



MOBILE CONTROL VEHICLE TECHNOLOGY (MCVT)

TEAM MEMBERS

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PROJECT GUIDE

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ABSTRACT:

Mobile control vehicle technology is through which you can control the vehicle by using the smart phone from 10 to 100 m distance and long. This project is to develop a fully automated bike which is controlled by using android application i.e. smart phone. We are using a four wheel to ride a bike in hill stations (like quad bike) to improve the torque and speed ratio. The Four wheel setups have obvious advantages in terms of stability, and it can also tilt at higher speeds, allowing for more stable cornering.



INTRODUCTION:

OBJECTIVE:

It is a technology through which we can control (acceleration , braking , steering) of vehicle (cars ,truck ,bike) by using mobile. Vehicle can be controlled in these ranges of distance (short 100m ,long 1000 m)

OUR IDEA:

To control or drive a vehicle by using mobile. Here we have to control the steering system , acceleration system ,clutch system ,braking system and gearing system.For every controlling system we need one transmitter and receiver here we are using mobile as a transmitter and receiver will be placed in vehicle.

INTRODUCTION:

In this technology we can control the five major systems for vehicle movement. The systems are steering system, accelerator system, clutch system, Brake system and Gear system. These systems are controlled by Micro controller application. Microcontroller controls the vehicle by the signal received from Smart phone. The GSM transmitter and receiver is used for the signal transmission.

The Wiper motor and Actuators are used for mechanical systems like move, turn, acceleration of vehicle. These both systems are directly connected vehicle arrangements. Self-driving technology isn't solely the domain of cars and trucks – bikes are getting in on the act too. The latest example is Euro bike in Germany, where Co Module showed a smart phone-controlled, three-wheeled e-bike prototype. The concept is designed to stimulate a conversation about the sorts of practical applications this technology could find in the real-world.

At the heart of the Co Module's embedded electronics, which include Bluetooth LE, GPS and GSM/GPRS connectivity. The vehicle itself is based on a cargo bike by Veleon, with a Heinemann motor and 350 WH batteries. The three-wheel setup has obvious advantages in terms of stability, and it can also tilt at higher speeds, allowing for more stable cornering.



The prototype e-bike is Friedrichshafen could be controlled using an Android application, with the ability to move forwards, stop and steer the bike remotely. Turning the vehicle is handled by pressing down on a virtual button and tilting the Smartphone. Co Module says that the with some additional tweaks and GPS coordinated punched in, the concept can operate autonomously in a closed environment. An autonomous bicycle to accompany postal service workers on deliveries or attaching a trash can to the front to help out park cleaners. There are also more ambitious uses envisaged for further down the line, such as autonomous deliveries in urban areas.

The smart-phone controlled prototype is also designed to showcase the core cloud connectivity platform. Co Module believes that by integrating its electronics into bicycles, manufacturers can create much more solid relationships with their end users by gathering useful data to help streamline their business models, such as when, where and how their bikes are being used.

This would also enable them to continue their relationships with customers long after the point of sale, providing offers to loyal customers, or suggesting riders get their bicycle serviced after a certain distance travelled. The possibilities, from Co Module's point of view, are almost endless. It's early days for both the wider platform, and for more specific products like the prototype bike. The company plans to start showing its concept vehicle to interested parties such as postal services in the near future. The prototype we saw in action at Euro bike looked close to being ready for such applications, so it's not outside the realms of possibility that the tech in use before it.

Each year at the North American International Auto Show (aka NAIAS or the Detroit Motor Show), the Michelin offers a global platform for students and designers to share their visions of design for automotive industries in the 21st Century. This year, 22 vehicles made it to the show in full-sized form and they represent original thought in the automotive design process and a trip to the design web site will provide hours of fascination for any mechanical engineering enthusiast. Two designs that really interested us this year were from young German designers Tillman Schlootz and Oliver Keller who collaborated to produce the Baal and Hyanide designs pictured here and inside. They represent an entirely new vehicle concept using a bendable rubber



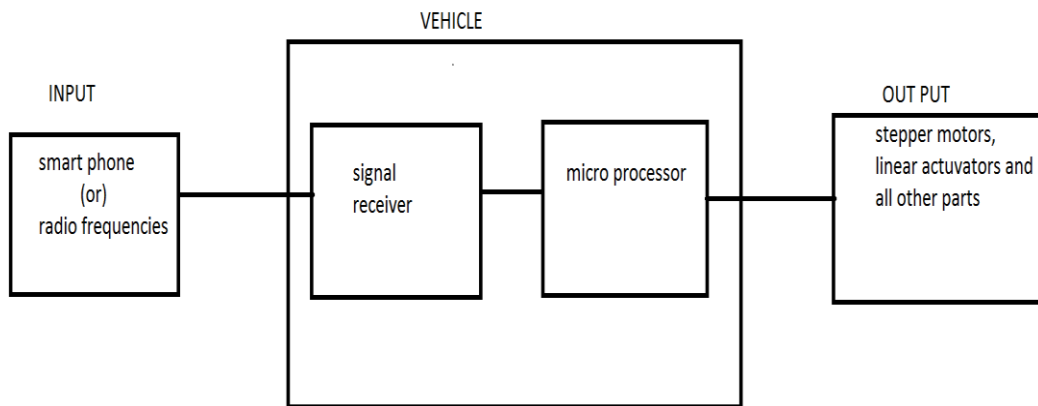
track that offers much more traction than its closest relative, the motorcycle, as well as freely changeable directions too long.

The Baal and Hyanide are steered by both hands and feet and though the display models use a 500cc ATV Motor, the designers believe the construction could allow the use of different engine concepts including fuel cell systems. The Baal is seen by the designers as having significant off road advantages due to its greater theoretical traction and could take part in desert rallies the Dakar or Baja 1000. Addendum - we posted this story and within minutes had stumbled on it again at our mate Red's site, so in order not to contravene the old boy's act, it's here too.



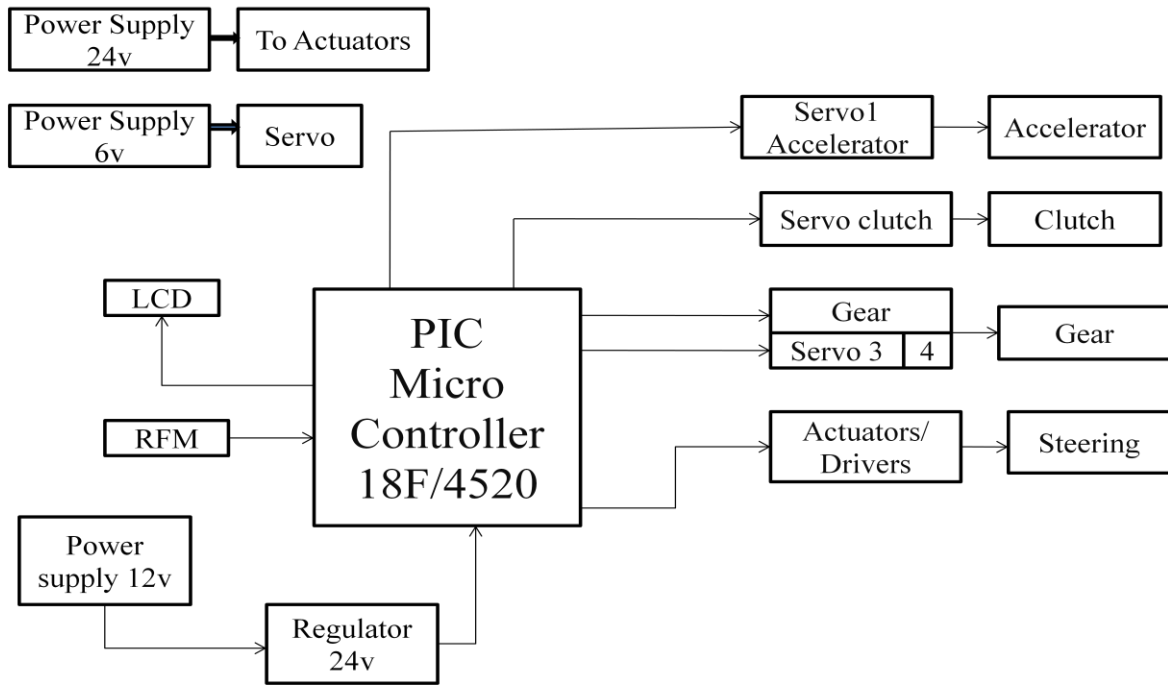
BLOCK DIAGRAM:

Transmission diagram:





In detail:





RESULT:

IMPLEMENTATION IN QUAD BIKE:

