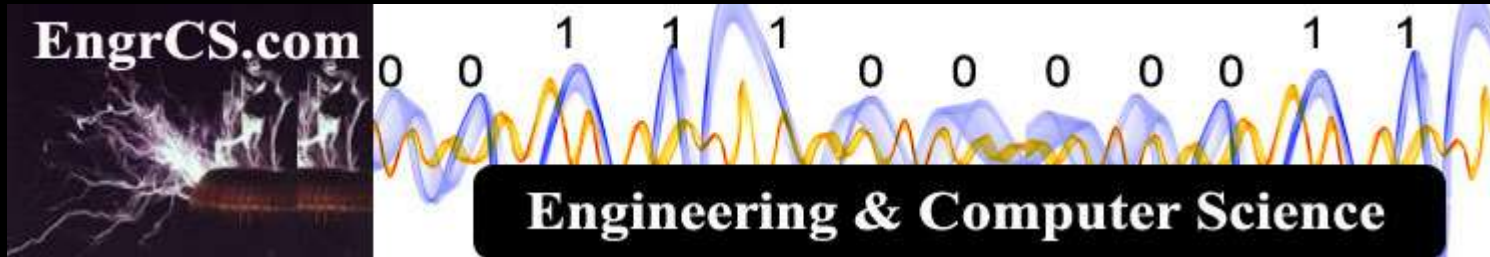


# CLARK COLLEGE ECS TECHNOLOGY PROJECT EXPO

*update on 6/8/2015*



# ELECTRIC CAR PROJECT





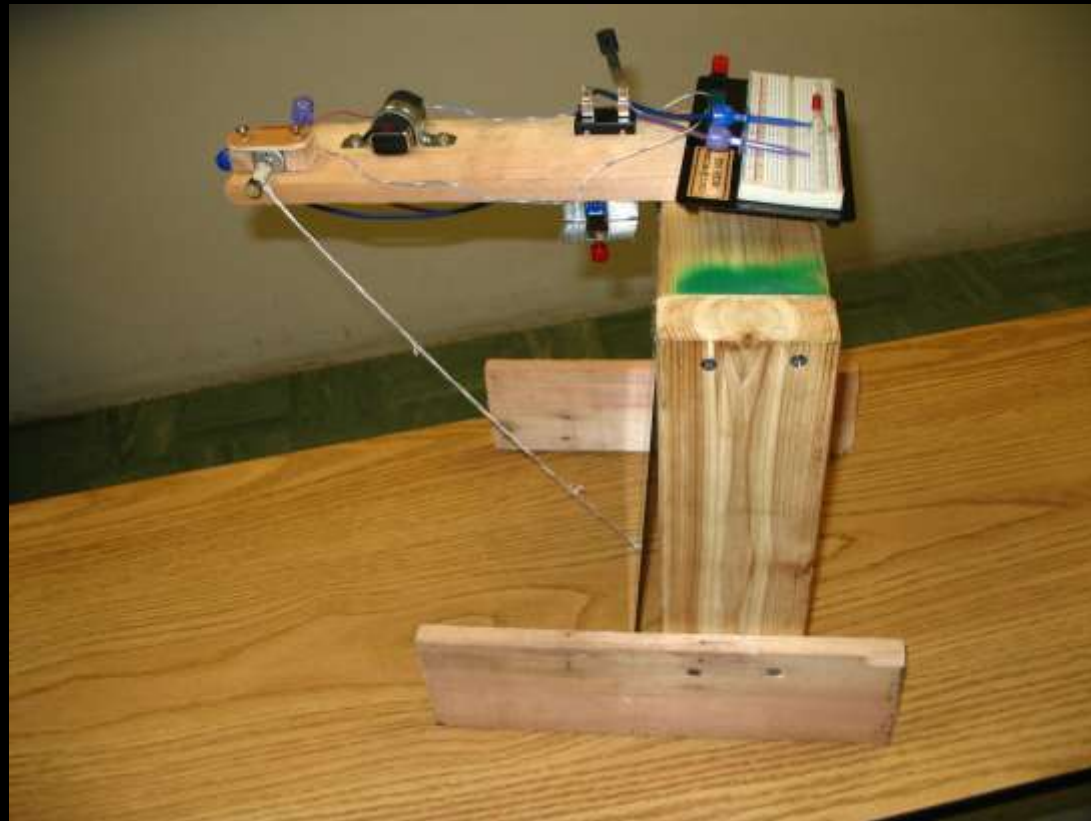
# 3 PHASE POWER GENERATOR



# OFF-ROAD WHEEL CHAIR



# AUTOMATED TRAP DOOR



# AUTONOMOUS HELICOPTER





# AUTONOMOUS LIGHT SEEKING VEHICLE

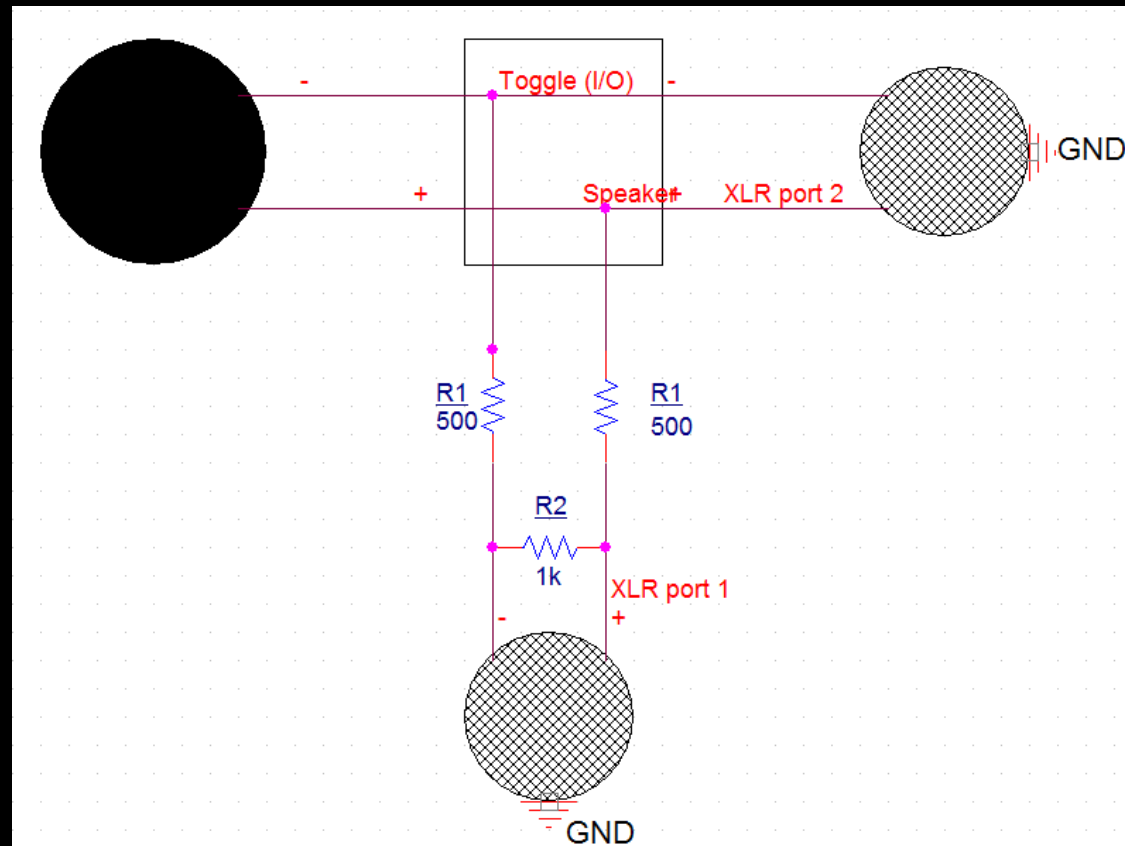


# BOUNDARY NOTIFIER





# CAPTURE BASE AND AMPLIFY



# REMOTE MAILBOX STATUS

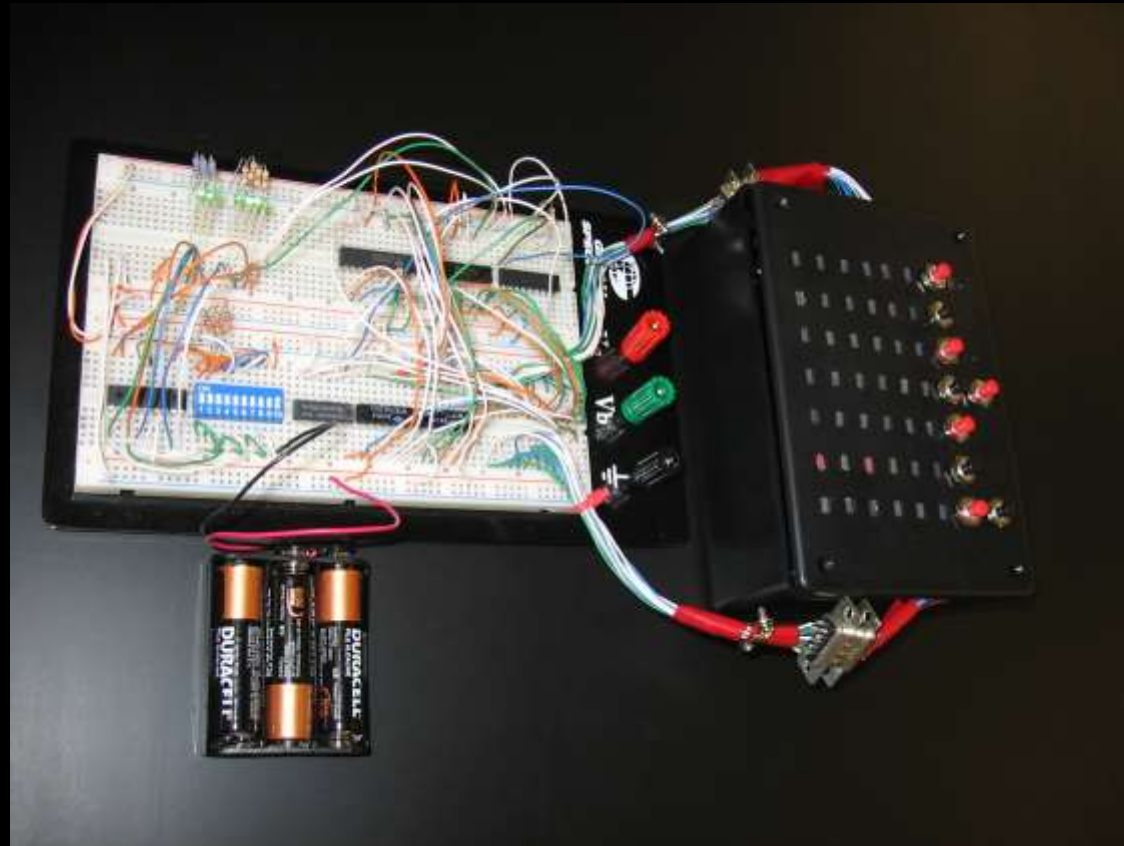




SUBKICK



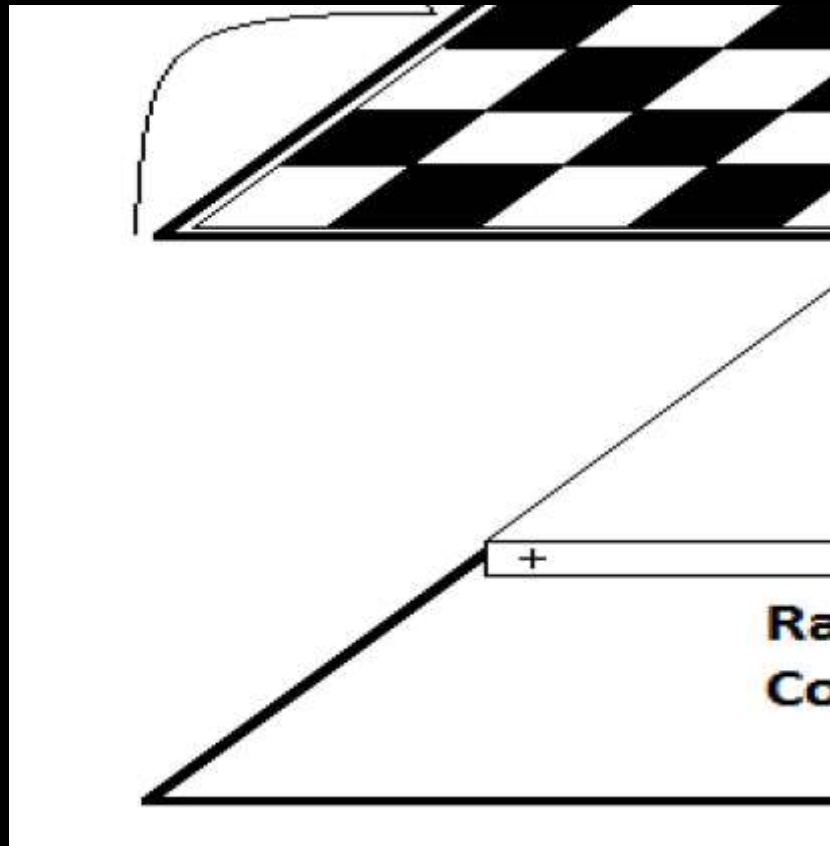
# CONNECT 4 GAME



# DOG BARK CANCELATION

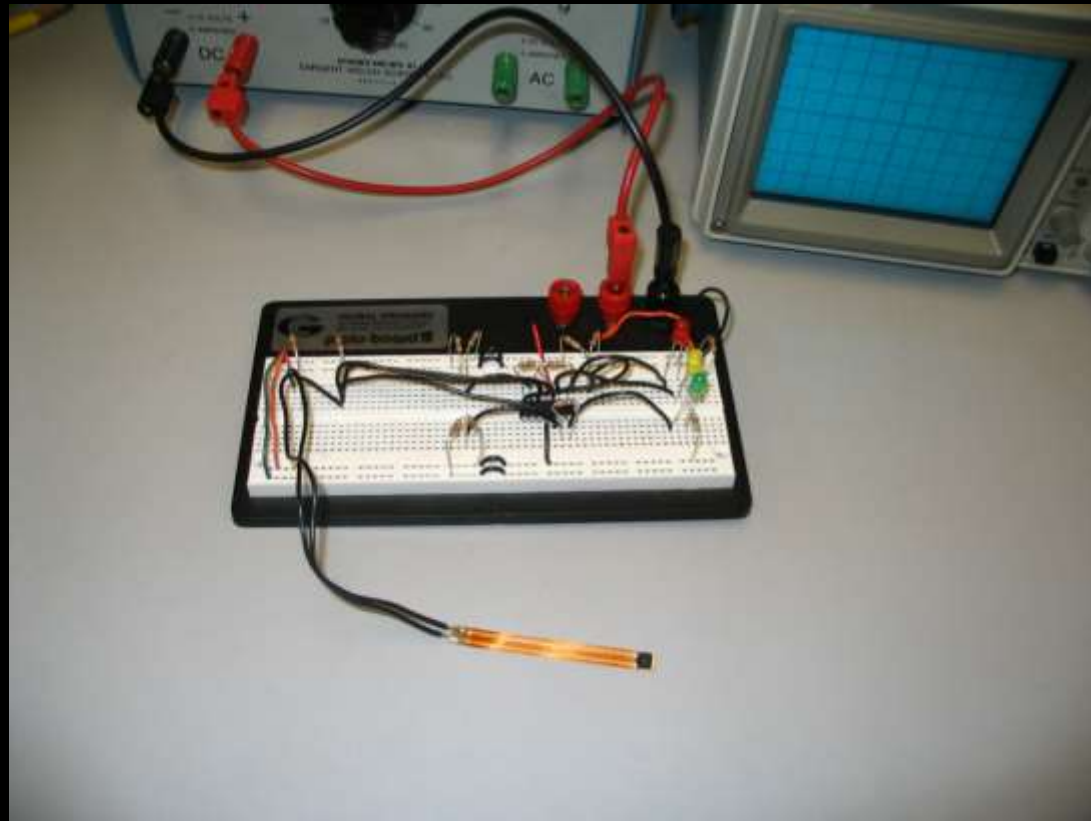


# ELECTRONIC BOARD GAME





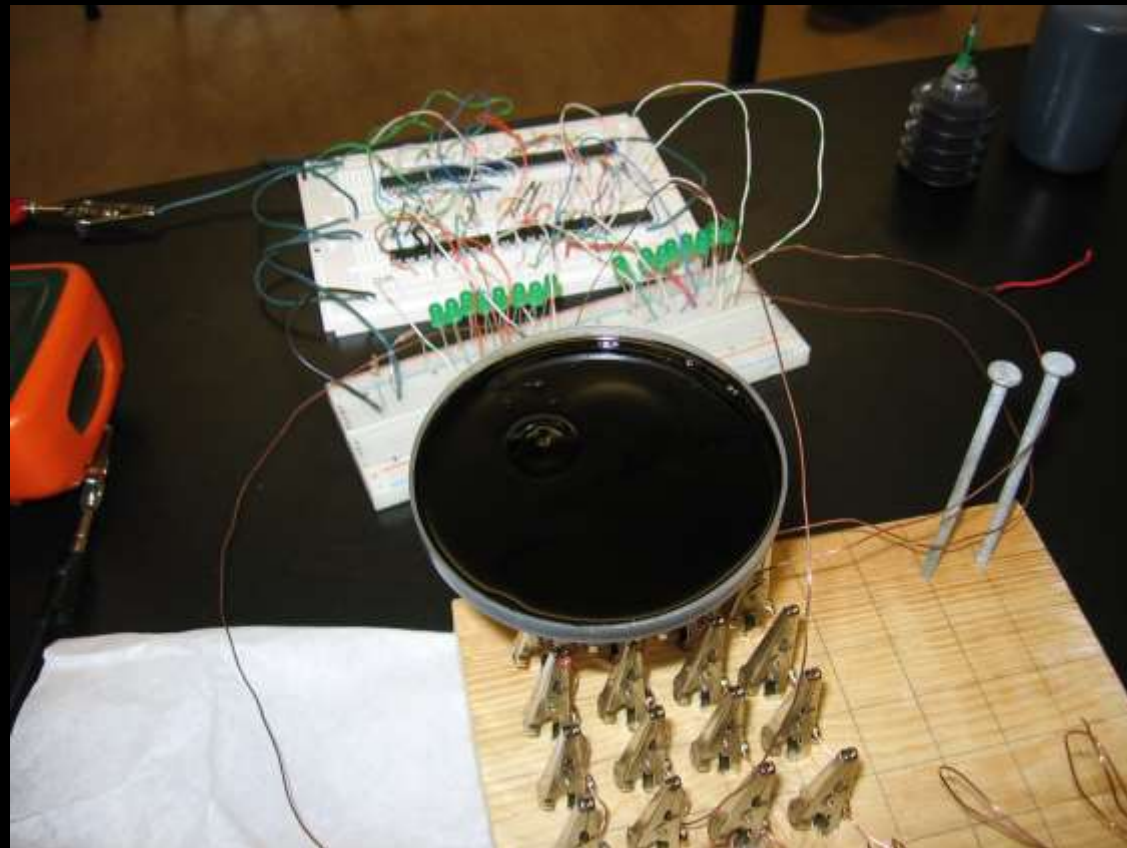
# ELECTRONIC SCALE



# DIGITAL DELAY GUITAR PEDAL



# FERROFLUID DISPLAY





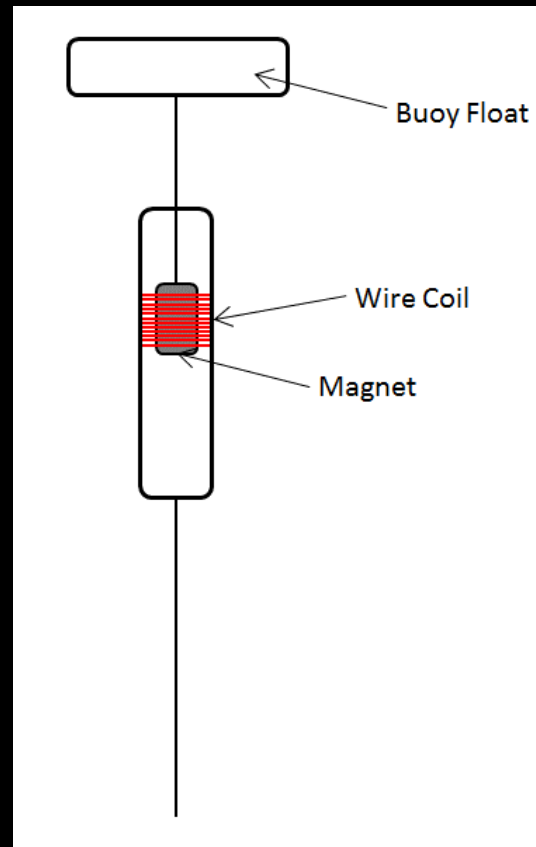
# CAD-DRIVEN FOAM CUTTER



# RFID CONTROLLED DOGGY DOOR



# GENERATION OF ELECTRICAL POWER FROM OCEAN WAVES



# MOBILE APP - CAMPUS GUIDE





# UAV WITH GPS WAY POINT PROGRAMING



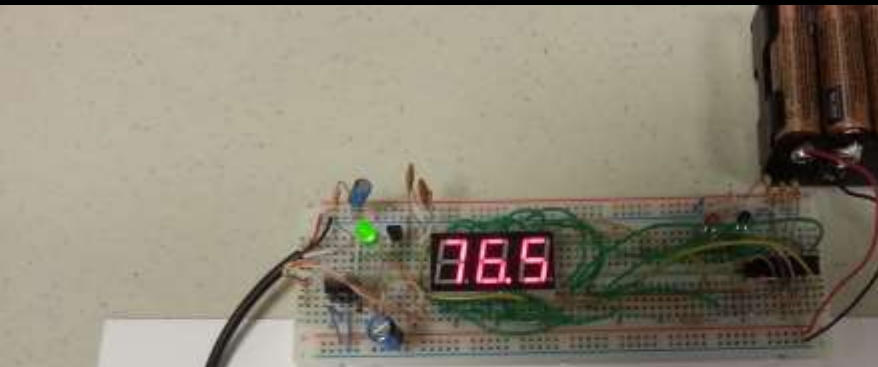
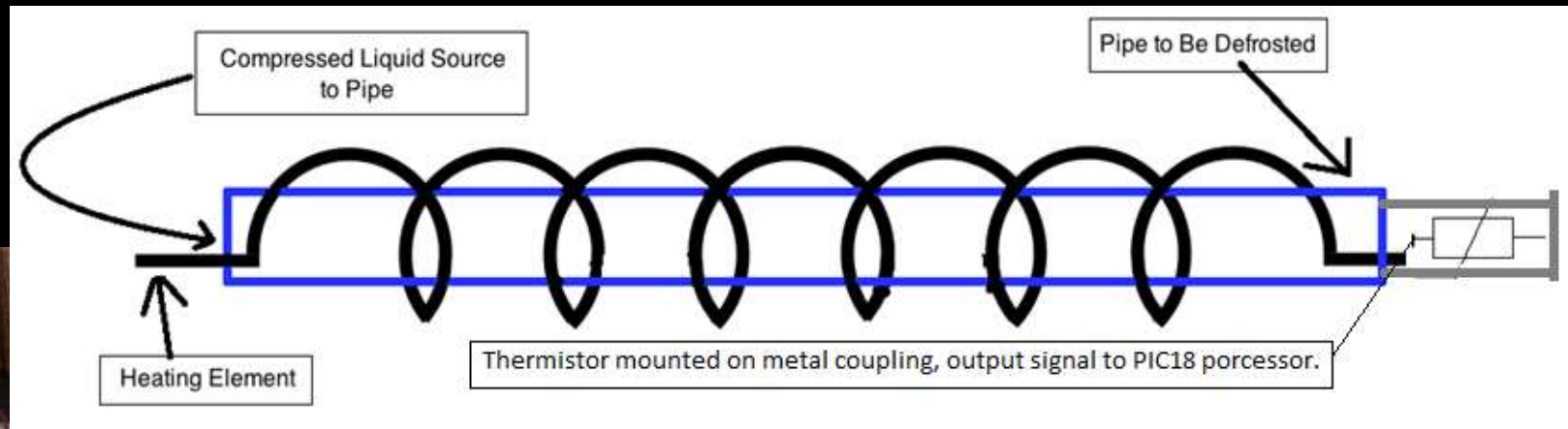
# LICENSE PLATE READER



License Plate	Entry Image
1336DTM	
Reference	
002948	
Reference Type	
Ticket	
Entry Time	
6/13/99 6:19:00 AM	
Entry Lane	
In:Daily A2	
Exit Time	
6/14/99 1:12:36 PM	
Exit Lane	
Out:Daily A2	
Entry Exception	
Valid	
Exit Exception	
Valid	



# LIQUID LINE AUTOMATIC DEFROST



Liquid Line Automatic Defrost, 3-4-14  
Dean Montgomery

## Problem Definition

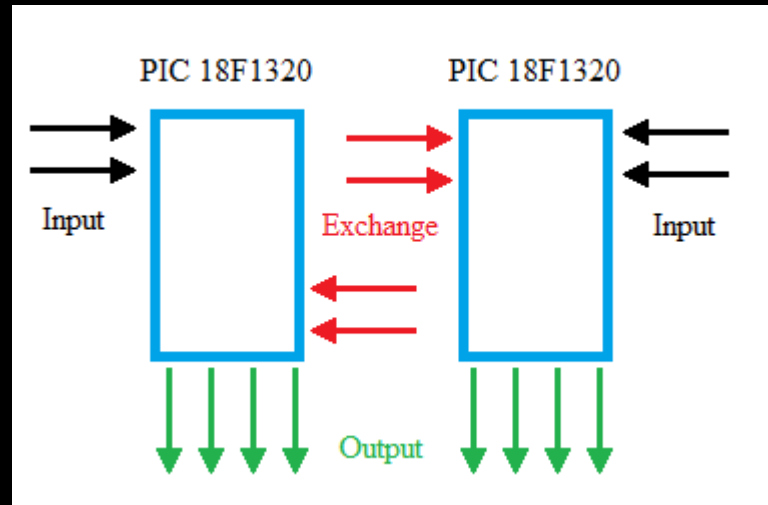
- Liquid lines from a chilled compressed source tend to freeze when volume of flow increases rapidly for a long period. As the fluids decompress in the line, energy is released and the lines freeze.

The goal of the project is to build a simple controller that can be

## Competitive Analysis

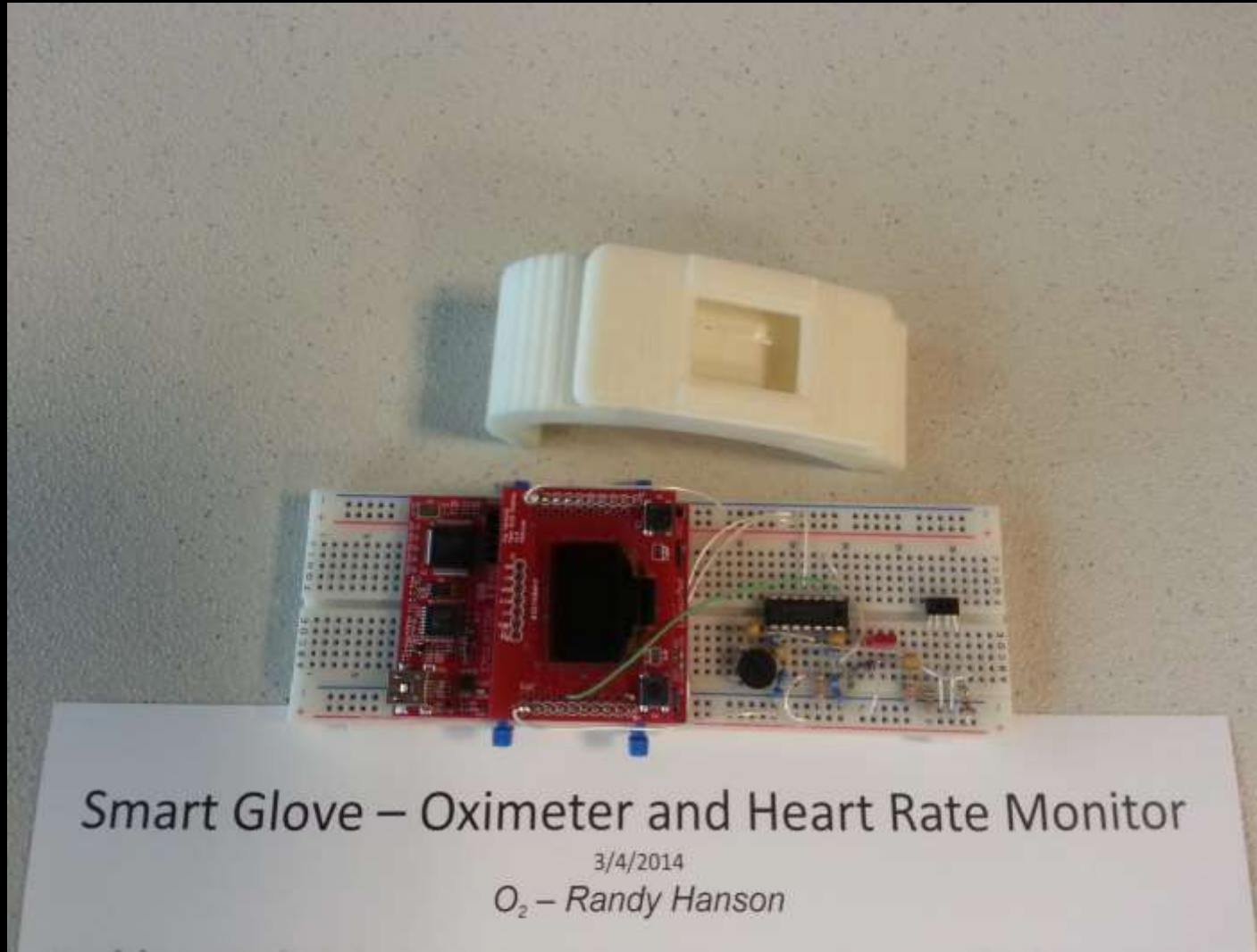
- Industrial or homeowner grade heater tape used to wrap copper and galvanized pipes is available but is not programmable or appropriate for 3/4" poly fluid lines.
- Commercial controllers are available, however they only take one input and give one

# NETWORKED MICROPROCESSORS





# OXYGEN & HEART MONITOR

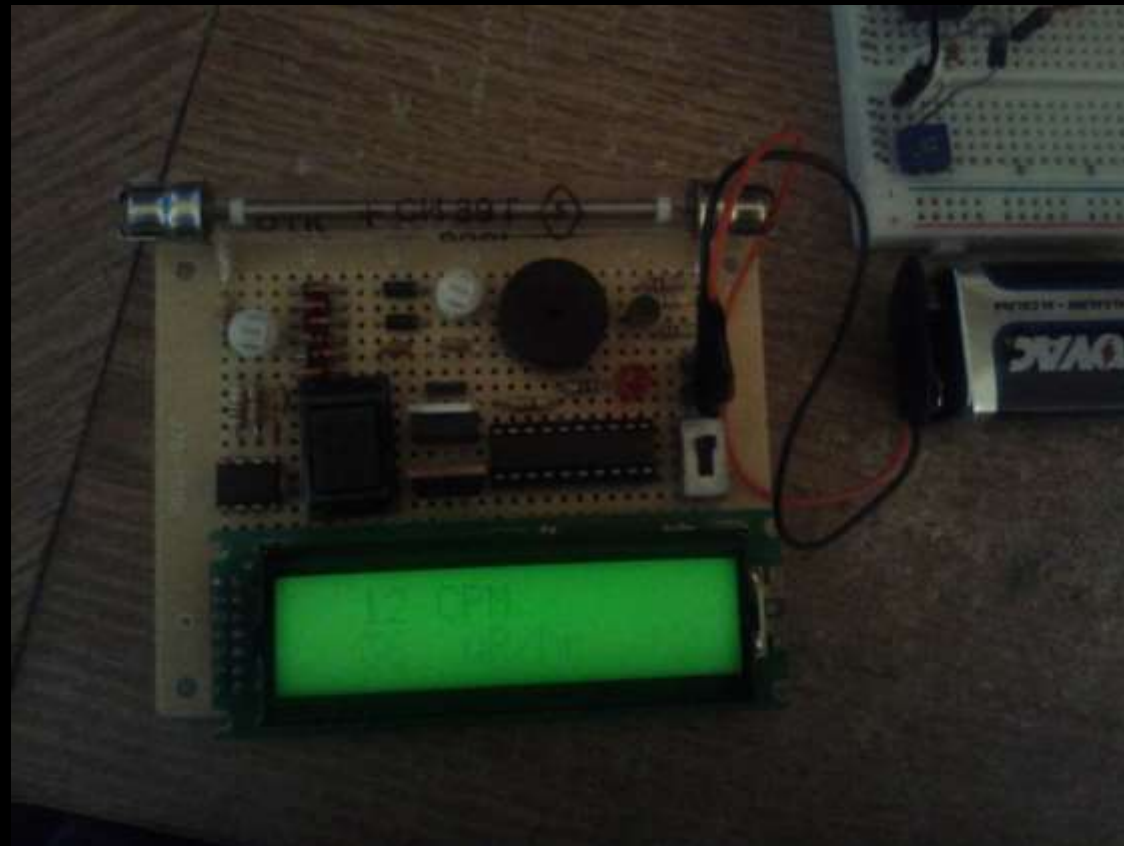


Smart Glove – Oximeter and Heart Rate Monitor

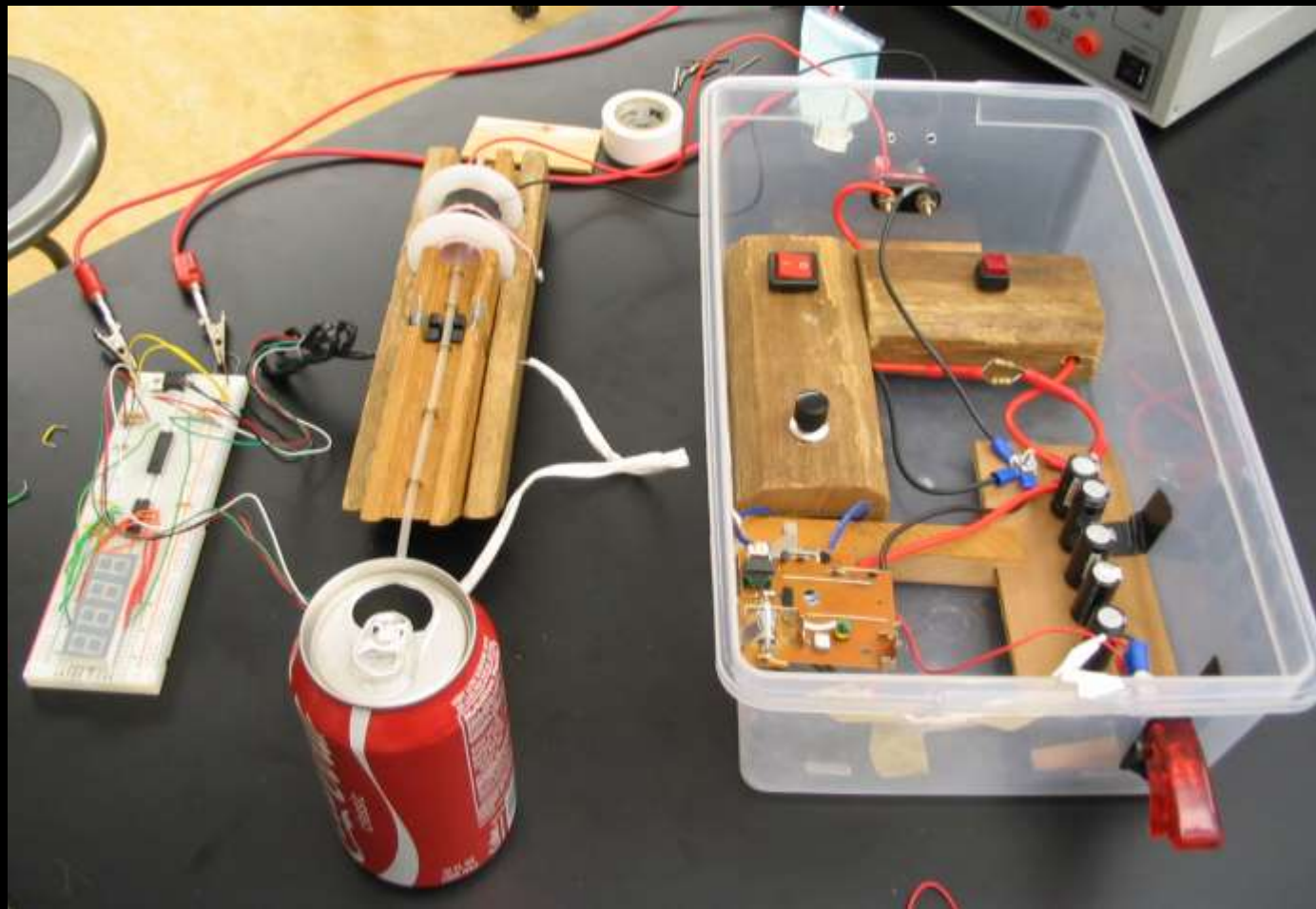
3/4/2014

O<sub>2</sub> – Randy Hanson

# RADIATION DETECTOR

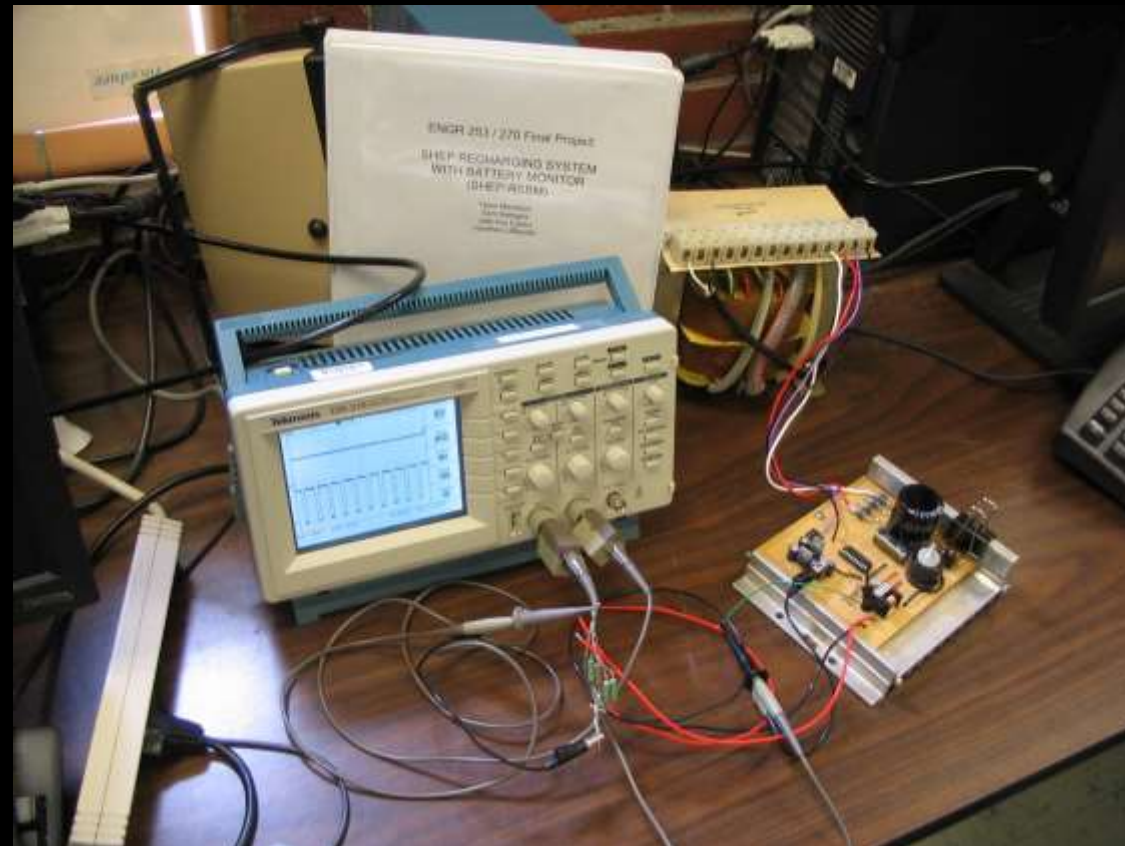


# RAIL GUN WITH SPEEDOMETER





# RECHARGER 36V @ 10A





# REMOTE POWER



# SOLAR-POWERED MOLE DETERENT



# SOLAR POWER MONITOR

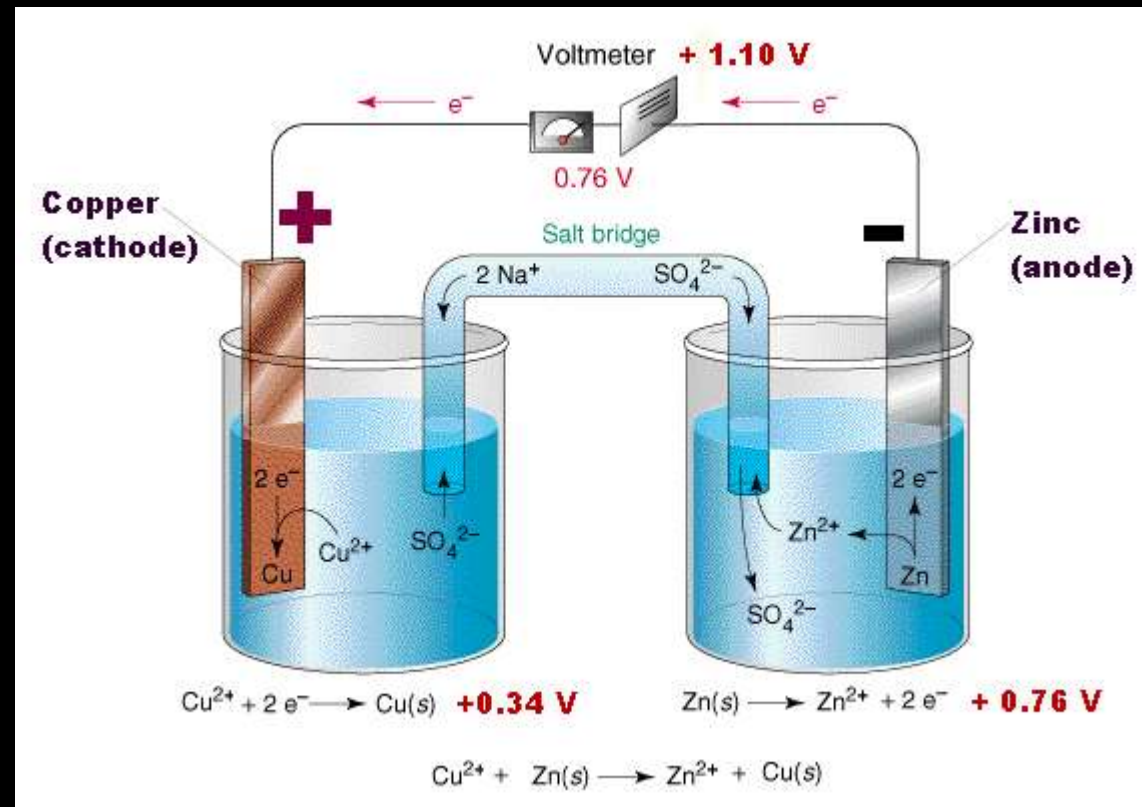


# ROVER-FOLLOW THE LEADER





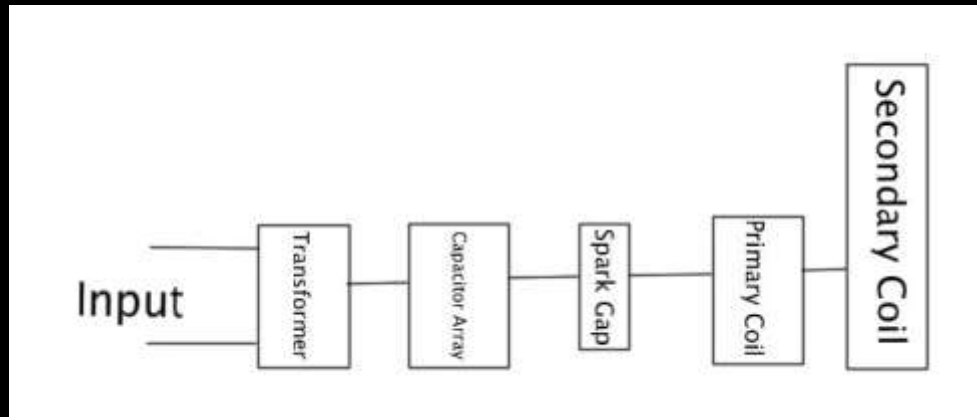
# SALT WATER BATTERY



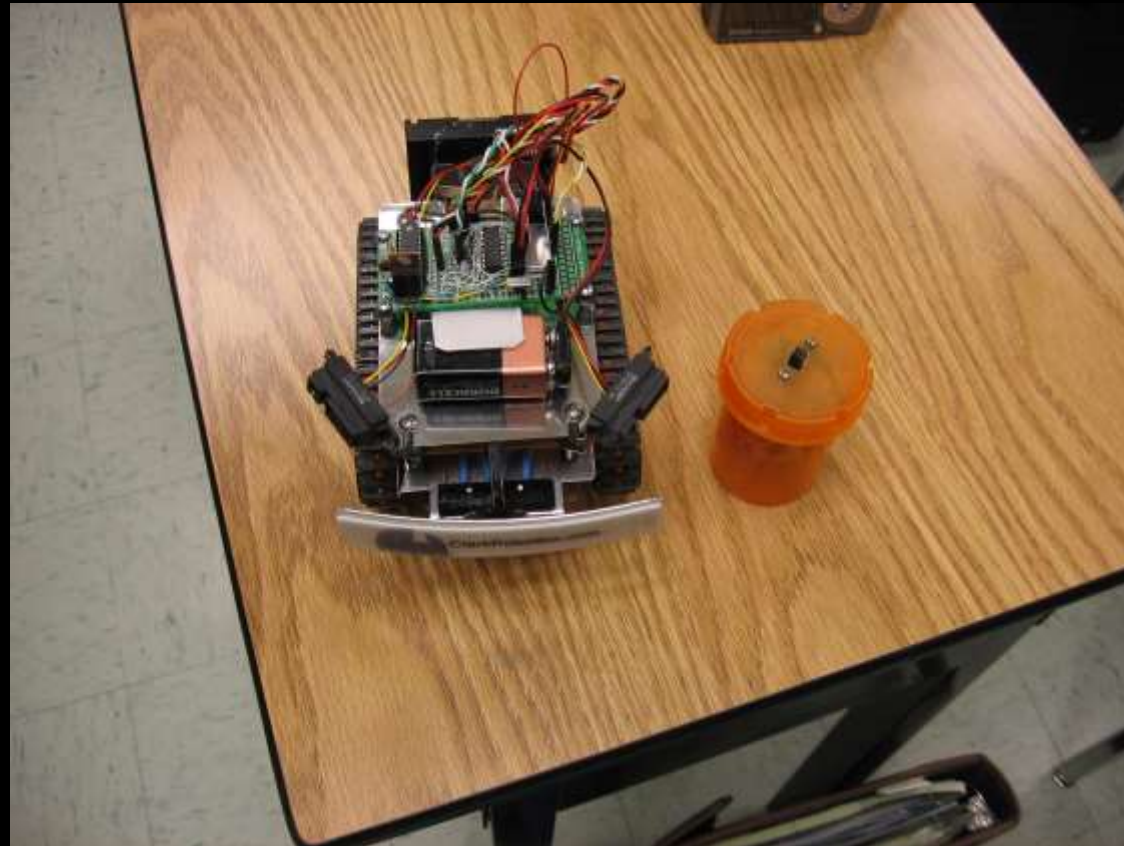
# SOLAR-POWERED CAR



# TESLA COIL

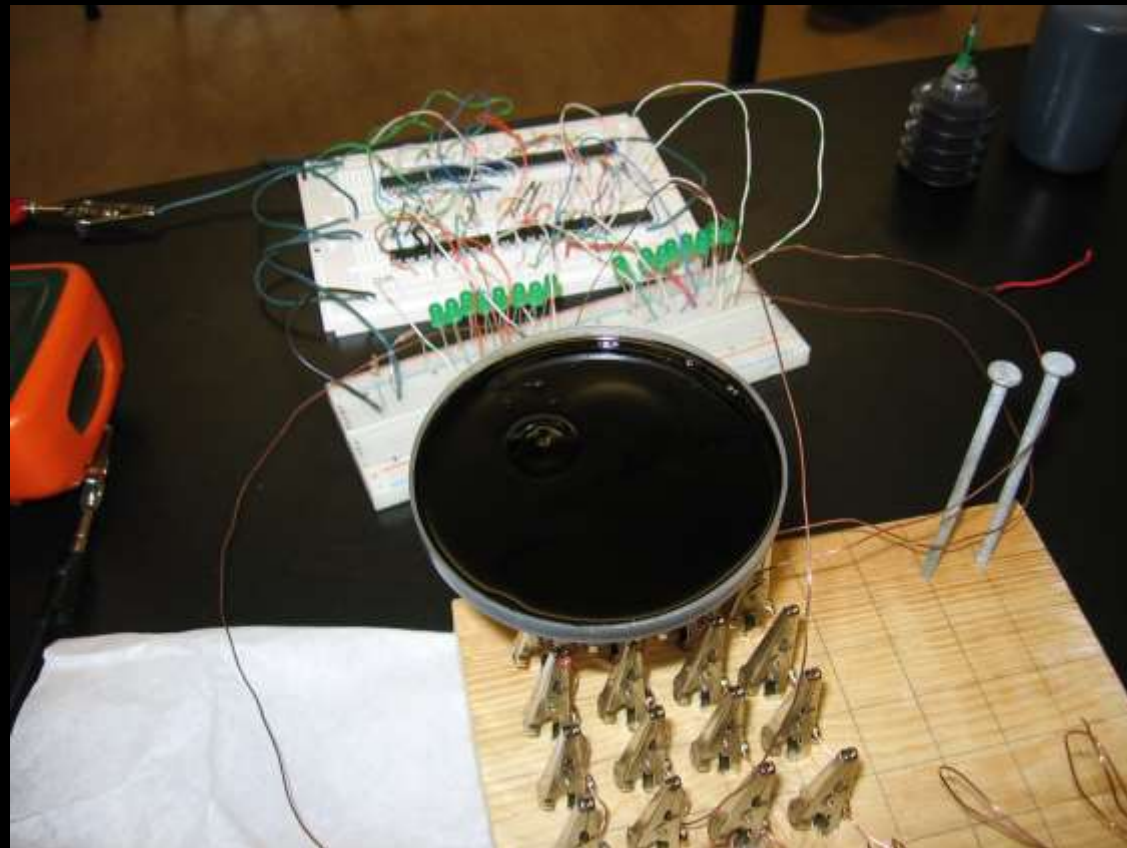


# ROBOT WITH HOMING BEACON





# FERROFLUID DISPLAY





More Examples are available at  
[www.EngrCs.com/projects](http://www.EngrCs.com/projects)



## Call to Action

You are **encouraged** to submit a problem or a project that your business think students should consider.