GPS/Radar based Adaptive Cruise Control System

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ABSTRACT

Intelligent Cruise Control System is one of the main development directions of vehicle industry, Adaptive Cruise Control (ACC) has been successfully applied to commercially available, it could reduce the burden on drivers when driving in a long time, but the function of ACC is limited to high-speed cruise use, so this paper simulated a variety of driving situations by CarSim software and come up with a policy-deciding system which can decide the mode instantly, another for the throttle and brakes to make the appropriate configuration to reduce fuel consumption and pollution. We also used radar and Global Positioning System (GPS) in wireless mobile rescue robot (SRV-1) to achieve the purpose of ACC, GPS navigation, GPS driving record.

Keywords : Intelligent vehicle ; Cruise Control System ; Global Positioning System ; Driving record

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