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Design of Android Based Smart Car

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Abstract

Android smart car is designed with safety in mind. A simple and sensitiveline, included steering wheels and new voice events, this is designed to reduceinterruption so you can stay focused on the highway.This car which can be controlling using an Android APP for smart phones.A car is regularly an electronic mechanic machine that is guide by computer and electronic controlling programming. The innovation of the Smart Car technology to developing based on remote connection using android application can control the car movements. This system use Bluetooth device controller to control the mobile App. This Bluetooth device interface with UART communication. The UART receive the command via the Bluetooth device. This design is may helps to our rural citifies. This system is developing to help to self driving vehicles.

Keywords*: Android, UART, Bluetooth, remote controls*

1. Introduction

Smart Cars propose only challenges in human machine communication. Vehicles are becoming, in result, robotic systems that team up with the driver described in [1-3]. As the robotic systems become extra capable, how best to direct the on board human resources is an interesting question [4-6]. Analysis of cloud computing technology described the basic analysis of the computing technology [6]. Combine the strengths of machines and humans, and extenuating their shortcomings is the goal of smart vehicle research. An efficient association rule based dynamic support count adaptation model for XML databases using X Query presented the adaptation model of the association rule [7]. With mobile computing already encroaching into vehicles, this project aims to develop smart systems and technologies that will really aid the driver and improve road safety. The investigate is centre around road context responsiveness through computational idea and additional sensors. Road understanding is then combined with driver gaze monitoring to exhibit holistic, sensitive driver support. NiS/SnS Core-Shell Embedded Polyaniline Composite: Synthesis and Characterization described the composite of the embedded characteristics.

The number of complex driver help systems is continuallygrowing. This system is also a driver helping system which is based on the idea of separated input and productivity. Hence, the driver enters his input on a touch pad which is located on the right support of his seat and the car performs the exacting action that the driver wants it to perform.

A touch pad on the supportmoved us to use our smart phone as the input device, as smart phone is very common and easy to utilize. This system focuses our attention to control the car with our android mobiles.

2. Proposed Systems

Consequently, smart phones are would be a great idea if we can use android smart phones as input Controller. Android mobiles are very useful these days. Android mobiles are very frequent these days.

This system has 3 controls the car, (i) accelerometer (ii) voice recognition and (iii) touch panel.

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2.1. Home Screen

The home page includes login and connectivity of Bluetooth device. The Bluetooth device is connected to the smart phone then the all Bluetooth controlled controllers are working based on user input on mobile phone using touch panel. Figure 1, shows home page.

Figure 1. Home page

2.2. Accelerometer

This accelerometer used to move the car direction. This accelerometer rotates 3600 all sides.This Figure 2 shows the sample of accelerometer.

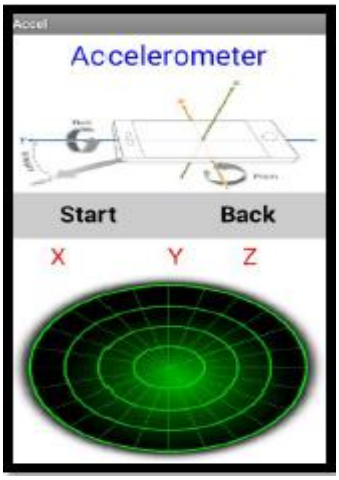

Figure 2. Accelerometer control

2.3. Voice Recognition

Voice IP is utilized to control the car. The basic idea to be used in two different way internets or without internet options. Figure 3, shows Voice Recognition.

Figure 3. Voice control

3. Conclusion

Physically challenged peoples using wheel chair, our project used an aid. The people just need to give the commands using android mobiles. This proposed model also used to army department using for transportation without human can transfer the equipments in one place to another.The model designed, has in the qualities of SmartDrive, the SmartDrive technology include any Android application to develop the car, but the model to developto added this value forever.

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