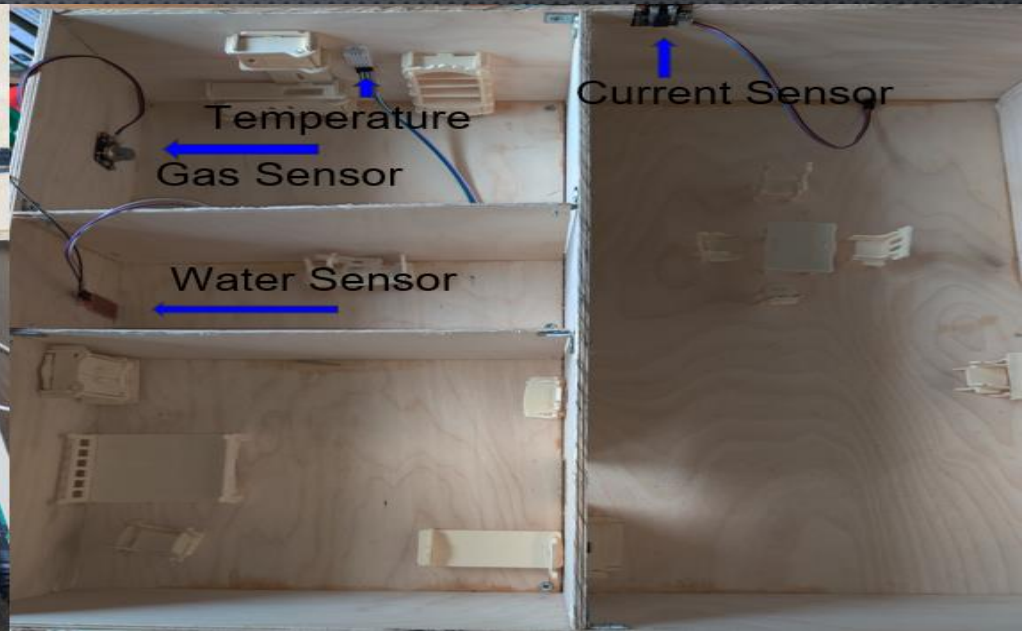
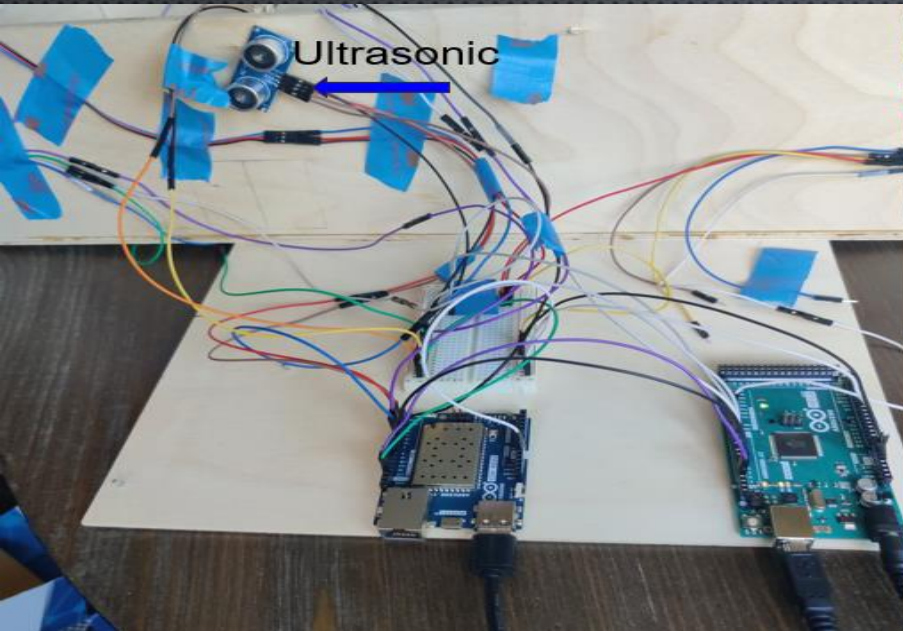


Smart Home using Internet of Thing (IoT)



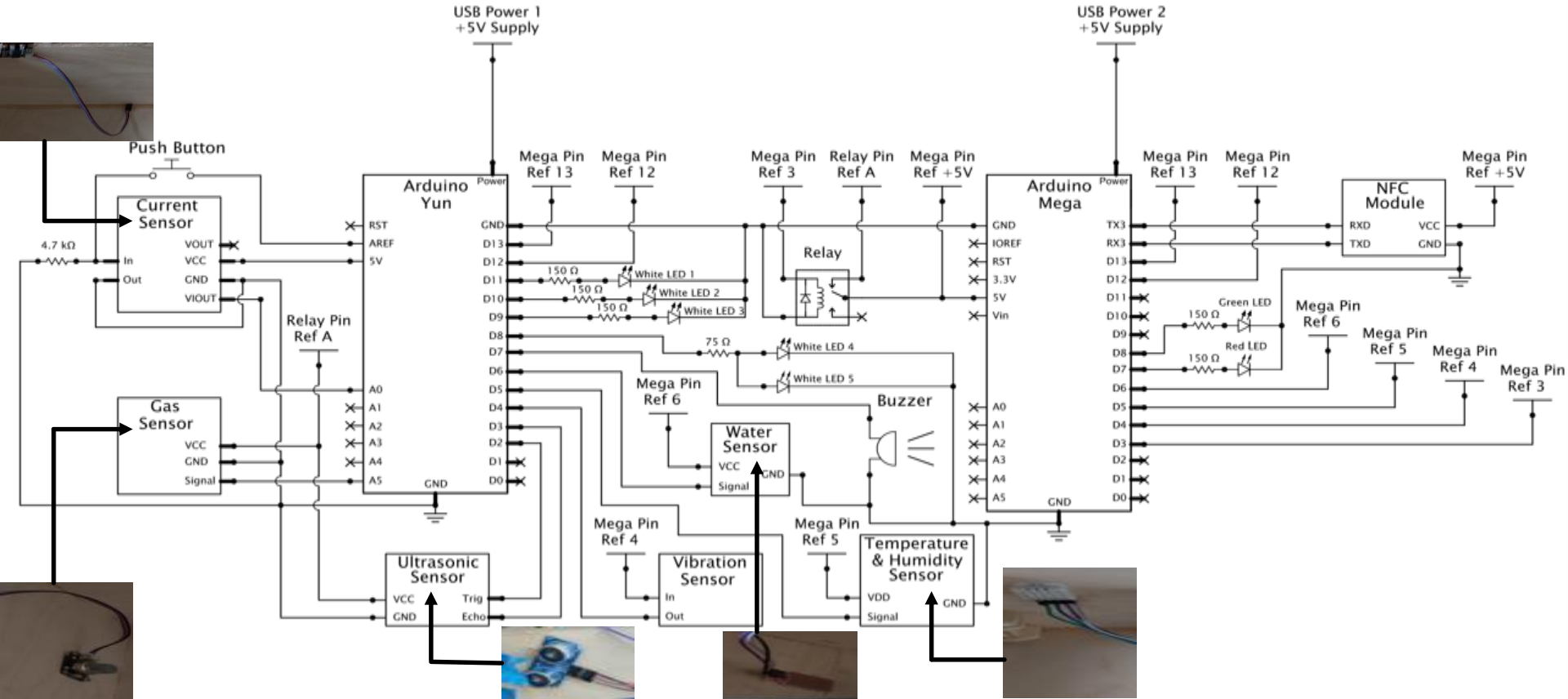
STEM
Success

Students Transitioning to Engaged and Motivated Success

RISE
Research and Immersion
for STEM Excellence

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Corey Edh
Jorge Hernandez
Samir Espinoza
(Advisor: Dr. Daehee Kim)

ELECTRICAL CONFIGURATION



DATA COLLECTION

- Arduino Mega 2560 and Arduino Yun are the two types of Arduino
- Arduino Mega is used to process data from the sensors
- Arduino Yun is used to send data to cloud

```
float duration, distancecm, distancein, humidity, ctemp, ftemp;  
DHT dht(DHTPIN, DHTTYPE);  
  
void setup() {  
  pinMode(SonictrigPin, OUTPUT);  
  pinMode(SonicechoPin, INPUT);  
  pinMode(watersensorPin, INPUT);  
  Serial.begin(9600);  
  dht.begin();  
}  
  
void loop() {  
  delay(1000);  
  
  water_sensor();  
  gasensor();  
  thsensor();  
  cmindistance();  
}
```

- Data is collected from all the sensors
- Visualize the data after collection
- Data changes with different Scenarios

```
Humidity= 38.40%  
Temperature= 25.60C; 78.08F  
Distance= 88.44 cm; 34.82 in
```

```
Water Sensor = WATER DETECTED  
Gas Sensor = GAS DETECTED  
Humidity= 38.40%  
Temperature= 25.60C; 78.08F  
Distance= 96.66 cm; 38.05 in
```

```
Water Sensor = WATER DETECTED  
Gas Sensor = GAS DETECTED  
Humidity= 38.40%  
Temperature= 25.60C; 78.08F  
Distance= 95.11 cm; 37.45 in
```

THANK YOU



QUESTIONS?

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