

MakeSense : DustDuino | INPUTS



Codigo Urbano organized local deployments and coding

- Organized meet-ups at São Paulo hackerspaces
- Led GSM hardware development
- Led local sensor assembly and configuration



Development Seed led the software development and design initiatives

- Produced opendustmap.com and api.opendustmap.com



DustDuino lead developer Matthew Schroyer:

- Led engineering of the DustDuino board
- Led wifi code development
- Provided materials for product documentation



Feedback Labs provided financial support for the pilot

- 60,000 USD



FrontlineSMS (later SIMLab), produced the proposal and led development of the GSM data pipeline

- Coordinated project schedule and task management
- Development of SMS pipeline to OpenDustMap via FrontlineCloud API



GroundTruth Initiative contributed research and learning components of the project

- Advised InfoAmazonia on deployment strategy
- Produced the learning report



InfoAmazonia led the production of local media and deployment of

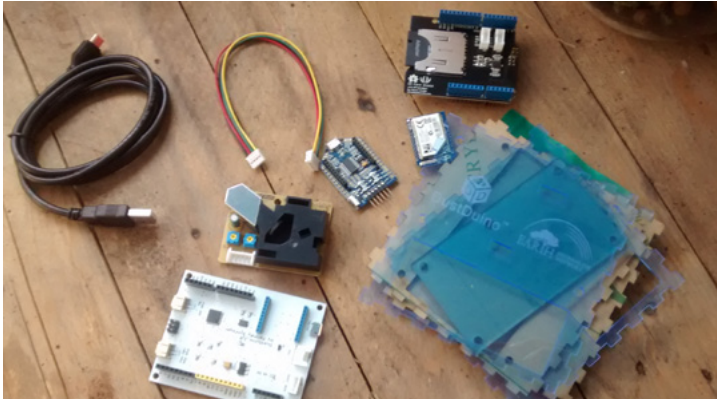
- Coordinated local deployment of sensors
- Produced video and poster materials



Internews Earth Journalism Network, led hardware development and documentation

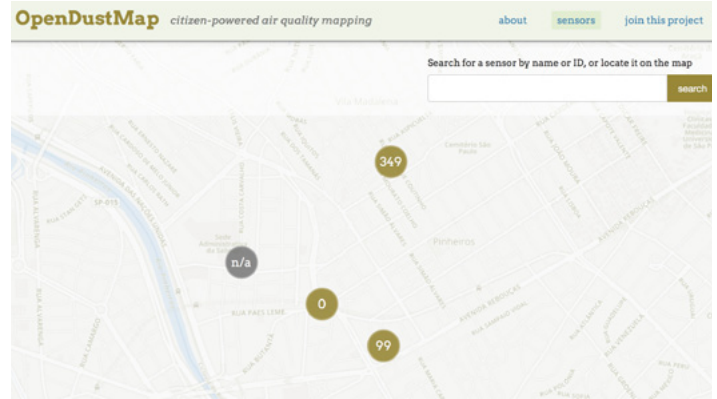
- Research and development of sensor technology
- Coordinated development and iterative testing of sensor technology
- Formalized manufacturing relationship and managed logistics
- Led production of users tutorials and documentation

TECHNOLOGY



DustDuino Kits

DIY air quality monitoring kits . 100 sensors produced by SEED Studio (40 sensors in Brazil: 5 GSM and 35 Wifi based) under a manufacture, distribution, and pricing agreement.



opendustmap.com

The front end website for displaying the data generated by the sensors.

DOCUMENTATION



Deployment Poster

Designed to accompany public displays of the sensor

DIY Particulate Matter Monitoring - June 2015

DustDuino Cookbook

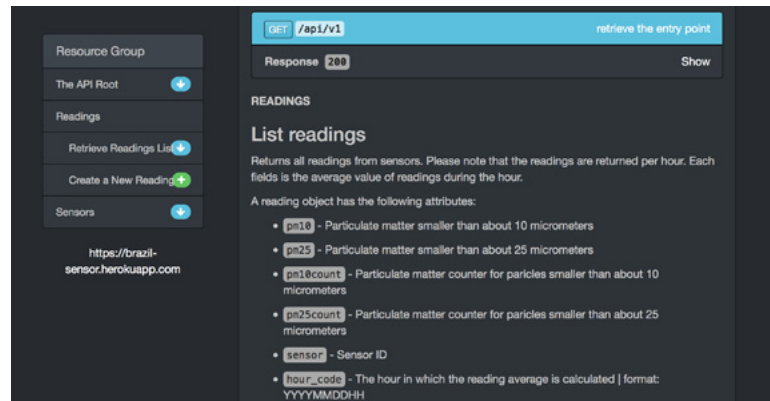
Count and report airborne particles



By Matthew Schroyer and Willie Shubert

DustDuino Cookbook

Detailed documentation for configuring, assembling, and deploying DIY sensors.



api.opendustmap.com

An open-by-default online database for sensor readings.

MEDIA



Scientific American *Dust in the Wind: How Data Visualization Can Help The Environment*, [published July 15 2015](#)

Nature *Environmental Science Pollution Patrol*, [January 15, 2015](#)

Development Seed *Opening Up Air Quality Data*, [June 3, 2015](#)

Codigo Urbano - *Primeiro sensor independente para monitorar poluição é instalado em SP*, [March 25, 2015](#)

OpenDustMap Project Video - [March 2016](#)