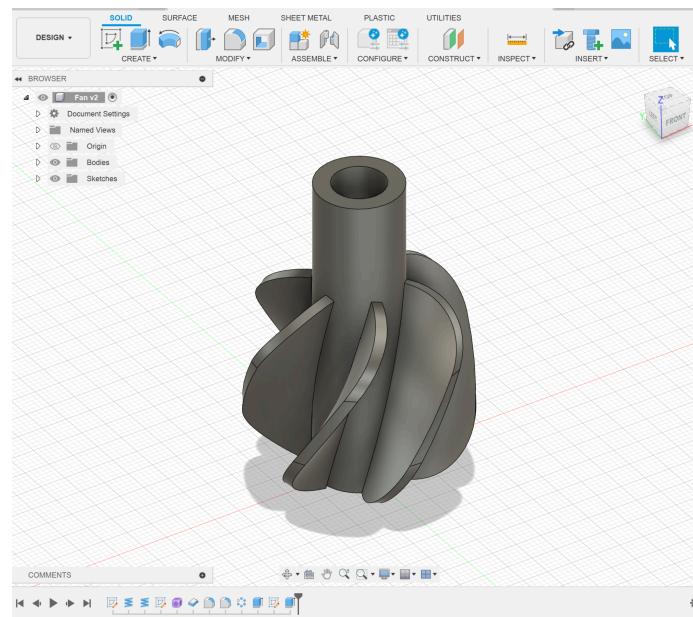


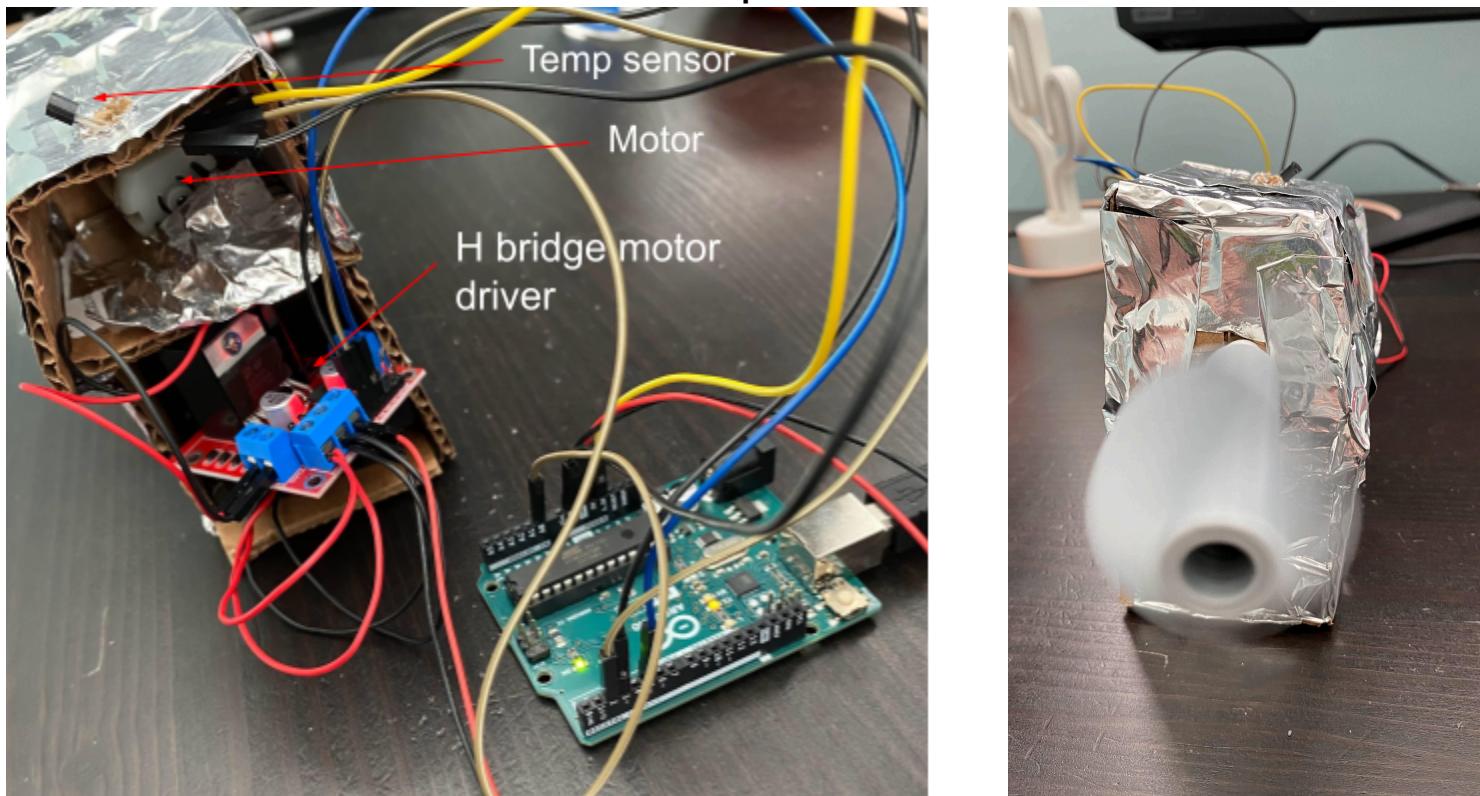
2. Smart Fan

Fan that adjusts its speed based on the surrounding temperature. The sensor relays the temperature and the arduino, with the help of the h bridge motor driver, can adjust the speed accordingly.

CAD for fan (Fusion 360)



Components



Code

A screenshot of the Arduino IDE 2.3.2 interface. The code editor window displays the 'fanmotor.ino' sketch. The code is as follows:

```
fanmotor | Arduino IDE 2.3.2
File Edit Sketch Tools Help
fanmotor.ino
10 Serial.begin(9600);
11 pinMode(enA, OUTPUT);
12 pinMode(in1, OUTPUT);
13 pinMode(in2, OUTPUT);
14
15 }
16
17 void loop() {
18
19     int sensorVal = analogRead(sensorPin);
20
21     float voltage = (sensorVal/1024.0) * 5.0;
22
23     float temperature = (voltage - 0.5) * 100;
24
25     float tempspeed = temperature + 200;
26
27     delay (10);
28
29     Serial.println(tempspeed);
30
31     digitalWrite(in1, LOW);
32     digitalWrite(in2, LOW);
33     analogWrite(enA, tempspeed);
34
35 }
```