# CALIFORNIA STATE SCIENCE FAIR
# 2013 PROJECT SUMMARY

**Name(s)**

Guillermo Haro

**Project Number**

33819

**Project Title**

## Electromagnetic Car

**Abstract**

**Objectives/Goals**

The objective of my project is to help reduce the pollution in our environment. I want to get rid of tire and gasoline use as a fuel. With the help of levitation there will be almost no friction, therefore not requiring as much energy to gain momentum. This characteristic will save energy and make a more efficient machine.

**Methods/Materials**

In order to get momentum the model will be using a propeller. Since the car will have friction on the ground without wheel I decided to make it float, and in order to do that I used magnets on both the car and track. To conduct electricity i used copper strips and copper mesh to continue the current at places where there may have been a separation.

**Results**

I was able to create a model car that has a constant levitation and can gain momentum with the propeller. Once the car has a certain amount of speed it does not need as much power to keep itself going. It was able to keep afloat and stay in motion even after it went through the U turns on either side of the track. Since the car has little friction it gains speed quickly and may go at high speeds if the acceleration is kept constant.

**Conclusions/Discussion**

This design of transportation would be a great advancement in efficient transportation. The project would have to go into a bigger scale and needs to go through more tests including how it would react to weather like rain, snow, or high levels of heat. The whole concept would involve many funds in order to change and recreate today's roads, however there can be adjustments or other options on how it can be used.

**Summary Statement**

My project is about getting rid of the use of tires and gasoline to improve the environment.

**Help Received**

Father helped build project.