

PERSONAL PROJECTS:

Simple Code To Wish Happy Birthday To My Dad in C language

```
1 #include <stdio.h>
2 #include <math.h>
3 int main() {
4     printf("Happy Birthday Dad!\n");
5     char jamie[100];
6     scanf("%s", jamie);
7     printf("Jamie said %s",jamie);
8
9 return 0;
10 }
11
```

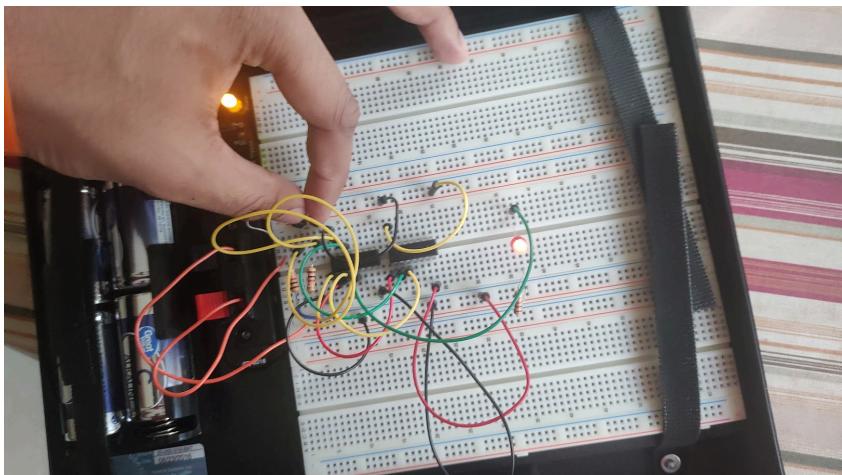
Develop mode Submit mode Run your program input value in seconds

Enter program input (optional)
ILoveYou

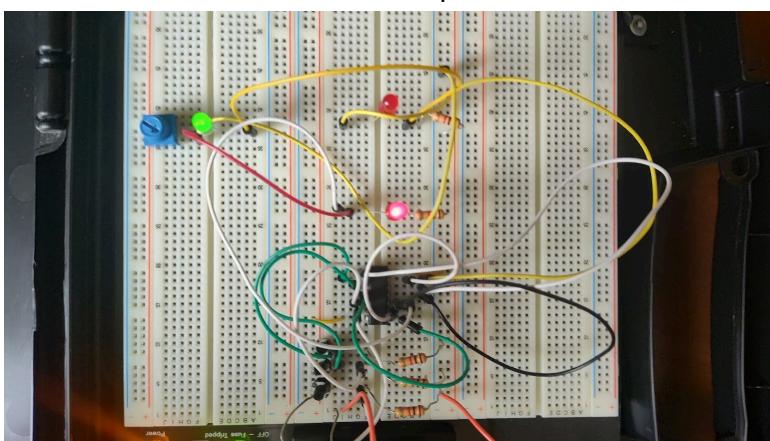
Run program Input (from terminal)

Program output displayed here
Happy Birthday Dad!
Jamie said ILoveYou

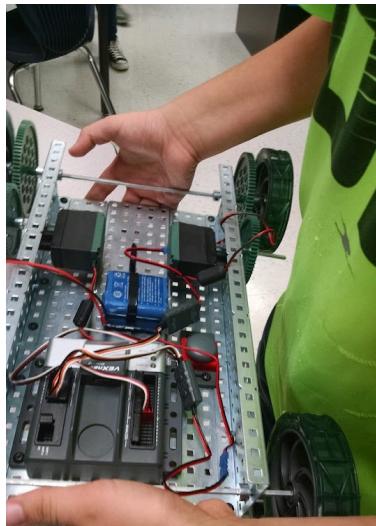
Hardware Demonstration of Demorgan's Theorem (Logic: ab vs !(a+b))



Sr latch with enable connected to potometer

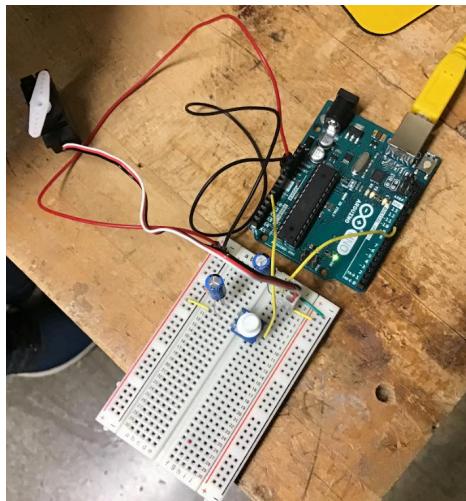


Middle School Project-Race Car:

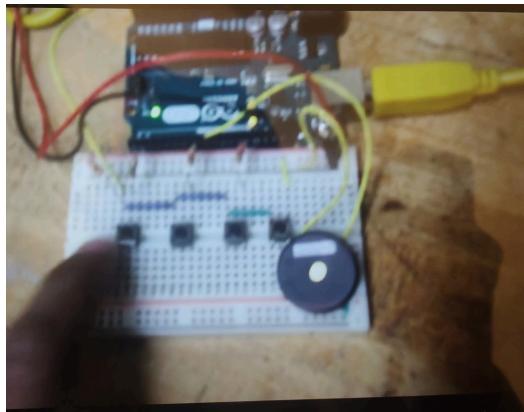


Designed and assembled a racecar to be used in a competition against the other students. With help from the teacher, my team coded how long the motors stay on and how fast they turn the wheels.

High School Project- Arduinos:



Given the code and circuit schematic, I put together the circuit and pressed play on the arduino software. The code moves the motor based on how much you move the potometer.

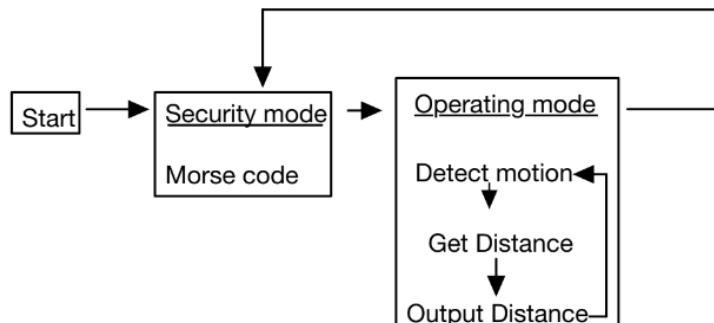


Given the code and circuit schematic, I put together the circuit and pressed play on the arduino software. This circuit plays a different tune when pressing different buttons.

University School Projects:

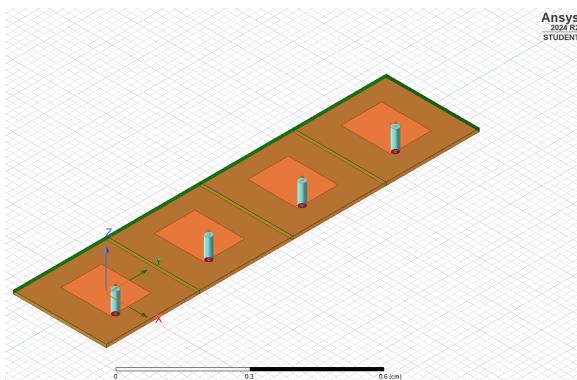
ECE 266: Introduction To Embedded Systems: final project- smart ruler

Designed and implemented a microcontroller-based ruler utilizing a motion sensor, 8-segment display, time capture, and push buttons. The system features a Morse code-based password, transitioning between security and operating modes. In operating mode, it detects objects, measures distance, and displays the output. Efficiently utilizes 262 KB of flash and 32,768 B of SRAM.



ECE 322: Intro to Electromagnetic and Application Final Project(s):

Designed and simulated microstrip patch antennas, including a single patch and an array configuration. Utilized ACT extensions to input element dimensions without requiring full 3D modeling. Successfully generated and analyzed E-field and H-field plots through simulation.



(image shown is 3d model for array antenna)