CanAir.io

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CanAirIO Citizen Network for Air Quality Monitoring

Open Source initiative that uses a ESP32 module and different PM2.5 sensors, interfaced with an Android client app to have static (WiFi) or mobile (Bluetooth) air quality stations.

CanAirIO is a citizen science iniciative that not only aims to generate an air quality network of fixed monitoring stations, but also to measure what occurs with pedestrians, drivers and passengers in their daily lives considering that in some cities with high population density the most affected people are moving. For this reason, we are developing a mobile application that is able to set a PM2.5 sensor, and other related sensors from the smartphone as fixed station or mobile reporter.

Main Goals

- To conform a global air quality network
- Mobile visualizations on real time
- Unification and joining with other iniciatives
- Cos4Cloud: EU Citizen observatories services
- Cripto currency incentives to reporters
- To improve device creation usability
- To find partners for hardware co-creations

Cos4Cloud ethereum

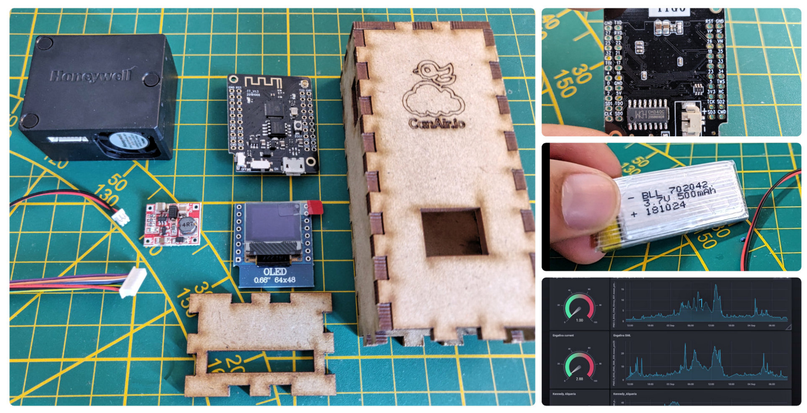
CanAirIO in the World

We want improve the DIY hardware and reduce the sensor complexity to help more people in the world.

OpenSource and OpenHardware project

Development status:

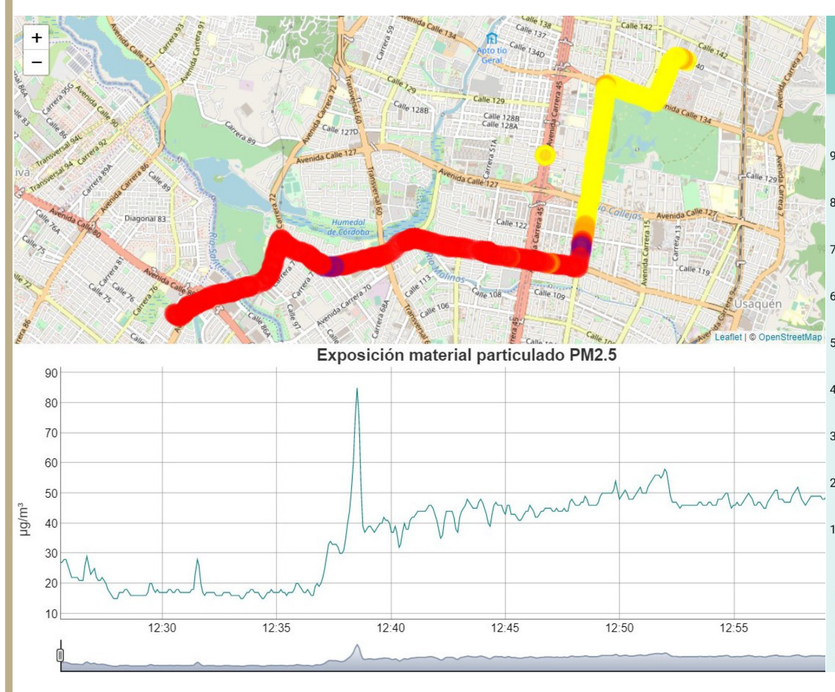
- Multiple sensor devices are supported.
- WiFi and sensor setup via BLE.
- All firmware in PlatformIO framework.
- Android native application (GATT client)
- 3DPrint and Laser cut case for mobile.

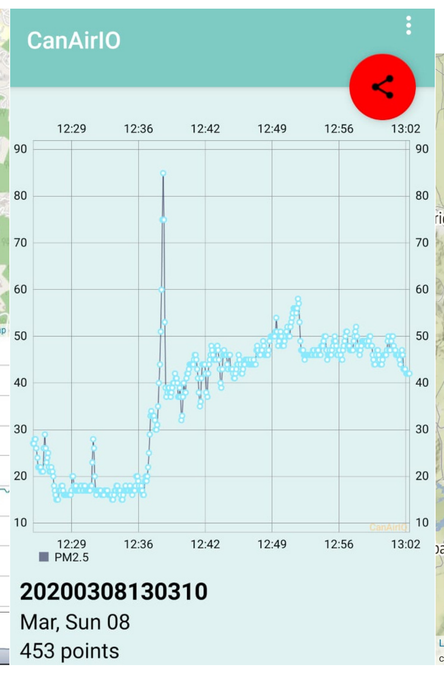


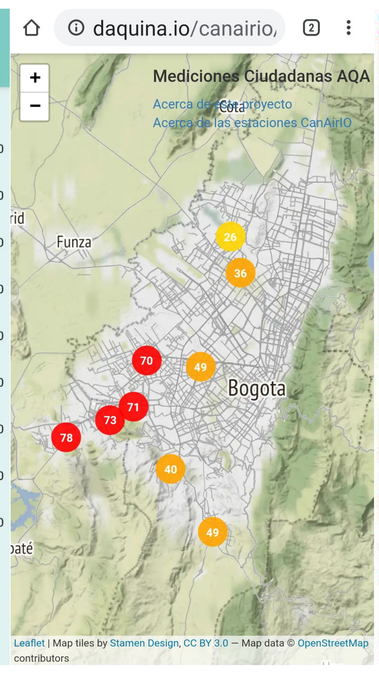
Community status:

- Aprox 100 sensors (maybe more).
- Open InfluxDB cloud server.
- API for writing; reading in development.
- Real time map and static data visualizations.
- Tool to show dynamic tracks for mobile captures.

Citizen work and results







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