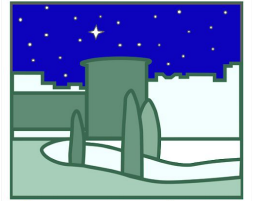




SERVATOREM



planetario



de pamplona



Nafarroako
Gobernua



Gobierno
de Navarra



European Space Agency

ACTIVIDAD EXTRAESCOLAR STEM SERVATOREM: UN EQUIPO MULTIDISCIPLINAR





974 rescates en montañas
en 2019



Más de 50.000 personas
rescatadas en el mar en 2019



Los objetivos de nuestro → CANSAT



Tranquilidad



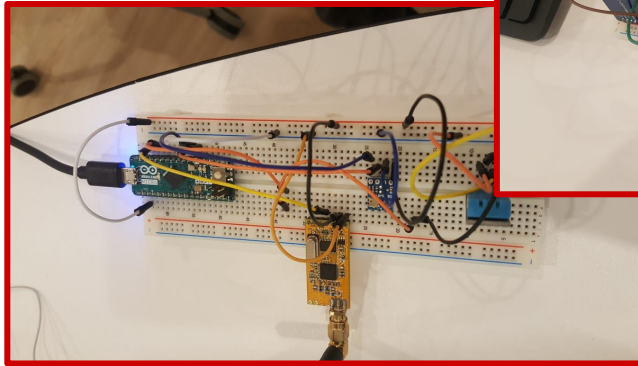
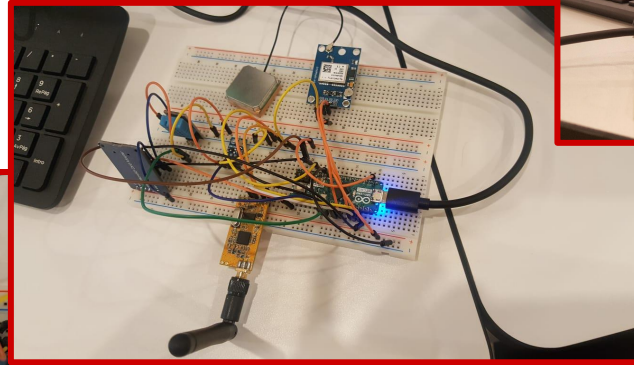
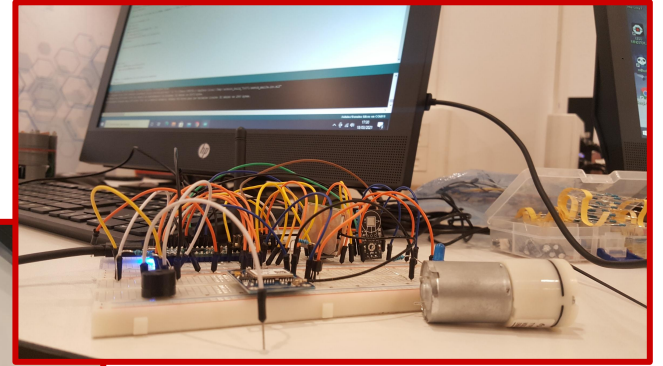
Imagen de Edgar Allan



Información



¿CÓMO VAMOS A CONSEGUIR ESTO?

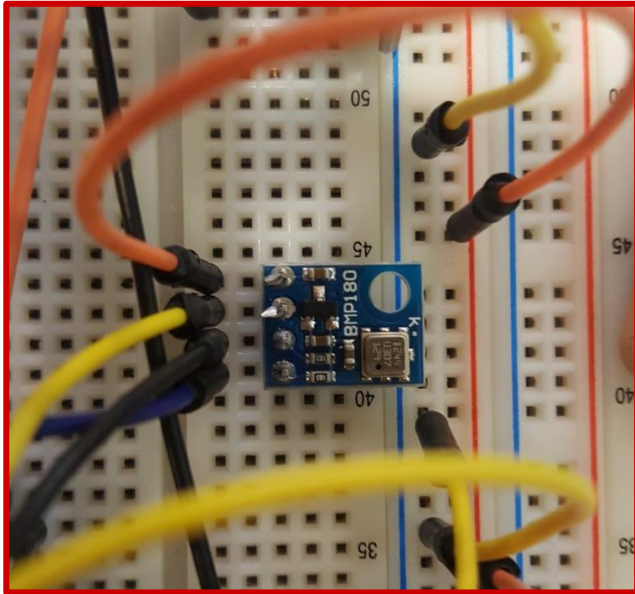




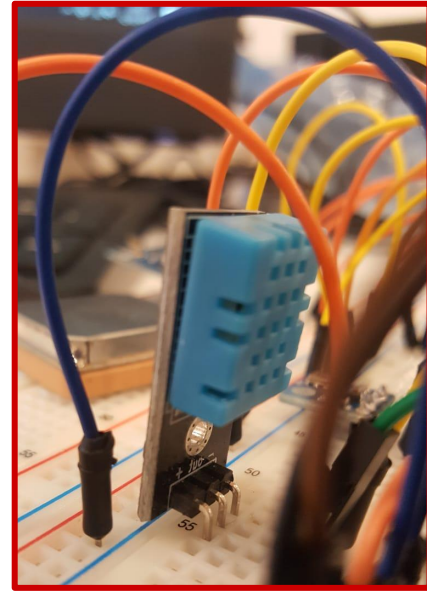
Diseño eléctrico



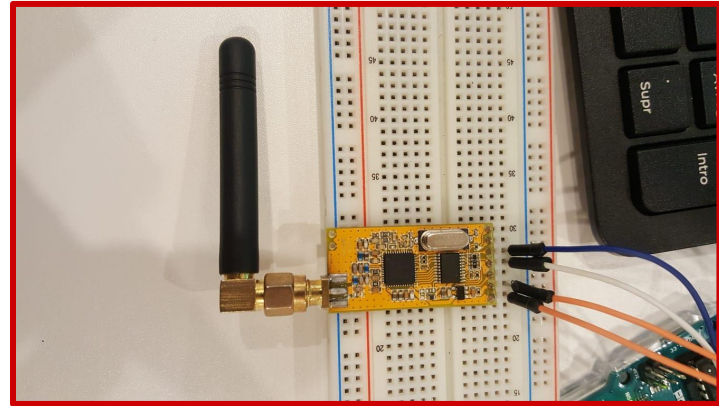
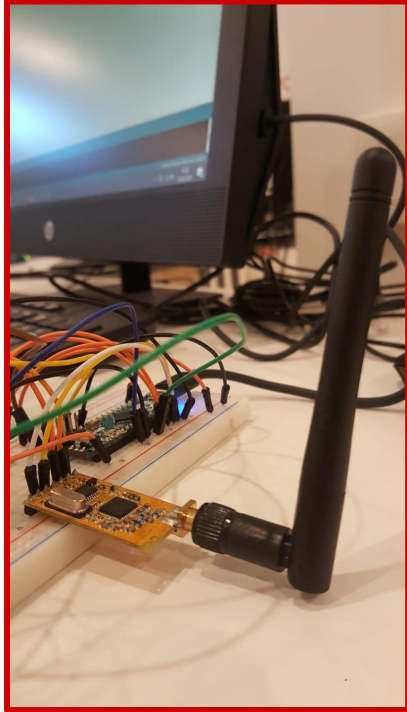
GY-68 BMP-180



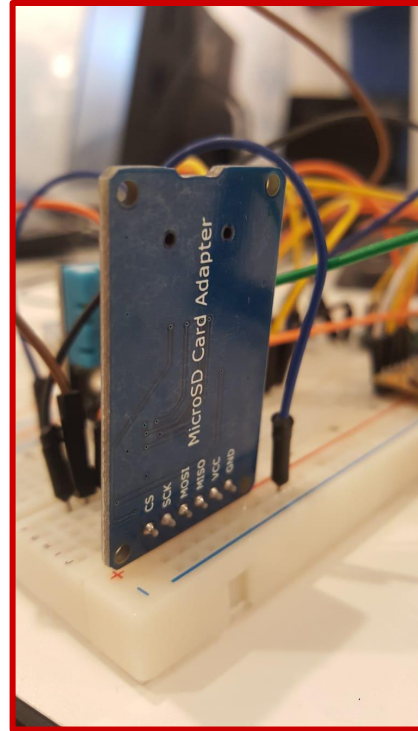
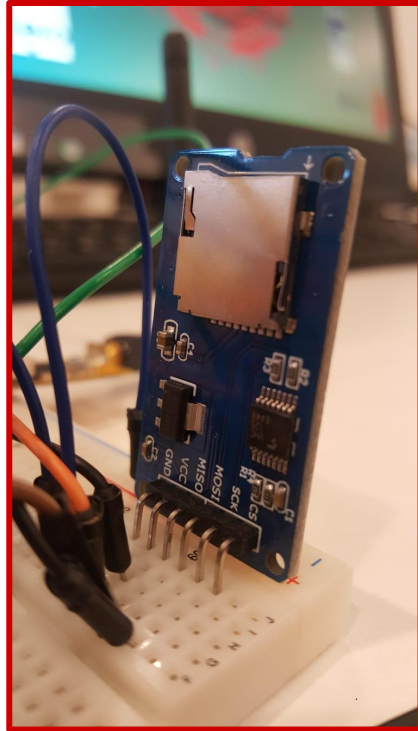
DHT-11



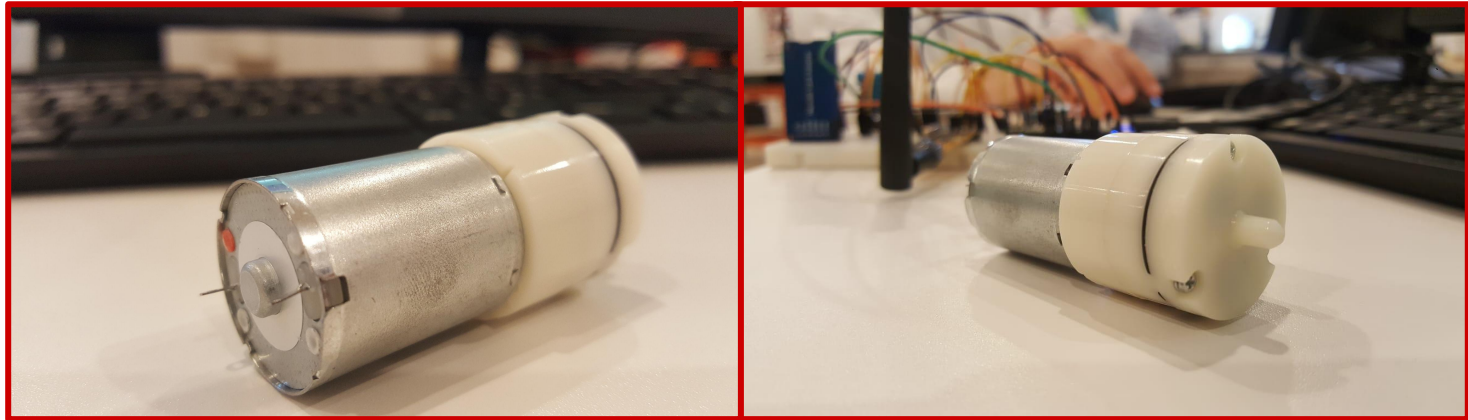
APC-220



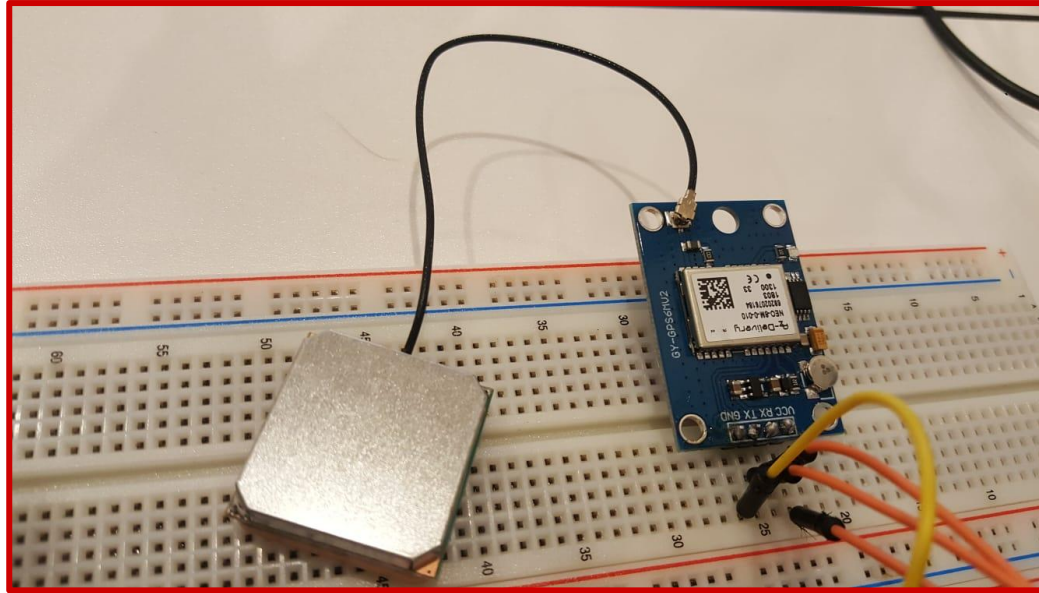
Lector de tarjeta MicroSD



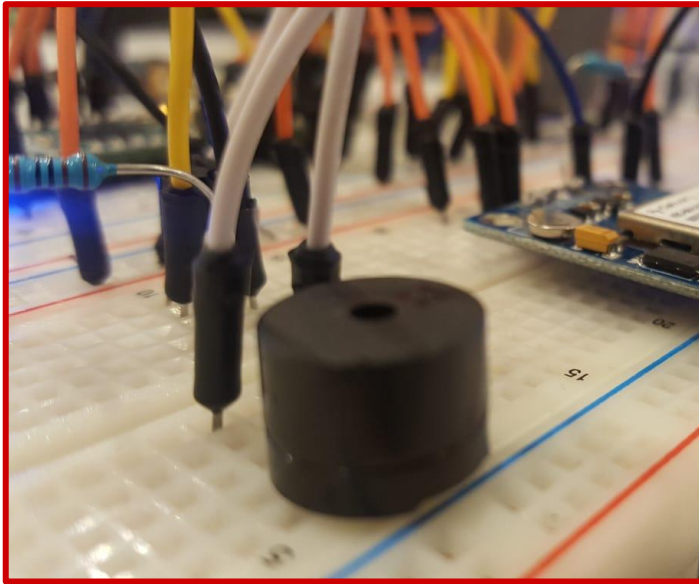
Mini bombas de aire



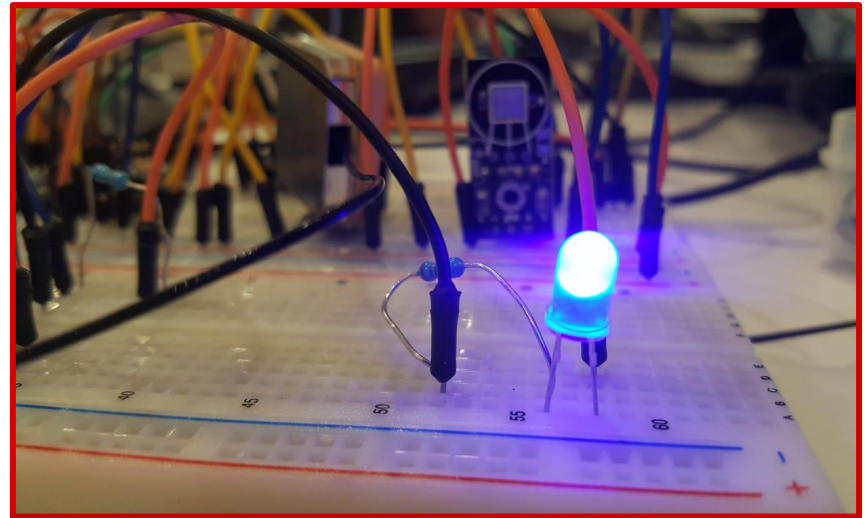
GY-GPS6MV2



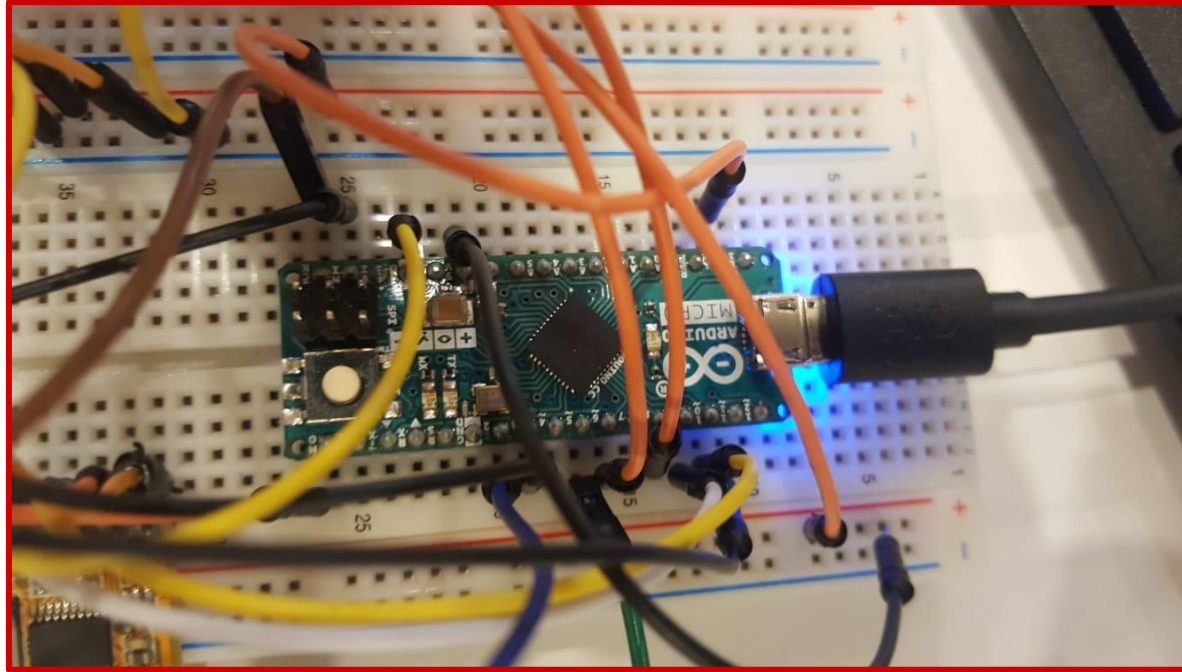
Zumbador



Luces LED



Arduino Micro



Planes futuros

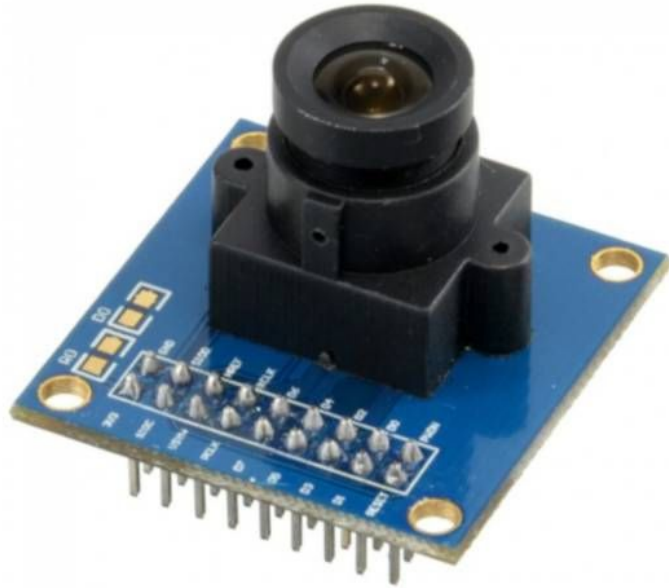


Imagen de Geek Factory



Imagen de Altavoz.me

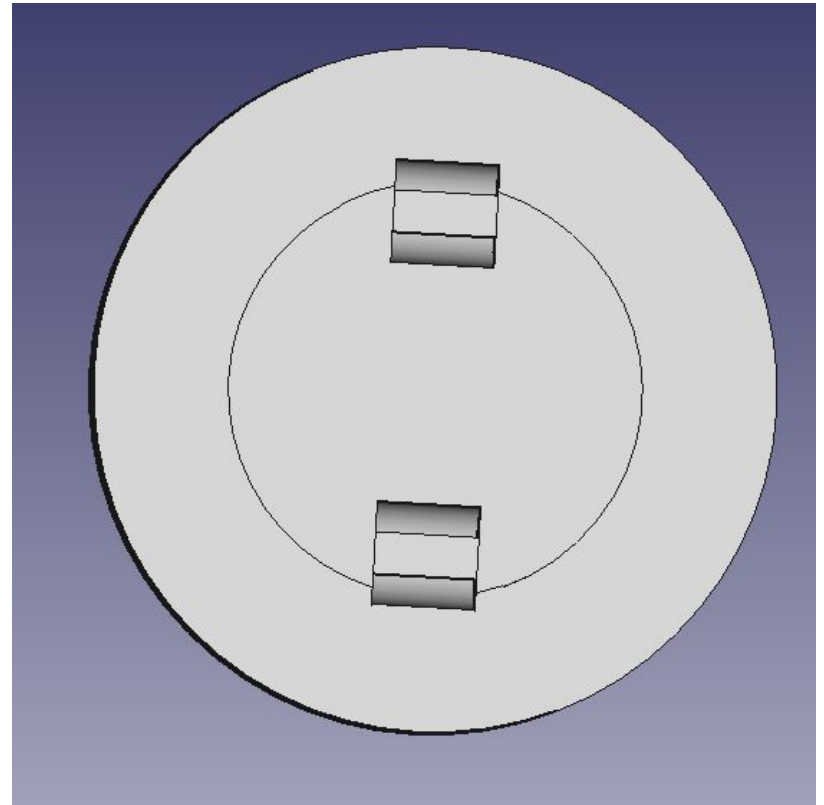
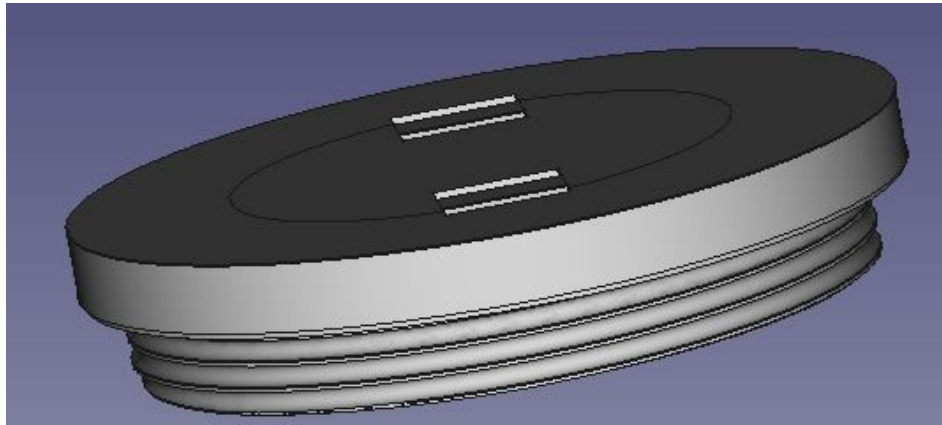
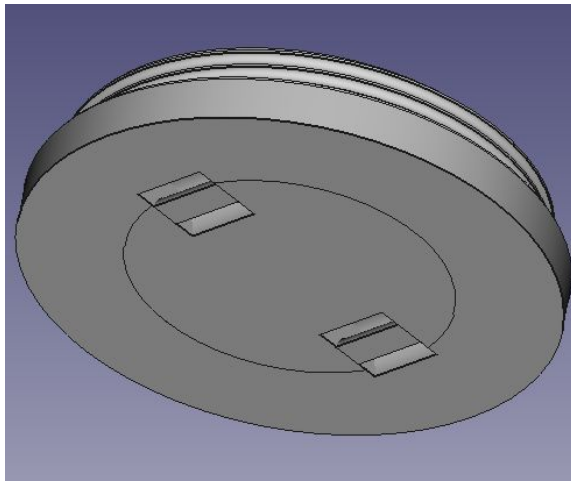




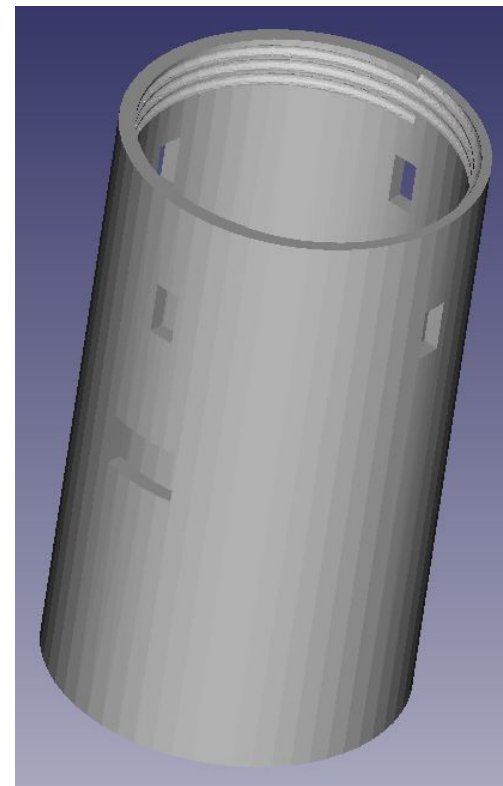
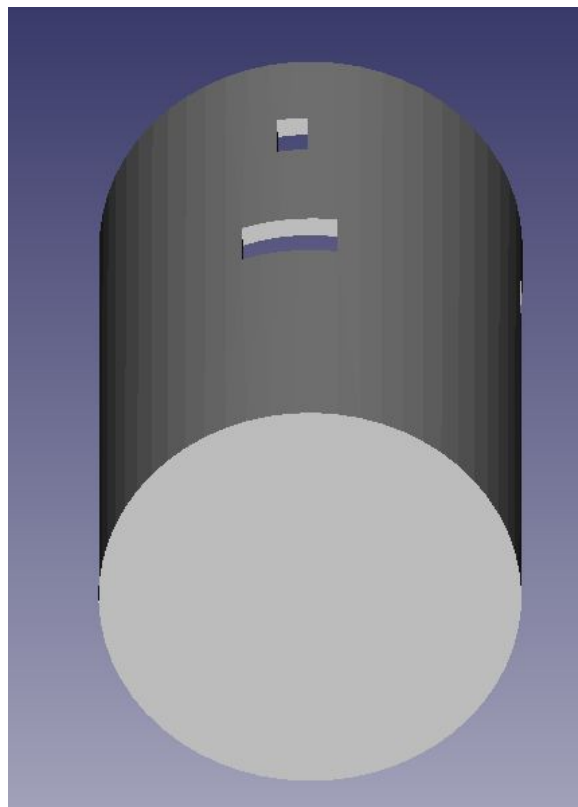
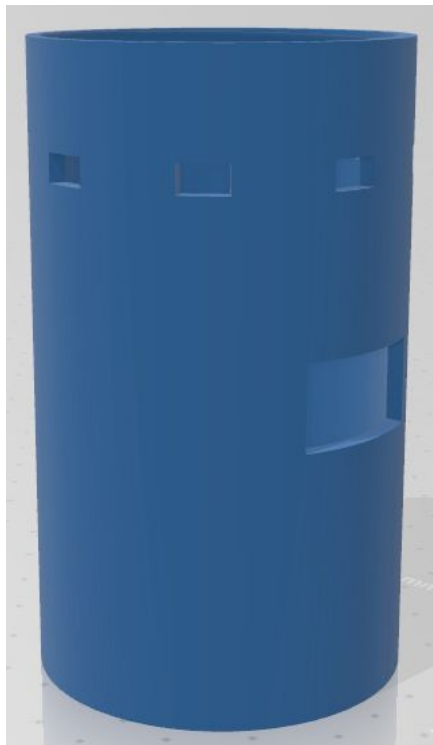
Diseño mecánico



Tapa



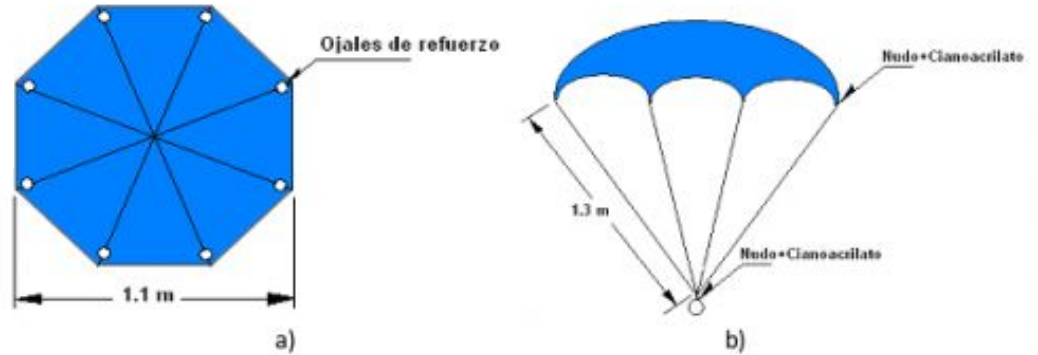
Carcasa exterior



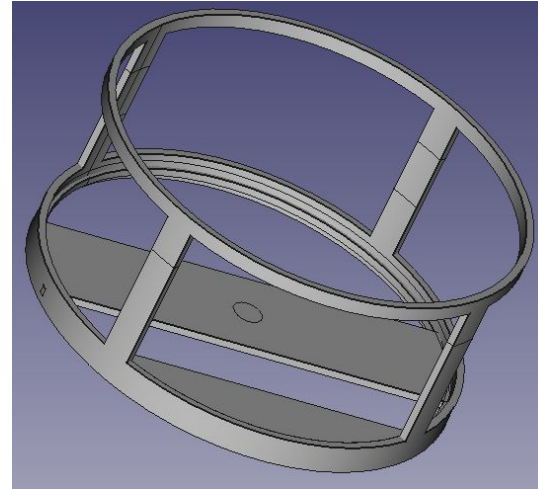
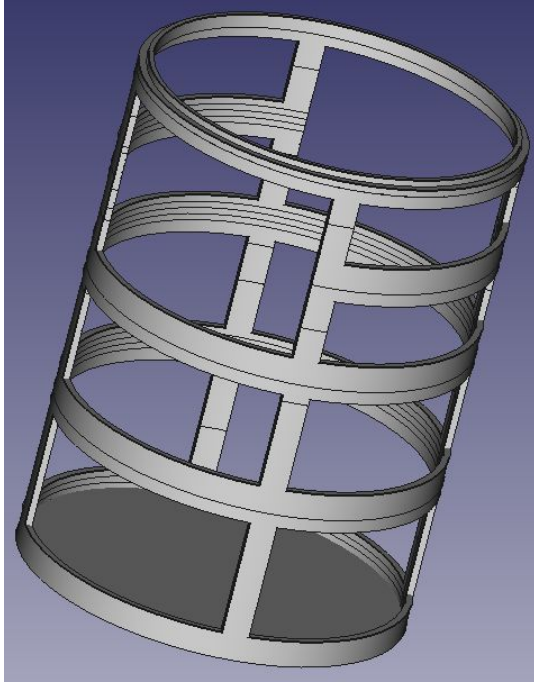
Paracaídas

$$mg - \frac{1}{2}C_D \rho Av^2 = 0$$

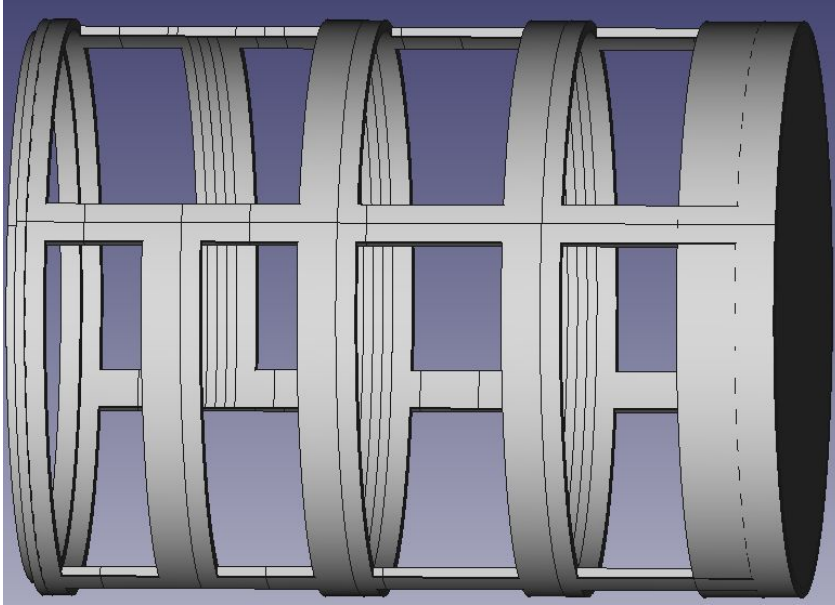
Fórmula para paracaídas octogonal.



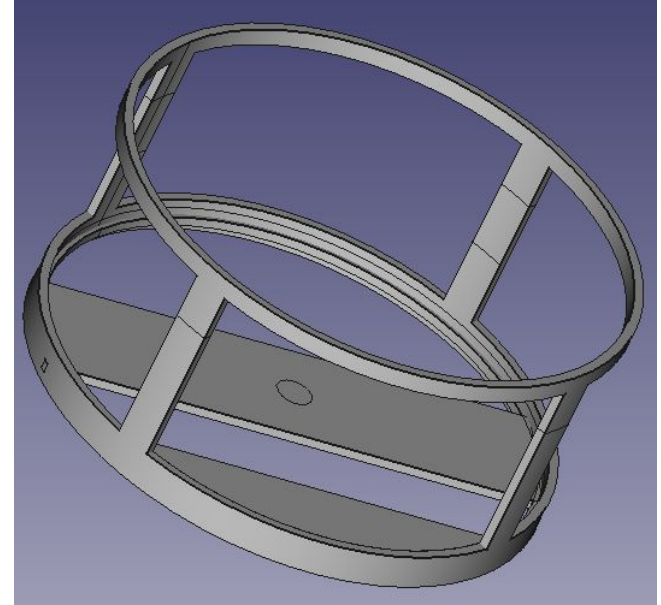
Diseño del interior



Módulos



Módulo de la bomba



Módulo para Arduino

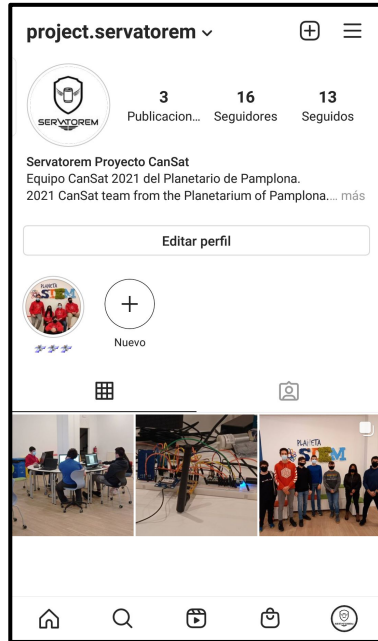


Presupuesto

| Concepto | Cantidad | Coste |
|-------------------|-----------|---------------|
| Arduino Micro | 1 | 18,00€ |
| Batería 9V | 1 | 4,95€ |
| Bombas de aire | 2 | 9,30€ |
| APC220 | 1 | 13,18€ |
| GY-GPS6MV2 | 1 | 4,99€ |
| GY-68 BMP180 | 1 | 4,29€ |
| DHT11 | 1 | 2,66€ |
| Adaptador microSD | 1 | 2,10€ |
| PLA | 90 gramos | 2,25€ |
| TOTAL | | 61,72€ |



DIFUSIÓN



@project.servatorem



@ServatoremP



AGRADECIMIENTOS



Nafarroako  Gobierno
Gobernua de Navarra



¡Muchas gracias!



¡Mila esker!

SERVITOREM