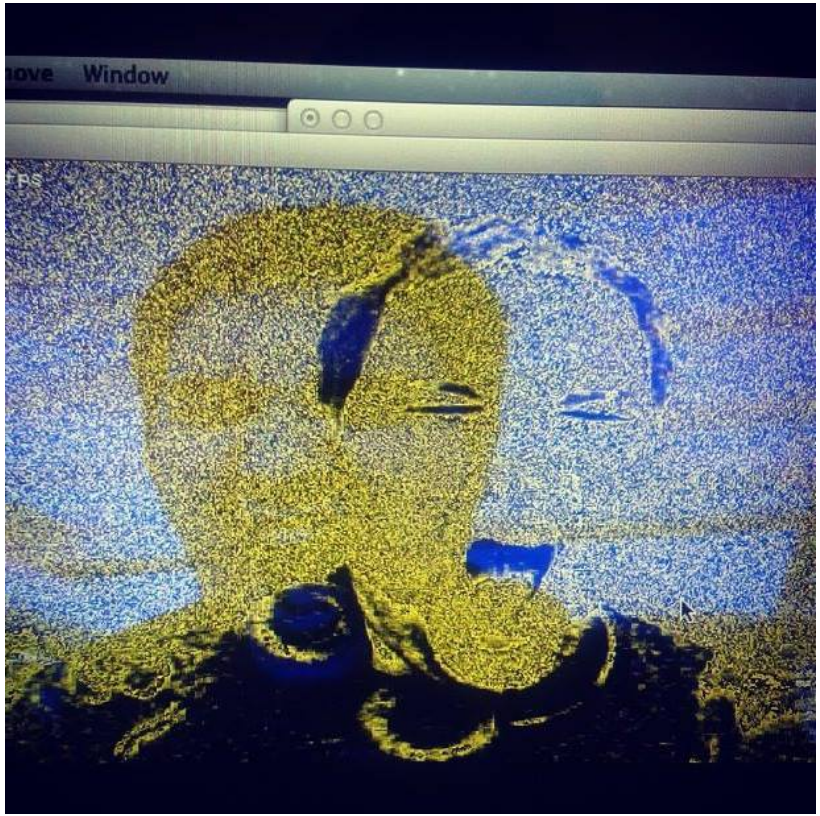
¿Como contamos historias con sensores?

Sensor Journalism bootcamp.

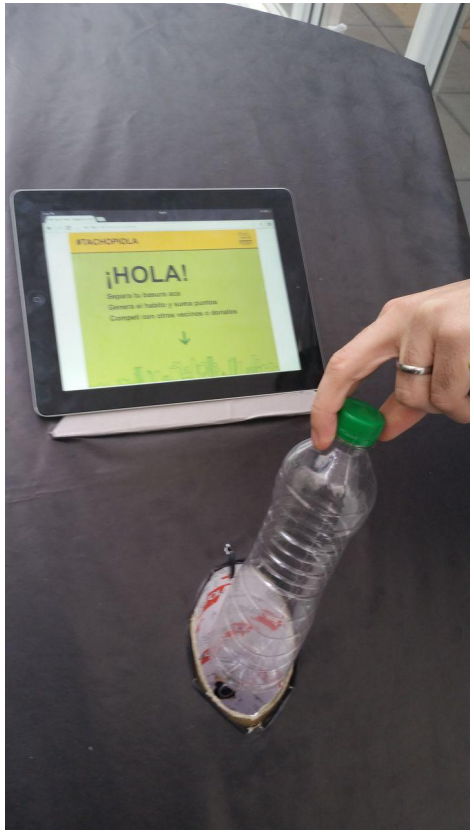


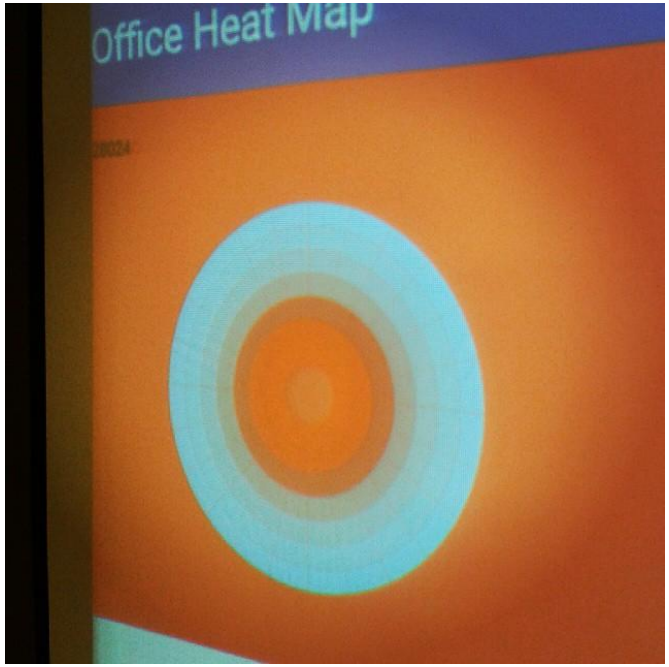
@tincho_for_ever

IOT/
BUE

CARGO
GRAFÍAS

¡HOLA!





¿Quienes estan?

¿De qué trata esto?

“**Data**, on its own, locked up or muddled with errors, does little good.
Cleaned up, structured, analyzed and layered into **stories**, data can enhance our understanding of the most basic questions about our world, helping journalists to explain who, what, where, how and why changes are happening.”

Alex Howard

DATOS < HISTORIAS

Únicos.
Medidos.
Interactivos.

Sensores?

“Un **sensor** es un dispositivo capaz de detectar **magnitud físicas o químicas** y transformarlas en **variables eléctricas**.”

Wikipedia

Los sensores son “algo” que reaccionan de forma predecible ante un estímulo del mundo real.

Charles Barret @ Tow Center

Entrada / Salida

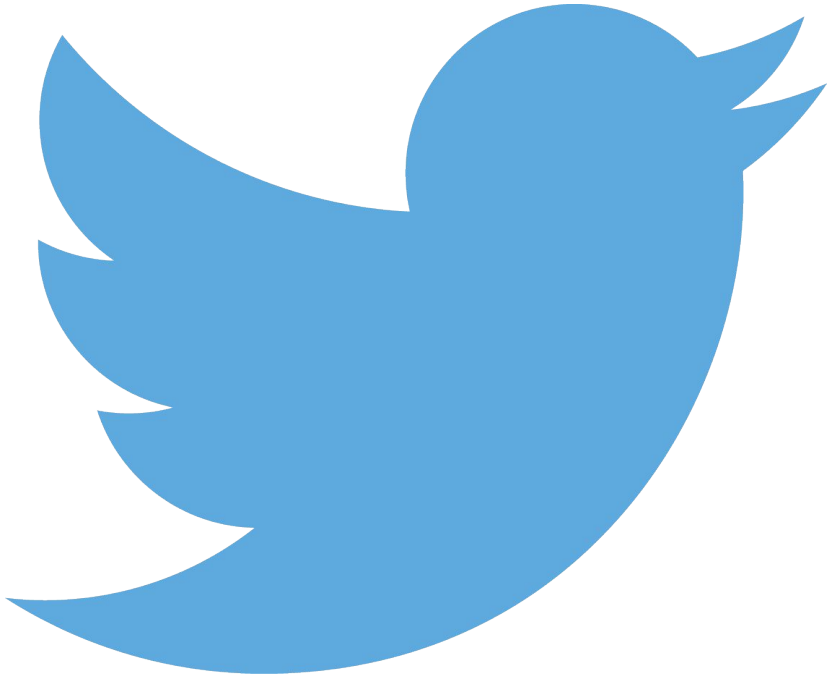
Data / Preguntas

LUZ

Que tan intensa es la iluminación?

Presion atmosferica

Va a llover Pronto?



#NOTENGOLUZ

Hay Luz en BA?

3 Historias

Historia.1

SAFECAST MAP Created by Nick Dolezal, The Safecast Map depicts over 18,000,000 radiation data points collected by the Safecast team and is current as of May 25, 2014. Maps with more recent datasets are currently available only via our free iOS app

http://safecast.org/tilemap/?lat=37.4078&lon=140.268324&z=8

SAFECAST MAP Created by Nick Dolezal, The Safecast Map depicts over 18,000,000 radiation data points collected by the Safecast team and is current as of May 25, 2014. Maps with more recent datasets are currently available only via our free iOS app

Safecast is a global project working to empower people with data, primarily by mapping **radiation levels** and building a sensor network, enabling people to both contribute and freely use the data collected. After the 3/11 earthquake and resulting nuclear situation at Fukushima Diachi it became clear that people wanted more data than what was available. Through joint efforts with partners such as International Medcom, Keio University, The John S. and James L. Knight Foundation and GlobalGiving, Safecast has been building a radiation sensor network comprised of static and mobile sensors actively being deployed around Japan – both near the exclusion zone and elsewhere in the country.

Safecast supports the idea that more data – freely available data – is better. Our goal is not to single out any individual source of data as untrustworthy, but rather to contribute to the existing measurement data and make it more robust. Multiple sources of data are always better and more accurate when aggregated.

While Japan and radiation is the primary focus of the moment, this work has made us aware of a need for more environmental data on a global level and the longterm work that Safecast engages in will address these needs. Safecast is based in the US but is currently focused on outreach efforts in Japan. Our team includes contributors from around the world.

Historia.2


EXTECH 421501
106

Historia.3

Fuente: GCBA

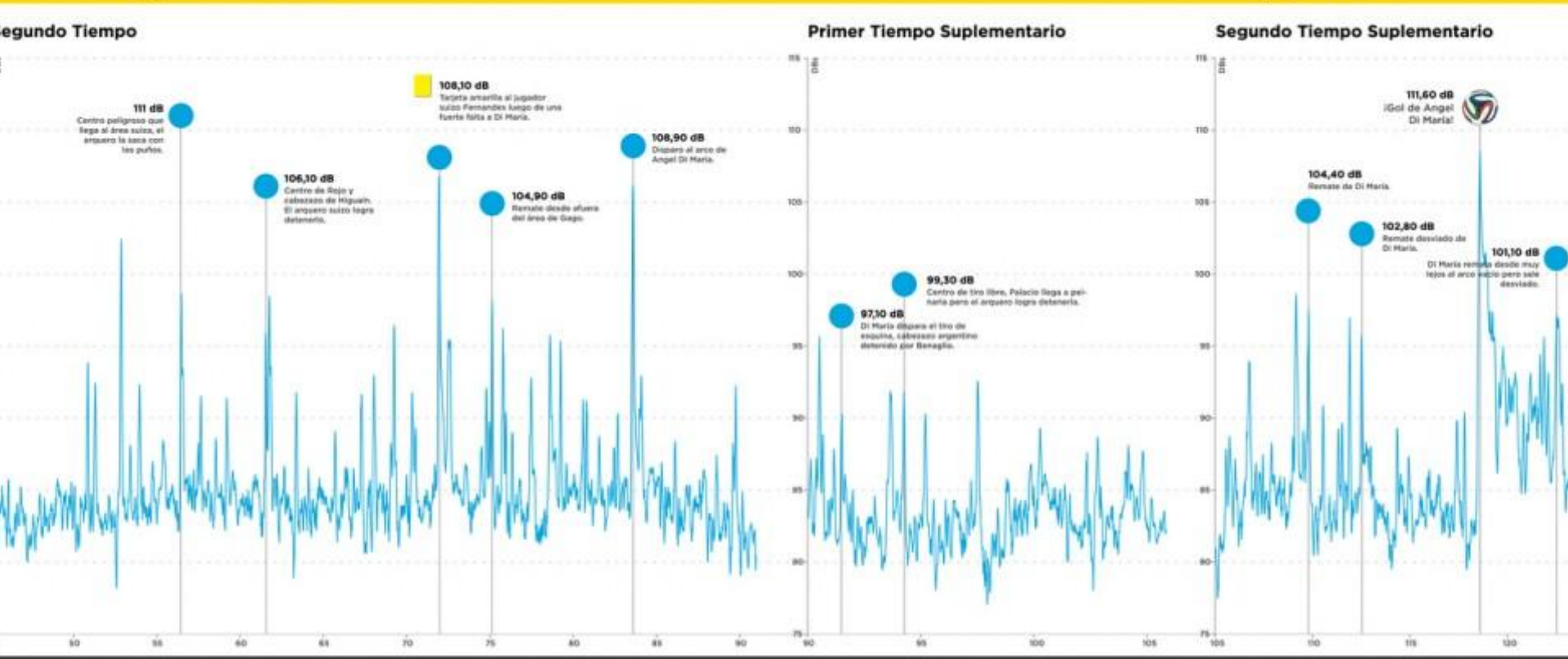
1 valor a medir.

¿Cuál sería?

¿Por qué?

Fuente: GCBA


BUENOS AIRES MUNDIAL
PUNTO DE MEDICIÓN


egundo Tiempo
111 dB
Centro peligroso que llega al área suiza, el arquero la saca con los puños.
106,10 dB
Centro de Rojo y cabezazo de Higuaín. El arquero suizo logra detenerlo.
108,10 dB
Tarjeta amarilla al jugador suizo Fernandes luego de una fuerte falta a Di María.
104,90 dB
Remate desde afuera del área de Gago.
108,90 dB
Disparo al arco de Angel Di María.
Primer Tiempo Suplementario
97,10 dB
Di María dispara el tiro de esquina, cabezazo argentino detenido por Benaglio.
99,30 dB
Centro de tiro libre, Palacio llega a pierna para el arquero logra detenerla.
Segundo Tiempo Suplementario
104,40 dB
Remate de Di María.
102,80 dB
Remate desviado de Di María.
111,60 dB
¡Gol de Angel Di María!
101,10 dB
Di María remata desde muy lejos al arco vacío pero sale desviado.

¿Por qué ahora?

Facil prototipado

Costos bajos

Comunidad

Participativo

Contexto.

No todo es importante todo el tiempo.

DATOS < HISTORIAS.

Únicos.
Medidos.
Interactivos.

DEMO.

Que hay que hacer para empezar?

Medición en vivo

Procesamiento

Visualización

Arduino + Sensores

Node JS

D3

Repo!

http://bit.ly/datafest-sensors/

¿Cuál es la proxima historia que vas a contar?

Historias

+

Sensores

=

Magia.

Referencias

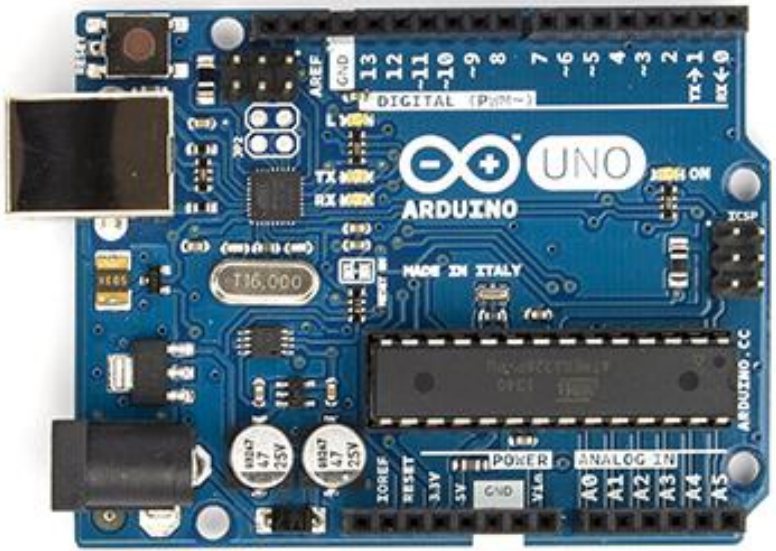
http://towcenter.org/research/sensor-journalism-at-the-tow-center/
http://project.wnyc.org/cicadas/
http://www.forbes.com/sites/eco-nomics/2013/02/20/london-to-be-an-ultra-low-emission-zone-by-2020/
http://www.nytimes.com/interactive/2008/08/16/sports/olympics/20080816-c0-graphic.html?_r=0
http://www2.ocregister.com/multimedia/pollution/main.swf
https://github.com/tinchoforever/sensor-journalism-kit-hhba
http://www.slideshare.net/ValentinaGrasso/ardomino-il-sensore-parlante
https://medium.com/@dangerbui/a-working-typology-of-sensor-journalism-projects-c0042a0410af

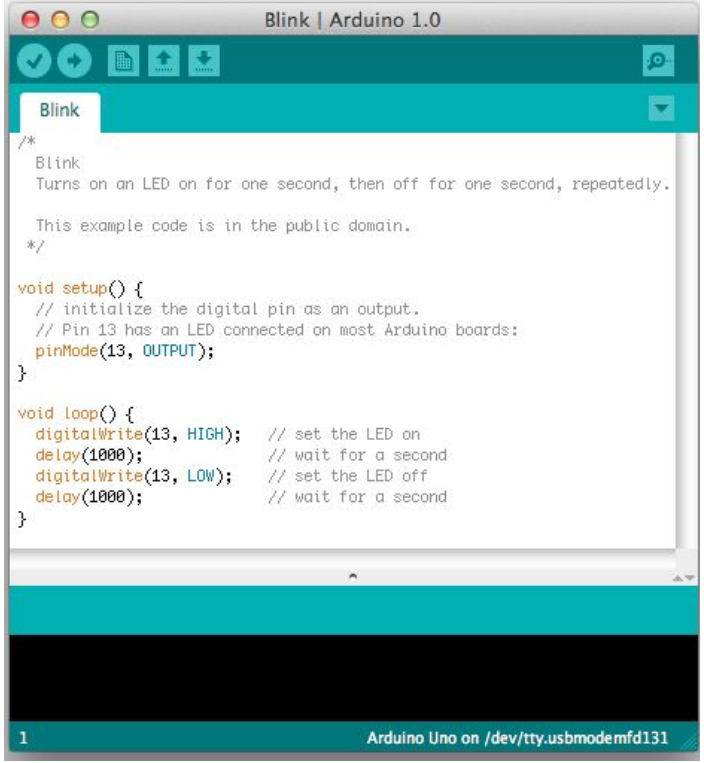
Gracias! :-)

Davo Galavotti - @pixelbeat
Ivan Roumec - @gr3nlion
Lucas Rudi - @thepiedrastone
Martin Rabaglia - @sr_humo

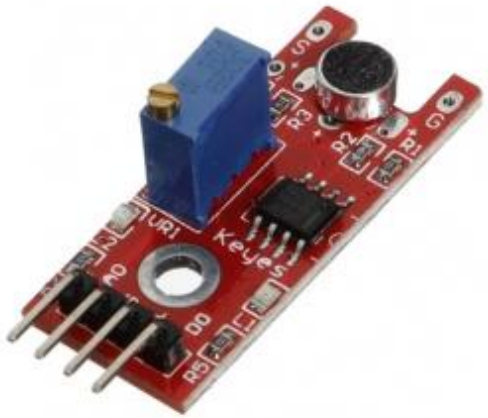
Appendix

Arduino = Hardware + Software





Input: Micrófono



Intensidad de sonido

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MAX: 1024