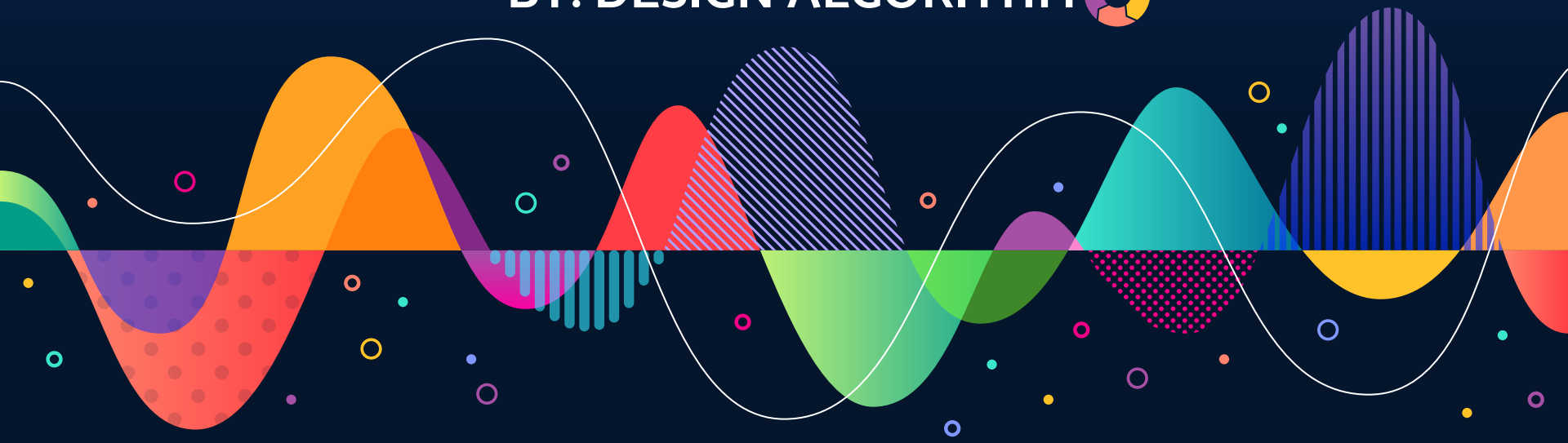
JAMZ Climate Sensor Add-On

BY: DESIGN ALGORITHM

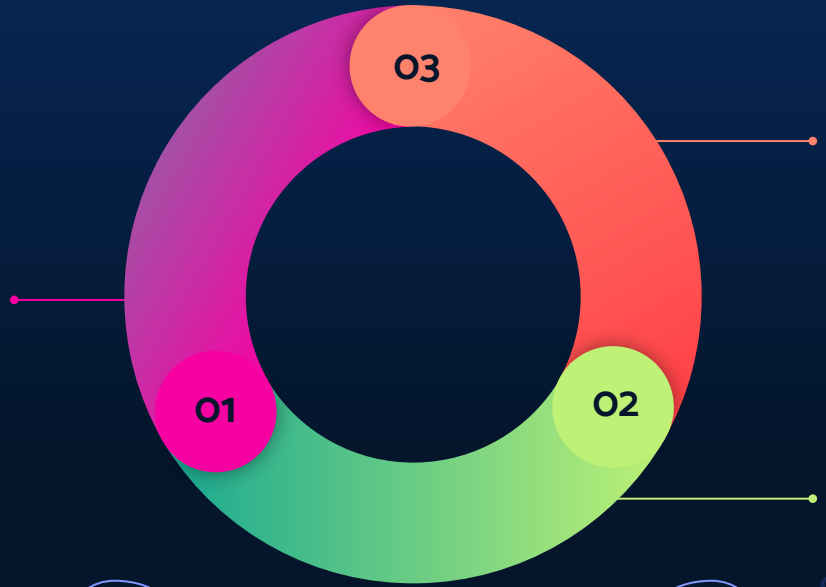


JAMZ needs a **climate sensor** add-on system for a food delivery drone that provides **accurate** and **reliable data** for temperature and humidity values. **Constant communication** to the flight operator is also necessary so JAMZ is able to tell when a value is out of the **desired range**.

OUR PROCESS IS EASY

Attachment:

Sensor casing is mounted with M3 screws on the inner top portion of the styrofoam food delivery box.



Output:

The data collected by the sensor will be sent to JAMZ via serial communication.

Connection:

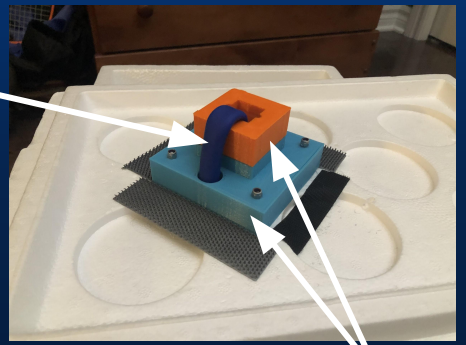
Using wires, Sensor is hooked up to the Arduino UNO, which then connected to the Raspberry Pi.

COM3

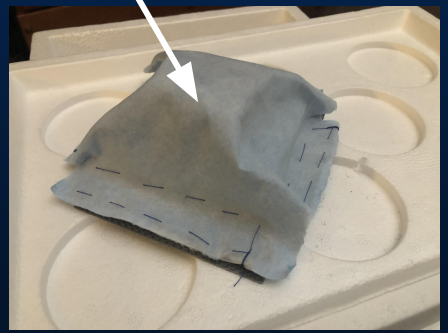
0:0:22.50s			
0:0:23.00s			
0:0:23.50s			
0:0:24.00s			
0:0:24.50s			
0:0:25.00s			
0:0:25.50s			
0:0:26.00s			
0:0:26.50s			
0:0:27.00s			
0:0:27.50s			
0:0:28.00s			
0:0:28.50s			
0:0:29.00s			
0:0:29.50s			
0:0:30.00s			
0:0:30.50s	24.65°C	60.49%	WARNING, HUMIDITY IS TOO HIGH
0:0:31.00s	24.65°C	61.25%	WARNING, HUMIDITY IS TOO HIGH
0:0:31.50s	24.69°C	62.37%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:32.00s	24.70°C	63.28%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:32.50s	24.69°C	64.11%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:33.00s	24.68°C	64.88%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:33.50s	24.70°C	65.68%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:34.00s	24.70°C	66.42%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:34.50s	24.70°C	66.99%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:35.00s	24.70°C	67.55%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:35.50s	24.71°C	68.13%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:36.00s	24.70°C	68.72%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:36.50s	24.70°C	69.26%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:37.00s	24.71°C	69.81%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:37.50s	24.72°C	70.39%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:38.00s	24.71°C	70.88%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:38.50s	24.73°C	71.36%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:39.00s	24.74°C	71.85%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:39.50s	24.74°C	72.38%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:40.00s	24.75°C	72.84%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:40.50s	24.76°C	73.26%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:41.00s	24.75°C	73.72%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:41.50s	24.78°C	74.13%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:42.00s	24.77°C	74.54%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:42.50s	24.77°C	74.92%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:43.00s	24.79°C	75.30%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:43.50s	24.78°C	75.65%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH
0:0:44.00s	24.79°C	76.01%	WARNING, TEMPERATURE AND HUMIDITY TOO HIGH

Autoscroll Show timestamp

Rubber Covering for the Wires

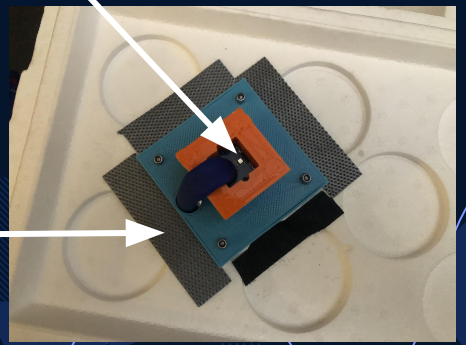


Waterproof Covering



Top and Bottom Pieces of Sensor Casing

Sensor



Velcro to Hold the Waterproof Covering


Response Time and Reliability
Data Readability
Consistent Communication
Compactability
Lightweight

DEMONSTRATION