SRS ITSP-2016

Abstract

Maglev Car

Motivation:
 We got fascinated by the speed of maglev trains whose videos have been floating on net.

Specifications:
It will be levitating in air(obviously). It will be floating on array of small pieces of electromagnets which will be insulated from each other.The magnetic field will be present in only that area where bot is present and surrounding areas so that stability is maintained.For moving the bot ,we will extend the magnetized area in the direction in which we want it to move as well as we will demagnetize the back portion of the electromagnet so that our bot advances .

Controlling:
Further we have also thought of controlling the magnetic field using an android app which will be virtually equal to controlling the bot.

Equipments:
Electromagnets,magnets,bot making equipments,android app (rough idea),Battery eliminator ,Motors and shaft, Wooden board (for fixing all the components).

Plan of Action:
 1 st week: 1) We will plan and design the car and controller. 2) We will study and purchase all the hardware that we will require.

2 nd week: 1) We will make the basic skeleton of the car and the controller. 2) We will also make the basic structure of each component of the car and controller.

3 rd week: 1) We will work on the levitation of the car to optimum height. 2) We will work on the surface and make it electromagnetic.

4 th week:
 1) We will work on the controller for the car.
5 th week:
1) We will work on transmitting and receiving commands between car and controller.
6 th week:
 1) Final testing and required optimization in the project will be done.
Any suggestions(related to anything)- comment please.

Approximate Expenses: 8,000 Rs.

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