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Development Index System and Dynamic Analysis Framework of Sports Characteristic Towns Based on Intelligently Assisted Portrait Analysis of Camera Images

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Abstract:With the gradual deepening of the reform and opening up in the inland, many sports towns in the northwest have certain development indicators to be assessed every year. Based on the camera image algorithm, this paper intelligently analyzes the development indicator system of sports towns and builds a dynamic framework for portrait analysis. Firstly, the method processes the image information collected by the camera, finds the road edge according to the characteristics of the road information of the sports town, and then analyzes the evaluation index system of the development level of the sports town according to the road edge. The research shows that the evaluation index of the development level of towns with sports as the core feature is inseparable from the comprehensive evaluation index system of the general characteristic towns, but the indicators and dimensions embodied in the characteristics of "sports" .

Keywords: Index System, Dynamic Analysis Framework, Sports Characteristic Towns, Portrait Analysis

1. INTRODUCTION

In recent years, the intelligentization of home appliances has become more and more intense, and it has become a general trend. All intelligence is based on the machine's perception of the outside world [1]. Data collection is the basis of perception, which mainly includes the collection of voice, image and other data. As of 2012, the "Freescale" Cup Smart Car Competition has been successfully held for nine sessions, and has received extensive attention from major universities, attracting many teachers and students to participate in it every year [2]. The teachers and students of the Electronic Design and Innovation Laboratory of our school have also participated in several competitions, and the problem of occlusion of the target can be well solved through the cooperation between the cameras [3].

In terms of field of view the field of view coverage of multiple cameras is definitely much larger than that of a single camera, the tracking of the target is more durable, and the tracking range is wider [4]. In some difficult issues, it also has its own set of practical methods and the plan is an important starting point for promoting sports poverty alleviation work, and has made important arrangements for the construction of national sports towns [5].

The construction of sports towns is still in the initial period of exploration. The construction of new towns focuses on the coordinated development of population, industry, ecology and space [6], while the sports towns advocating the concept of "innovation, coordination, green, openness and sharing". Meeting the requirements of new-type urbanization is one of the breakthrough points to promote the construction of new-type urbanization [7]. At present, the construction of sports characteristic towns is in the exploratory period. In August 2018, the "Notice of the General Office of the National Development and Reform Commission on Establishing a High-quality Development Mechanism for Characteristic Towns and Characteristic Small Towns" [8] first proposed that each region should be based on characteristic towns. The difference of essential connotation, standardize the provincial creation mechanism [9].

Under the background of current planning and development, application and cultivation, and functional positioning, sports towns have emerged as the times require. The town is used for the development of national fitness and health business, and the problem of occlusion of the target can be well solved through the coordination between cameras [10].

In terms of field of view, needless to say, the field of view coverage of multiple cameras is definitely much larger than that of a single camera, and the tracking of the target is more durable and the tracking range is wider [11]. At present, the mainstream image-based obstacle detection methods are mostly aimed at Dynamic obstacles are designed, while the main purpose of this paper is to identify static obstacles. Therefore, different from the direct detection of dynamic obstacles, this paper divides the detection of static obstacles into two parts [12]. At present, the mainstream image-based obstacle detection methods are mostly designed for dynamic obstacles, and the main the purpose is to identify static obstacles [13].

Different from the direct detection of dynamic obstacles, this paper divides the detection of static obstacles into two parts. From the home appliance market and major home appliance exhibitions [14], we can see that cameras have gradually spread over all kinds of home appliances, making home appliances smarter Provides image data acquisition capabilities. This solution uses OV series digital cameras to collect road images. OV series cameras are digital cameras

commonly used in Freescale smart car competitions [15]. They have the advantages of convenient and simple data collection, low power consumption and small size. This series of cameras has signal acquisition methods such as line signal HREF, field signal VSYN, pixel synchronization signal PCLK and odd-even field signal. Search CNKI and relevant websites of Shandong government departments [16], sort out and analyze the literature on the construction and evaluation of characteristic towns, and the construction and development of sports towns, and master the research results related to sports characteristic towns [17].

The construction of sports towns has kicked off, but due to incomplete supporting documents, unclear implementation of specific plans and other factors, the construction of sports towns is still in groping. The town developed slowly [18]. The local government realized that the reason why the sports characteristic town took a detour is that the construction work lacked the guidance of the index system [19].

2. THE PROPOSED METHODOLOGY

2.1 The Camera Image Intelligence Assists Portrait Analysis

Multi-camera handover tracking is able to continuously and stably track the target through two or more cameras, because the same target may appear in the monitoring scene of different cameras. During the process of image analysis and processing, the researchers found that Most of the effective information of the image is often concentrated in a specific area, while other edge areas contain less information, or even negligible. Shooting method: when the door is completely closed, that is, the camera field of view is completely facing When taking pictures inside the refrigerator, each camera is responsible for taking pictures of the first floor of the refrigerator. The system is designed to maintain the openness of the system. Openness refers not only to being able to support various platforms and various network environments, but also to supporting the secondary development of software. The system uses standardized data interfaces to ensure the most basic performance of exchanging and sharing data with other information systems.

The system uses standardized data interfaces to ensure the most basic performance of exchanging and sharing data with other information systems. The handover process of the target is that for the target to be handed over, the target to be handed over can be found in the field of view of another camera. By detecting the moving target in the field of view, the similarity measurement is performed with the target to be handed over, which can be similarity measurement of local texture, corner, color and other features.

2.2 The Development Index System of Sports Characteristic Towns

The research significance of sports towns runs through many fields such as new urbanization construction, rural revitalization, targeted poverty alleviation, healthy China, sports culture construction, and sports tourism industry integration. On the basis of consulting relevant literature and expert interviews, evaluation indicators for the development of sports characteristic towns are preliminarily determined. According to the research needs, 30 experts were identified, including 8 experts in urban development planning, 9 experts in sports industry, and 6 experts in sports sociology. Industry, culture, ecology and many other aspects.

A small town with sports as its core characteristic is a new business integration and growth product, and relevant research cannot only focus on the context and theory of the sports industry. SPSS20.0 statistical software was used to process the data, calculate the importance of each index, the mean, standard deviation and coefficient of variation of operability, and analyze the index system.

The video tracking system based on multi-camera requires that the video data collected by the multi-camera can be processed and analyzed, the target in the video image frame can be automatically detected, and the accurate tracking can be performed. Then automatically put the video images of different cameras at the same time. When screening indicators, it is necessary to meet the basic requirements of evaluation and assessment, but also pay attention to the possibility of current statistical data, that is, indicators are easy to obtain, easy to measure and easy to evaluate and check. The realization of functional requirements allows people to clearly understand what the system can do, and the realization of performance requirements can bring users a better experience. The multi-camera target handover tracking algorithm involves the handover and fusion of information between different cameras. Stable and continuous tracking of moving objects under each camera is also critical. The robustness of tracking under each camera is also directly related to the quality of handover tracking. With this method, its time and space complexity are high, and it is only sensitive to fast-moving objects such as vehicles. If the obstacle is stationary or moving at a low speed, this detection method often cannot achieve the desired effect. To sum up, in the research on sports characteristic towns, the research results of domestic scholars are diversified, mainly involving the research content It includes the concept, construction type, development model, development path, etc. of a sports town.

3. CONCLUSIONS

The connotation of a sports town is a general term for an industrial base or space carrier that is based on the unique natural, cultural and other resources of a certain area and takes sports as the theme. The multi-camera target tracking system applies several current classical algorithms, and adopts the mixed Gaussian difference algorithm to achieve fast and accurate detection and tracking of the target. Target matching and handover. Its development level evaluation index system mainly includes four criteria-level indicators infrastructure development information, sports characteristic industry.

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