I Auxiliary driving system

Auxiliary driving system mainly includes as follows: driver prompt module and vehicle prompt module. Driver prompt module prompts the driver using voice according to automatic identification system in order to help driver safe driving. Vehicle prompt module prompts the adjacent vehicle to decelerate or give way or overtake according to its own driving behavior so as to achieve the purpose of safe driving by good communications.

J Vehicle positioning system

Vehicle positioning system positions roughly by the use of GPS at first and identify vehicle information through so as to the precise positioning. Its main modules include as follows: GPS positioning module, short-range and wireless communication module and traffic geographic information matching module.

K Vehicle navigation system

Vehicle navigation system uses the precise positioning and traffic geographic information matching of GPS system and the algorithm in the algorithms library to calculate the shortest travel path and the least time path. Because the traffic flow is dynamic, vehicle navigation system is also dynamic .So the travel path and the least time path may change at any time. Its main modules include as follows: navigation voice prompt module, navigation geographic information display module, path computation module.

L Vehicle information service system

Vehicle information service system realizes query and control according to the driver's demand by speech or manual operation. For example, when the driver need to query whether there is a parking space nearby, he can use voice command to initiate a query by roadside communication system so as to the result displayed by recovery of speech or vehicle displayer.

IV. CONCLUSIONS

On the basis of information flow analysis of CVIS, this paper makes clear each transaction of node and grasps the whole architecture of CVIS. In addition, this paper designs the framework, the demarcation and function modules of subsystems of CVIS. So it draws the following conclusions:

(1) Because the designing of the CVIS is on the basis of the internet of vehicle, a lot of problems need more refined processing.

(2) A lot of influence factors of road can not be found and shared because of the complexity of road, so CVIS needs more analysis of traffic data and module to improve the design.

(3) Using the system analysis method, we can effectively grasp the business point of the huge and complex CVIS by the main line of data flow.

Although the development of CVIS at home is not easy and all kinds of problems also exist, the start is basically the same at home and abroad look from whole. The research of key and core technology progress smoothly, and many achievements have been applied to practice, so the CVIS is believed to get the specific implementation in next few years.

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