Retraction

Retraction: Research on Intelligent Transportation Construction Model Based on Computer Technology (J. Phys.: Conf. Ser. 1915 022008)

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This article has been retracted by IOP Publishing following an allegation that raises concerns this article may have been created, manipulated, and/or sold by a commercial entity. In addition, IOP Publishing has seen no evidence that reliable peer review was conducted on this article, despite the clear standards expected of and communicated to conference organisers.

The authors of the article have been given opportunity to present evidence that they were the original and genuine creators of the work, however at the time of publication of this notice, IOP Publishing has not received any response. IOP Publishing has analysed the article and agrees there are enough indicators to cause serious doubts over the legitimacy of the work and agree this article should be retracted. The authors are encouraged to contact IOP Publishing Limited if they have any comments on this retraction.

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Research on Intelligent Transportation Construction Model Based on Computer Technology

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Abstract. With the continuous progress of the society, people's living standard has been continuously improved, which is obviously reflected in the way people travel. More and more people begin to use cars as a means of transportation in daily production and life. Computer technology has been widely used in the construction of vision in intelligent transportation. So-called visual traffic means the use of computer image processing function, the analysis of image processing, and the image obtained mainly from traffic monitoring systems, in the main city of placed in a large number of surveillance cameras, real-time monitoring of traffic, through the analysis of the collected image processing, to timely learn about the way of real-time traffic, thereby to shunt of key crossroads, reduce the pressure of main road traffic. In the establishment of intelligent transportation, the traffic signal lamp is an indispensable and important part, and the traffic signal lamp is also an effective way of traffic management. In the establishment of intelligent transportation, the vehicle positioning and navigation requirements are high, so the real-time positioning and real-time navigation of the vehicle is particularly important. In this paper, the construction of intelligent transportation as a starting point, from the computer technology in the construction of intelligent transportation in the process of various advantages were analyzed, the feasibility of the construction of intelligent transportation for in-depth analysis.

Keywords: Computer Technology, The Construction of Intelligent Transportation

1. Introduction

With the continuous progress of society, people's living standards are also improving, which is significantly reflected in the way people travel. More and more people begin to use cars as a means of transportation in daily production and life. Since entering the 21st century, the car ownership in our
country has been on the rise, and in recent years has reached a rapid growth trend, and with more and more cars began to take to the streets, the requirements for the road is also higher and higher [1]. Traditional urban planning and road construction have been unable to meet the normal traffic demand, especially in the large and medium-sized cities in our country, the increase of car ownership has brought about significant traffic pressure. Therefore, in the face of this situation, how to make use of the existing traffic resources to rationalize the use of traffic pressure has become an important problem facing the city.

The concept of intelligent transportation is like the dawn of the dawn to effectively solve this problem. The idea of intelligent transportation is to use the existing advanced computer technology to establish efficient and intelligent transportation system, so as to improve the utilization of resources and reduce the traffic pressure of the city [2]. The concept of intelligent transportation has been put forward and received wide responses. At present, many large and medium-sized cities are practicing this concept. The establishment of intelligent transportation system, advanced computer technology is indispensable.

2. Application of computer technology in intelligent traffic vision

Computer technology has been widely used in the construction of vision in intelligent transportation. So-called visual traffic means the use of computer image processing function, the analysis of image processing, and the image obtained mainly from traffic monitoring system, in the main city of placed in a large number of surveillance cameras, real-time monitoring of traffic, through the analysis of the collected image processing, to timely learn about the way of real-time traffic, thereby to shunt of key crossroads, reduce the pressure of main road traffic [3]. It can also automatically recognize the license plate of the motor vehicle, analyze the origin and destination of the motor vehicle, collect and analyze the traffic situation of the road, so as to adjust the traffic. Computer technology mainly includes the following aspects in terms of vision:

2.1. Automatic recognition of vehicle license plates

The license plate of a vehicle indicates to a large extent that the main information about a vehicle includes the owner of the vehicle and the person who is currently driving the vehicle. Whether the motor vehicle has illegal behavior in the process of driving on the road, whether there is illegal behavior in the parking can be based on the license plate of the motor vehicle to pursue responsibility. Due to the material nature of the vehicle license plate and the time limit of driving the vehicle, the vehicle license plate is easily affected by light, weather, Angle and other factors when the surveillance camera is taking real-time photos and monitoring, which makes the vehicle license plate cannot be accurately recorded by the surveillance camera. The application of computer technology has solved this problem.

(1) Vehicle license plate positioning technology

In our country, the motor vehicle license plate has the characteristics of vertical image and gray scale change during the production [4,5]. Using the computer technology to detect and recognize the characteristics of the license plate, it can achieve the vehicle license plate information acquisition.

(2) Character recognition technology
Although in many cases, the whole license plate can be captured by the surveillance camera, the license plate of the motor vehicle will be affected to some extent, so it is impossible to identify the license plate of the motor vehicle with the naked eye. The application of computer technology can obtain the key characters of the vehicle license plate through the comprehensive analysis of the vehicle license plate, and then filter the vehicle model to get all the information of the vehicle license plate.

2.2. Vehicle detection and traffic statistics

The surge in the number of vehicles combined with poor urban planning has led to long traffic jams on urban roads, especially during the morning and evening rush hours. The time of traffic lights in cities is fixed, which cannot be changed under normal circumstances. The number of traffic police is also limited, so it is impossible to equip traffic police to direct traffic at all intersections. Therefore, in order to reduce the traffic congestion on the main road, it is necessary to make a statistical analysis of the vehicles passing through the intersection, so as to make a plan to reduce the traffic pressure [6]. The application of computer technology can be real-time statistics, each intersection traffic through a computer recognition system, can the memory of each intersection vehicle recognition, forecast vehicle route to can, through the collection of data analysis, can periodically to control main intersections traffic light time, let the main intersection in traffic peak period, efficient fast through traffic, and to pass by there crossroads vehicle shunt in advance, so as to reduce the traffic pressure.

2.3. Autonomous driving of vehicles

The concept of autonomous driving has been proposed for a long time, and autonomous driving of cars is a typical product of the concept of intelligent transportation. In order to realize the automatic driving function of motor vehicles, two basic functions must be realized. The first is the real-time collection and analysis of road conditions, and the second is the detection of vehicles on the road. The first function can ensure that the car has a humanized judgment of the road conditions ahead when it is driving autonomously [7,8]. The second function can enable the vehicle to have artificial intelligence recognition and collect and analyze the surrounding vehicle information on the road. The realization of these functions is based on the premise of computer technology, and the realization of intelligent transportation is inseparable from the support of computer technology. At this stage, the autopilot is not able to promote the use of large area, the reason is because in the existing computer technology, while can meet the basic requirement of the two automatic driving, but because of the autopilot nobody thinking judgment ability, so the automatic driving on the road, still have a lot of technical constraints, but no matter which direction development, the realization of the autopilot is inseparable from the support of computer technology. (figure 1)
3. Application of computer technology to traffic signals

In the establishment of intelligent transportation, the traffic signal lamp is an indispensable and important part, and the traffic signal lamp is also an effective way of traffic management. In the construction of intelligent transportation, the change of traffic signal light is inevitable. Through the support of computer technology, traffic signal light can realize intelligent control [9]. Through the analysis of urban traffic information collection, can be summed up in the city road traffic cycles, through to the traffic lights intelligent transformation, in the road traffic is in a stable, traffic lights can be in accordance with the usual time to time, during the period of higher in the morning and evening, traffic lights can be based on road traffic congestion degree to the change of the intelligent light time, allowing large flow rapidly through the traffic jam, lowering the road congestion.
Figure 2. Schematic diagram of intelligent traffic signal lamp

4. Application of computer technology in traffic location

In the establishment of intelligent transportation, the vehicle positioning and navigation requirements are high, so the real-time positioning and real-time navigation of the vehicle is particularly important. First of all, the positioning of the vehicle needs to accurately display the current position of the vehicle [10]. Under the premise of accurate positioning, the vehicle navigation can clearly show the current position of the vehicle, the position to be reached and the route of the vehicle in the form of an electronic map in front of the driver according to the urban road planning. In addition, the combination of computer technology and map navigation can enable vehicles to see on the electronic map which section of their route is congested or normal, so that drivers can plan a more reasonable route and avoid entering the severely congested road section. This can also effectively allow vehicles to change their routes before entering the congested road sections, thus reducing the traffic flow and reducing the traffic pressure.

5. Conclusion

With the continuous development of the information age, the construction of intelligent transportation will be carried out gradually from the conceptual practice. The establishment of intelligent transportation is based on the original traffic conditions, the introduction of advanced computer technology, through the real-time analysis of traffic conditions, planning a reasonable traffic route, so as to reduce the problem of urban traffic congestion, so that the traffic problem is no longer a single rely on human to solve. At present, the construction of intelligent transportation has already started the practice stage. Through the preliminary practice, it has been proved that the establishment of intelligent transportation can relieve the urban traffic pressure to a large extent. Intelligent transportation has the characteristics of network and intelligence. The establishment of intelligent transportation can effectively solve the urban traffic problems, strengthen the management of motor vehicles, and thus improve the service level of the city. In this paper, the construction of intelligent
transportation as a starting point, from the computer technology in the construction of intelligent transportation in the process of various advantages were analyzed, the feasibility of the construction of intelligent transportation for in-depth analysis.

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