- Mobile Sensor Platform - (hack demonstration)

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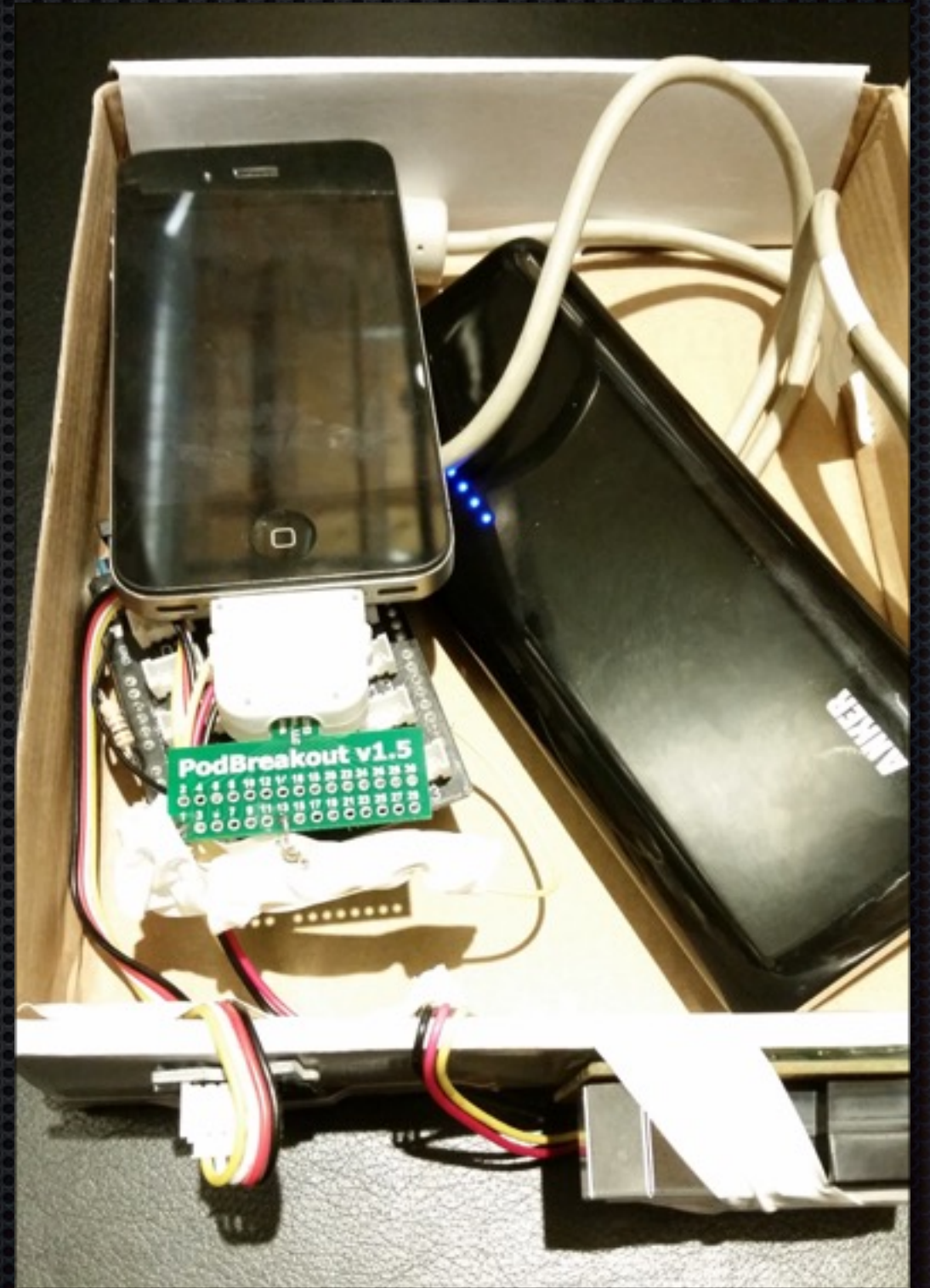**https://github.com/4levity/mobile-sensors**
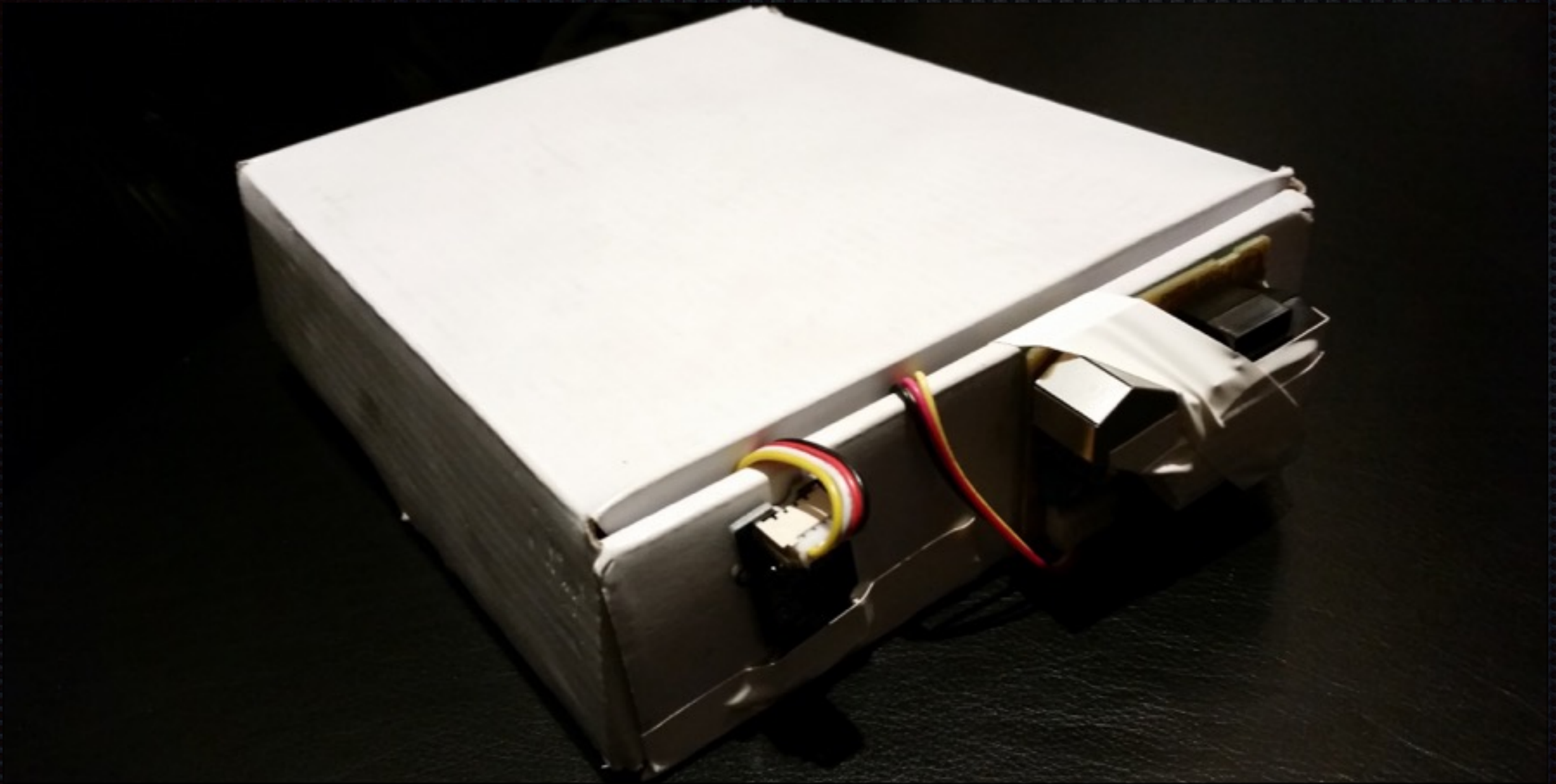
Location-Aware Data Logger

San Francisco Science Hack Day 2015

WHY?
1. New life for old hardware!
2. HOWTO for fellow citizen scientists!
3. Crowdsource data and environmental awareness

Inspired by your air quality monitoring ideas and the ongoing health crisis in Indonesia.

System Features

- Small and portable, self-contained, days of battery life

- Real-time GPS and environmental sensor data

- Uses cellular network and/or wifi

- End result: CSV data on server, ready for analysis

- Pretty much complete, open-source solution w/ plenty of README files so that you can build on this concept!

Components

1. Arduino with sensors (dust, temperature, humidity, …)

2. iPhone 4 hacked with serial port

3. iOS GPS monitoring app
   + data collection script

4. Standalone Java web service to receive data

More Ideas???

* Use phone audio and screen to warn about local environmental problems e.g. heavy pollution

* Queue data when network is unavailable and send later

* MOAR SENSORS (on Arduino and/or iPhone)

* Analyze data to geo-visualize travel and environmental conditions

"I just invent, then wait until man comes around to needing what I've invented."

–R. Buckminster Fuller