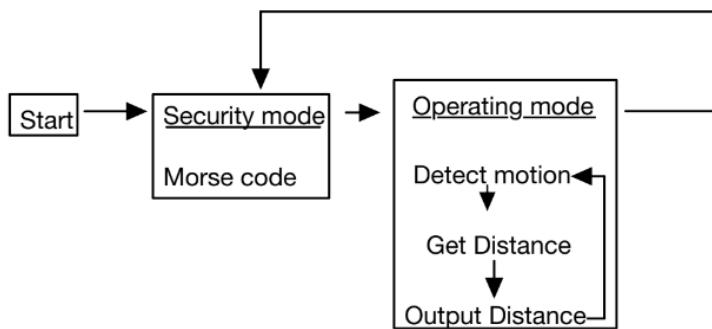


University School Projects:

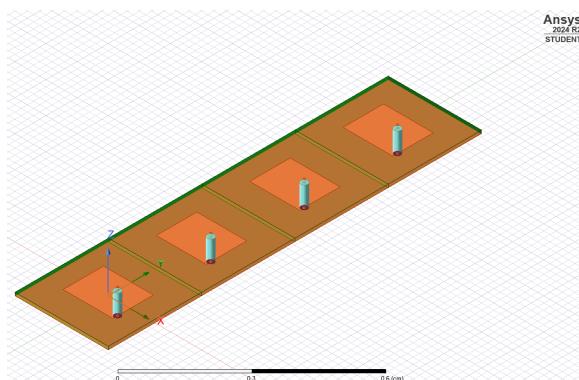
ECE 266: Introduction To Embedded Systems: final project- smart ruler

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)

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
```

Run your code

Enter program input (optional)

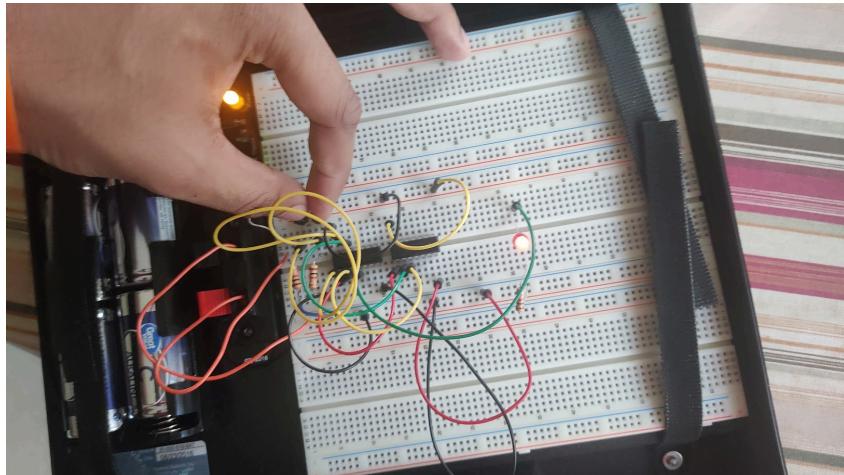
I Love You

Run program

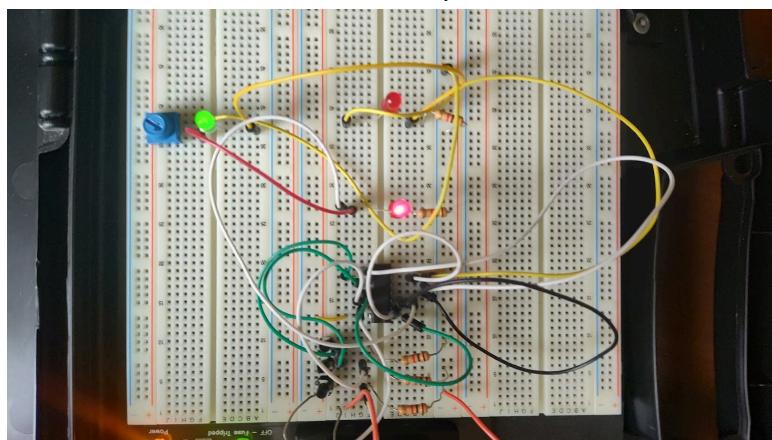
Program output displayed here

Happy Birthday Dad!
Jamie said I Love You

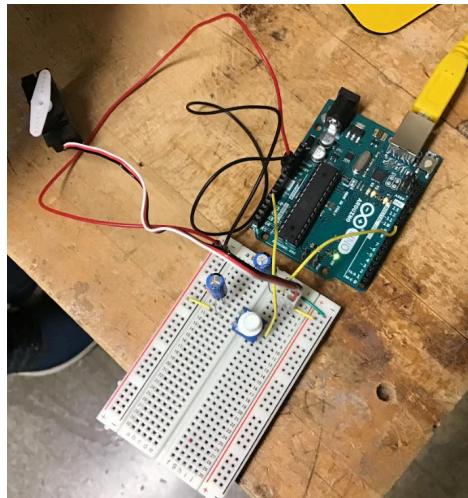
Hardware Demonstration of Demorgan's Theorem (Logic: ab vs !(a+b))



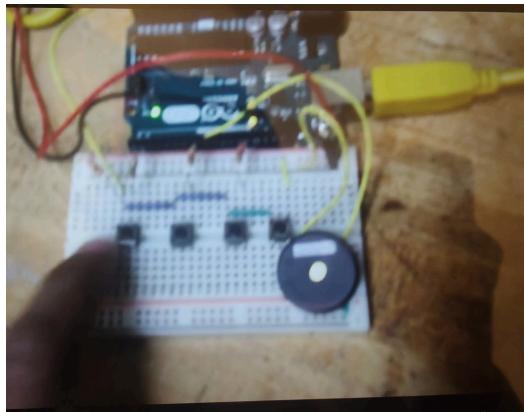
Sr latch with enable connected to potometer



High School Project- Arduinos:

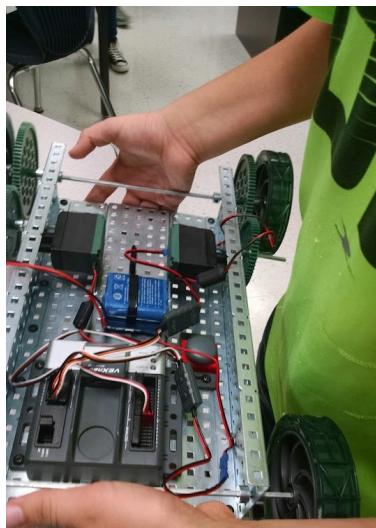


Given the code and circuit schematic, I put together the circuit and pressed play on the arduino software. The code moves the motor based on how much you move the potometer.



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.

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.