have greatly improved the scope and form of human creation and utilization of information. At present, industrial integration has become the only way for industrial development [6]. Industrial integration refers to the mutual penetration, intersection and final integration of different industries or different industries within the same industry. A dynamic development process that gradually forms new industries or growth points [7].

The coexistence pattern of traffic data platform and business platform (information platform) rationally separates data backup [8], mining and traffic business execution processes, which solves the need to carry out data mining and analysis

applications and service decision support on the current business information platform at the same time. of incompatibility and incompatibility [9]. The nature and tasks of the public security organs determine that the central work is carried out around "people", and "people" are the main body of a case or event. After a case occurs, the public security organ first needs to determine "who" is the suspect, and "who" needs an ID to uniquely identify it [10]. In daily work, names can be used to uniquely point to an object. Tourism, as a rapidly emerging industry, plays a very important role in world economic growth.

Social media sites generate massive amounts of data every day, bringing more opportunities to decision makers [11]. In order to deal with large data sets, CURE [12] adopts the technique of random sampling. However, the clustering results generated by its calculation are relatively random and not ideal. Division-based methods like K-Medoid and KMeans (KM) have better scalability, and the revolutionary struggle in southern Gansu has a long history and great influence [13]. From August 1926, the first party organization, the Ganzhou branch of the Communist Party of China, was established. In September 1949, the whole territory of southern Gansu was liberated [14]. The revolutionary struggle has never stopped. Especially during the Second Civil Revolutionary War, "cultural and creative industries" were based on modern technology and cultural resources. Taking creativity and innovation as the core and soul, it runs through the whole process of production, dissemination, circulation and consumption [15].

As an emerging industry cluster that provides cultural, artistic, spiritual, psychological, and entertainment products to the public [16] According to the previous description, the data platform of the traffic management department is different from the existing business platform in terms of positioning and functions. The basic relationship between the two is shown in Figure 1 [17], the data platform is like an intelligence center. It undertakes applications such as information reorganization, storage, calculation, mining, and

research and judgment, focusing on completing thinking-level responses. The input is the original data provided by the business platform [18], including WeChat, QQ, Alipay, Douyin and other apps account. Different IDs have different advantages and disadvantages. For example, the first type is relatively accurate and real, but it is difficult to collect; the second type is the most popular, but the camouflage is strong; the third type is a new type of ID, with the rise of the Internet, especially the mobile Internet [19].

2. THE PROPOSED METHODOLOGY

2.1 The Tourism Big Data Clustering Algorithm

Tourism thrives on information. A large number of new big data information repositories (more information available than standard databases) can provide researchers, managers and policy makers with data-driven evidence centrality indicators are simple, intuitive, and computationally low-complexity. In big data clustering, the efficiency is the first priority, and the accuracy can be reduced by a small part in order to save time consumption. Therefore, the degree centrality algorithm is suitable for application in big data clustering.

Application scenarios: 1. Call on-site video surveillance to lock suspects; 2. Structure a large number of videos, extract human models, and build rich trajectories for suspects; 3. Use multi-dimensional intelligent capture machines in the trajectory to capture clear frontal faces and human bodies, and geotag The spatiotemporal data contained in the photo records the real activities of the user, and by analyzing these data, information such as the user's activity pattern can be mined. Since these photos contain a large number of tourism-related photos, geotagged photos can be directly used for tourism knowledge mining research. At the same time, as the number of users of photo-sharing websites continues to increase, big data analysis is applied to monitor the flow of tourists in the operation and management of scenic spots. Tourism is growing rapidly and there are several sources that provide visitor data.

The information obtained from these data is not sufficient to analyze the traffic situation in the scenic area. Select the node with the largest degree, if A is the node with the largest degree, then A is the local key node, otherwise, take the node with the largest degree as the initial node, and repeat (2) until the initial node is the node with the largest degree. Each individual industry has its specific social function and role, and the similar functions reflected between industries may often become the cutting point for the integration of different industries. The differentiated functions between industries may become complementary advantages of industrial integration. In real cases, the suspect often wears a mask, and the license plate number of the suspected car is covered and defaced, or the license plate is directly duplicated or unlicensed, which is easy to disguise. But for the two IDs of the human body model and the vehicle model, big data technology and clustering algorithms are used to predict and identify the density pattern location of a specific area.

2.2 The Red Tourism Industry in Northeast Guangdong

To make it a new economic growth point, it is necessary to solidly expand the red tourism industry. So how can we make the red tourism industry bigger and stronger? 7 I think. First of all, we must change the concept - turning red tourism resources into tourism economy.

The public security bureau and the traffic police are often two important functional agencies of urban traffic management, but the specific business directions they undertake are different. For example, the public security bureau often takes vehicle inspection and control and public safety as the main business direction and can also estimate seasonal trends. The results show the number of tourists who will arrive at the place in a given month of the year.

Take the month value on the y-axis and the number of visitors on the x-axis. Since the maximal clique search is a tree search with the initial node as the vertex, each branch search tree is basically independent, so each search tree can be regarded as a subtask for parallel computing.

2.3 The Research and Development of Data-Oriented Intelligent Research and Judgment Platform

In response to this requirement, this chapter proposes a spatiotemporal information representation algorithm based on cross-media information summarization, which can be trusted to output meaningful clusters if there are any clusters in the provided dataset. HDBSCAN is well suited for clustering and has many advantages over K-Means and other clustering algorithms. Select the node with the largest degree. If A is the node with the largest degree, then A is a local key node. Otherwise, the node with the largest degree is used as the initial node. The public security bureau and the traffic police are often two important functional institutions of urban traffic management, but the two There are differences in the specific business direction undertaken. For example, the public security bureau often focuses on vehicle inspection and control and public safety as the main business direction, while the traffic police focus on service management.

3. CONCLUSIONS

Aiming at the problem of big data tourism data, a big data-based tourism behavior clustering algorithm is proposed, which can identify high-density locations in the areas most frequently visited by tourists. Data collected from photos uploaded on online travel sites helped identify clusters in different regions. In this web platform. The audience can realize reading red book stories, on-demand red audio and video, experience war scenes and even online trading of red tourism commodities. Support joint analysis and in-depth mining of homogeneous platforms of multi-source heterogeneous data, break down barriers, eliminate fragmentation problems, and make up for data boundaries.

4. ACKNOWLEDGEMENT

5. REFERENCES

[1] Ding Fahong. Using tourism "big data" to promote the upgrading of Qingyang's red tourism industry [J]. Contemporary Tourism, 2020.

[2] Zeng Qinghong, Wang Ling. Research on the innovative model of red tourism marketing under the background of big data——Taking Lvshunkou District of Dalian as an example [J]. Business Economics, 2020(1):3.

[3] Nie Leigang, Li Yongmei, Yu Yuanhui. Intelligent Tourism Planning Based on Cluster Analysis Algorithm [J]. Computer Development and Application, 2012, 25(2):3.

[4] Su Jiageng. Distributed EM clustering algorithm based on Hadoop platform [D]. Hebei Normal University.

[5] Zhou Rongrong, Chen Dong, Liu Siyuan. Optimization model of fresh food transportation route based on K-means clustering algorithm [J]. Journal of Agricultural Big Data, 2022, 4(1):9.

[6] Jiang Mingyu. Research on red tourism and red culture inheritance in the era of big data [J]. Global Human Geography, 2016, 000(006):299.

[7] Wu Xia, Dong Zengshou, Meng Xiaoyan. Research on K value optimization of clustering algorithm based on big data platform hadoop [J]. Journal of Taiyuan University of Science and Technology, 2015, 36(2):5.

[8] Xu Huafeng, Li Ling, Zhou Shuke, et al. A data processing method and system based on big data and artificial intelligence: CN109634968A[P]. 2019.

[9] Zheng Lin, Zhang Hui. Big data clustering mining technology based on swarm intelligence algorithm in cloud environment [J]. Modern Electronic Technology, 2020, 43(15):4.

[10] Gu Donghu. P-WAP-based big data clustering mining algorithm under Hadoop cloud platform [J]. Journal of Changchun Normal University, 2020, 39(10):7.

[11] Li Junyan. Research on power big data clustering algorithm based on Hadoop platform [J]. Digital World, 2020.

[12] Liu Yunheng. Big data clustering mining technology based on swarm intelligence algorithm in cloud environment [J]. Modern Electronic Technology, 2019, 42(9):4.

[13] Si Fuming, Bu Tianran. Design of a big data clustering algorithm based on Hadoop cloud computing platform [J]. Journal of Chuxiong Normal University, 2016, 31(3):7.

[14] Wang Chengyun, Dai Tianle, Jiang Shimin, et al. Research on Shanghai red tourism image perception and emotional evaluation based on network big data [J]. Tourism Science, 2022, 36(2):13.

[15] Wang Ting. Ctrip released the red tourism report in the first half of the year. The order volume of "red + rural" scenic spots increased by a maximum of 17 times [J]. Chinese Consumers, 2021(7):2.

[16] Cong Li, Li Shuyu, Hong Jingxuan, et al. Research on the spatial structure of tourism flow network in national red tourist attractions [J]. Resources and Environment in Arid Areas, 2021, 35(12):7.

[17] Tian Weiyang. Using big data to help targeted poverty alleviation in old revolutionary base areas in Guizhou [J]. Contemporary Guizhou, 2016(33):2.

[18] Meng Haidong, Ren Jingpei, Song Yuchen. A big data clustering algorithm based on cloud computing platform:, CN103838863A[P].

[19] Yang Yi, Ma Runing. Big Data Spectral Clustering Algorithm Based on Core Points [J]. Journal of University of Science and Technology of China, 2016(9):7.