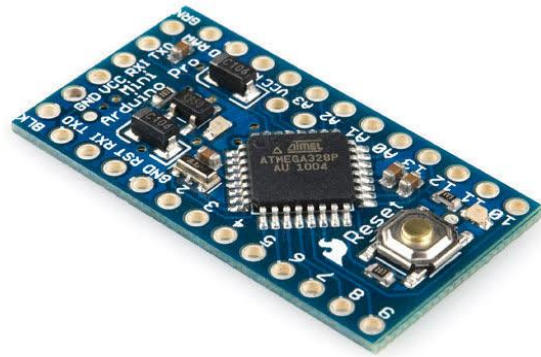


Modelling and construction of a cansat

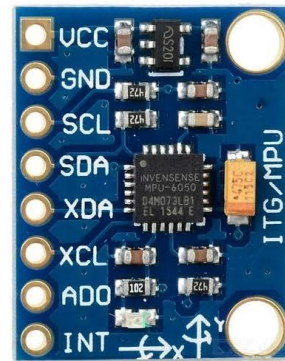
Árisla Soares, Michelly Guedes, Pedro Gil, Prof.Msc. João
Nascimento and Prof. Dr. José Lopes



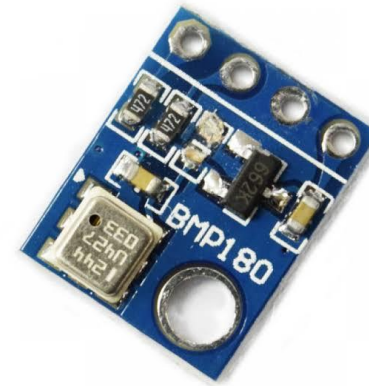
Electronic circuit



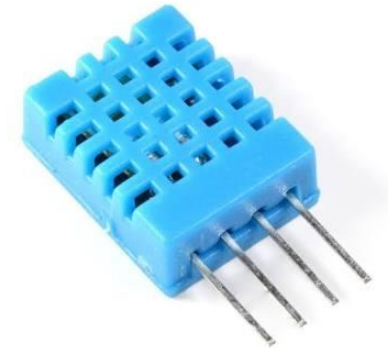
Arduino promini



MPU 6050

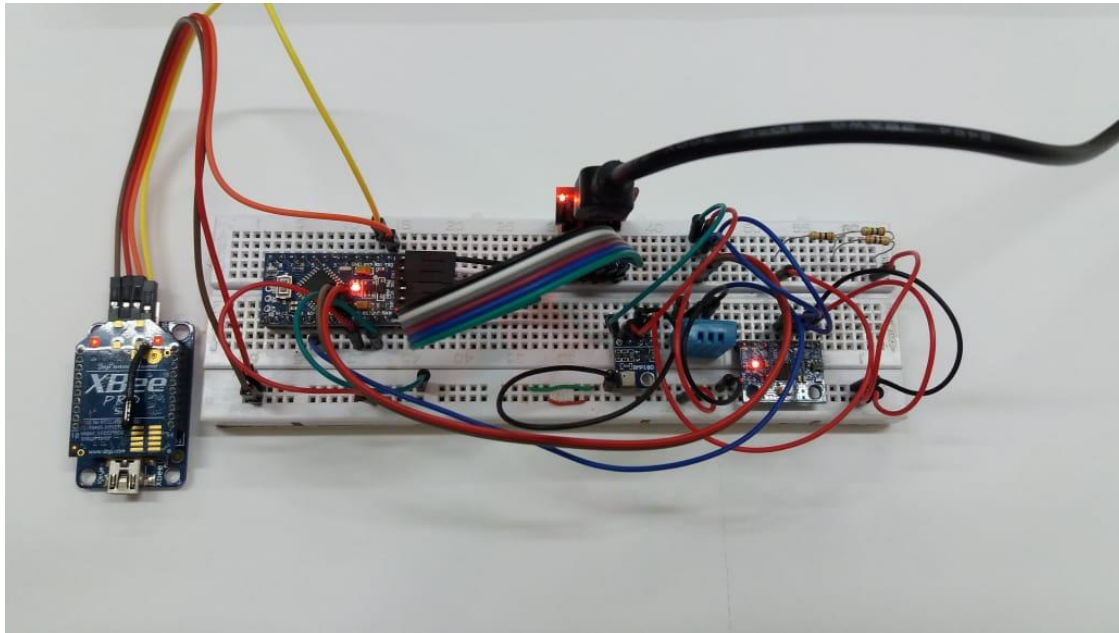


BMP 180

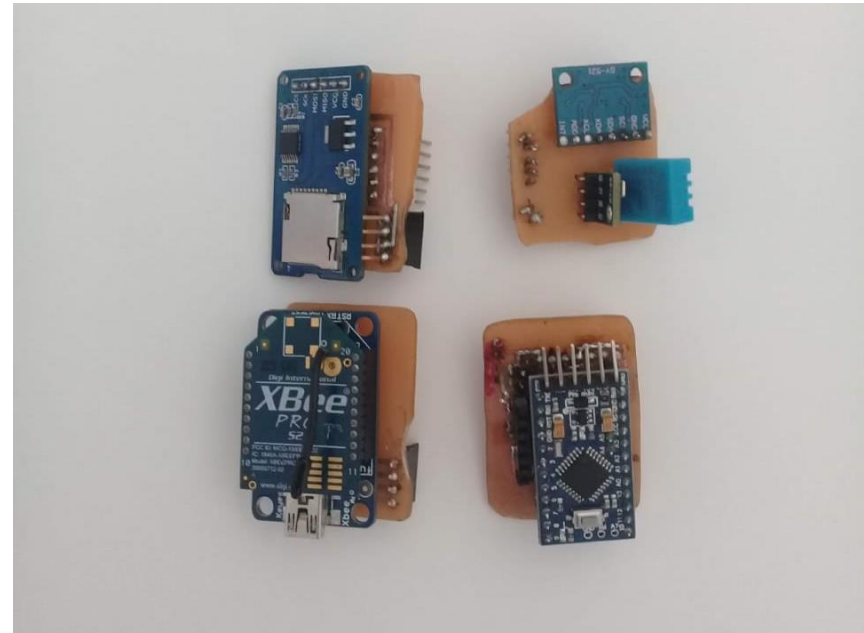


DHT11

Electronic circuit



Circuit in protoboard



Printed circuit board

Communication

The screenshot displays the XCTU software interface. The top menu includes 'XCTU', 'Working Modes', 'Tools', and 'Help'. A toolbar contains icons for file operations, settings, and communication. The 'Radio Modules' panel on the left shows the configuration for 'CANSAT_PROMINI':

- Name: CANSAT_PROMINI
- Function: ZigBee Coordinator AT
- Port: COM5 - 9600/8/N/1/N - AT
- MAC: 0013A2004063D220

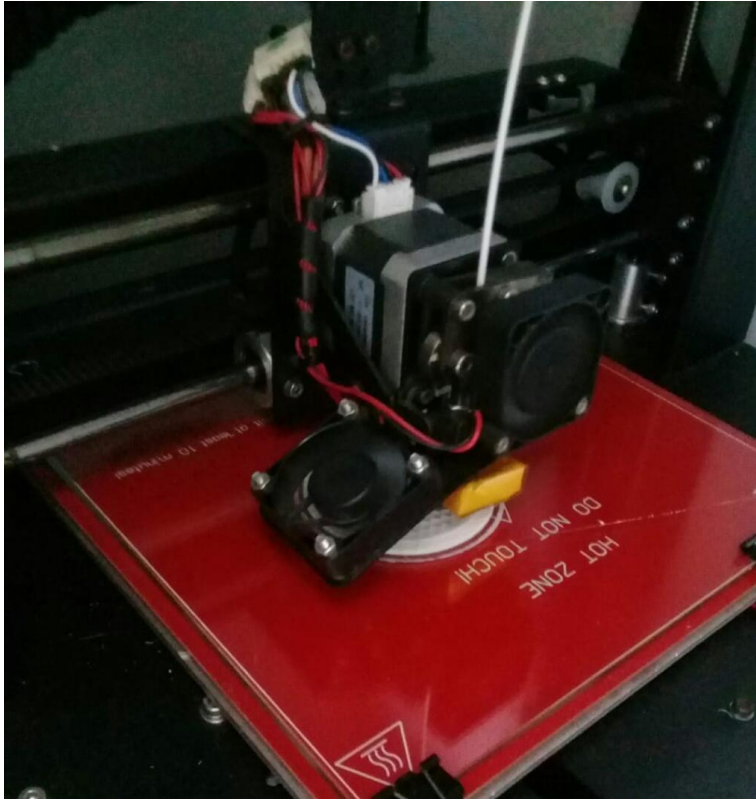
The main window shows the 'CANSAT_PROMINI - 0013A2004063D220' configuration. It includes a status bar with 'Tx Bytes: 0' and 'Rx Bytes: 33440'. The 'Console log' displays the following data:

```
dados do dia 24-11 :
temperatura:
dht11 = 34.00
bmp = 26.80
mpu = 28.80
pressao:100567.00
acelerometro: X= 1752  Y= -836  Z= 15432
giroscopio: X= -227  Y= -103  Z= 121
```

The 'Send packets' section contains a table with columns 'Name' and 'Data'. The 'Send a single packet' section has a 'Send selected packet' button. The 'Send sequence' section includes a 'Transmit interval (ms): 500' dropdown, radio buttons for 'Repeat times 1' (selected) and 'Loop infinitely', and a 'Start sequence' button.

Software XCTU

Physics structure

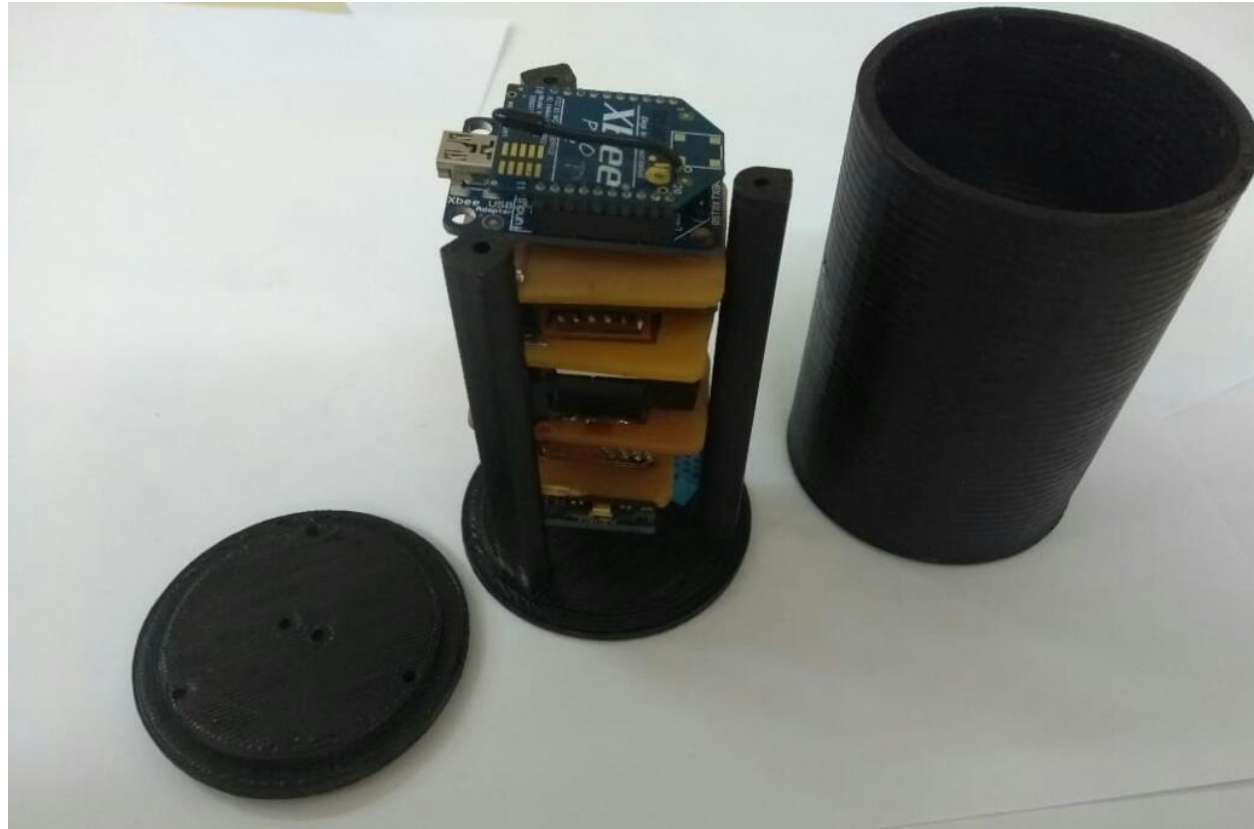


3D printer



Physics structure

Cansat



Cansat developed

Acknowledgments



Thank you very much.

