VISUAL INTERFACE DISPLAY METHOD AND APPARATUS, ELECTRONIC DEVICE, AND STORAGE MEDIUM

This application claims priority to Chinese Patent Application No. 202010408219.0 filed with the China National Intellectual Property Administration (CNIPA) on May. 14, 2020, the disclosure of which is incorporated herein by reference in its entirety.

TECHNICAL FIELD

The present application relates to the field of self-driving technology, for example, a visual interface display method and apparatus, an electronic device, and a storage medium.

BACKGROUND

With the development of science and technology, automotive self-driving technology is in a critical period of the vigorous development. To improve the user experience, a driving environment is visualized to display the environment around a car in real time.

~~In the related art, when a driving environment is displayed through a visual interface, an electronic map is displayed on the visual interface, and the point cloud data of the surrounding environment of the car is obtained through a sensor on the car. The point cloud data is input into a pre-trained classification model to obtain the classification result of each object around the car. For example, the classification result may be a vehicle, a pedestrian, a bicycle, and a traffic cone. Then a corresponding model is matched with the classification result and displayed on the map to implement visual display of the driving environment.~~

~~In practical applications, since the accuracy of point cloud data acquisition or the accuracy of a classification model is not high, the classification model is accurate in classifying certain types of objects (such as vehicles), but inaccurate in classifying other types of objects (such as objects other than vehicles) or even unable to classify other types of objects. Further, a wrong model or even no model is displayed for an inaccurately classified object on a visual interface. As a result, the user experience is undoubtedly reduced.~~

SUMMARY

The present application provides a visual interface display method and apparatus, an electronic

executes the driving task.

The map display module is configured to display the map within the preset range according to the real-time position of the target vehicle.

The object model display module is configured to display the object model on the map, where the object model display module is further configured to display the first object model for the first object detected by the target vehicle and display the second object model including at least the point cloud data for the non-first object detected by the target vehicle.

In a third aspect, some embodiments of the present application provide an electronic device. The electronic device includes one or more processors and a memory configured to store one or more programs.

When executing the one or more programs, the one or more processors perform the visual interface display method according to some embodiments of the present application.

In a fourth aspect, some embodiments of the present application provide a computer-readable storage medium. The storage medium stores a computer program. When executing the computer program, a processor performs the visual interface display method according to some embodiments of the present application.

When it is determined that the target vehicle executes the driving task, the map within the preset range is displayed according to the real-time position of the target vehicle, and the object model is displayed on the map. A first object model is displayed for a first object detected by the target vehicle so that a first object model can be displayed for the accurately classified first object. A second object model including at least the point cloud data is displayed for a non-first object detected by the target vehicle so that the second object model can be displayed for the inaccurately classified or unclassifiable non-first object~~. In this manner, the problem that a classification model is inaccurate in classifying a non-first object or unable to classify the non-first object, resulting in the display of a wrong model or even no model for the non-first object on a visual interface is solved.~~. Accordingly, models may be displayed for the first object and the non-first object detected by the target vehicle, and the second object model including at least the point cloud data may be displayed for the non-first object without classifying the non-first object. In this manner, the data volume of model rendering of the non-first object is reduced, and it is not even necessary to render a model for the non-first object, so that while a model is displayed for a detected object, the speed of model rendering is improved. Thus, the