Das Internet der Dinge

GFZ, 22.01.2015

thomas.amberg@yaler.net

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Internet of Things (IoT)

"Computer mit **Sensoren und Aktuatoren**, verbunden durch Internet-Protokolle"

Physikalische Eigenschaften messen und manipulieren

=> Web-Apps können in die reale Welt vordringen

=> Reale Dinge können zu Web-Services werden

http://e-home.com/tamberg/kitchen/light

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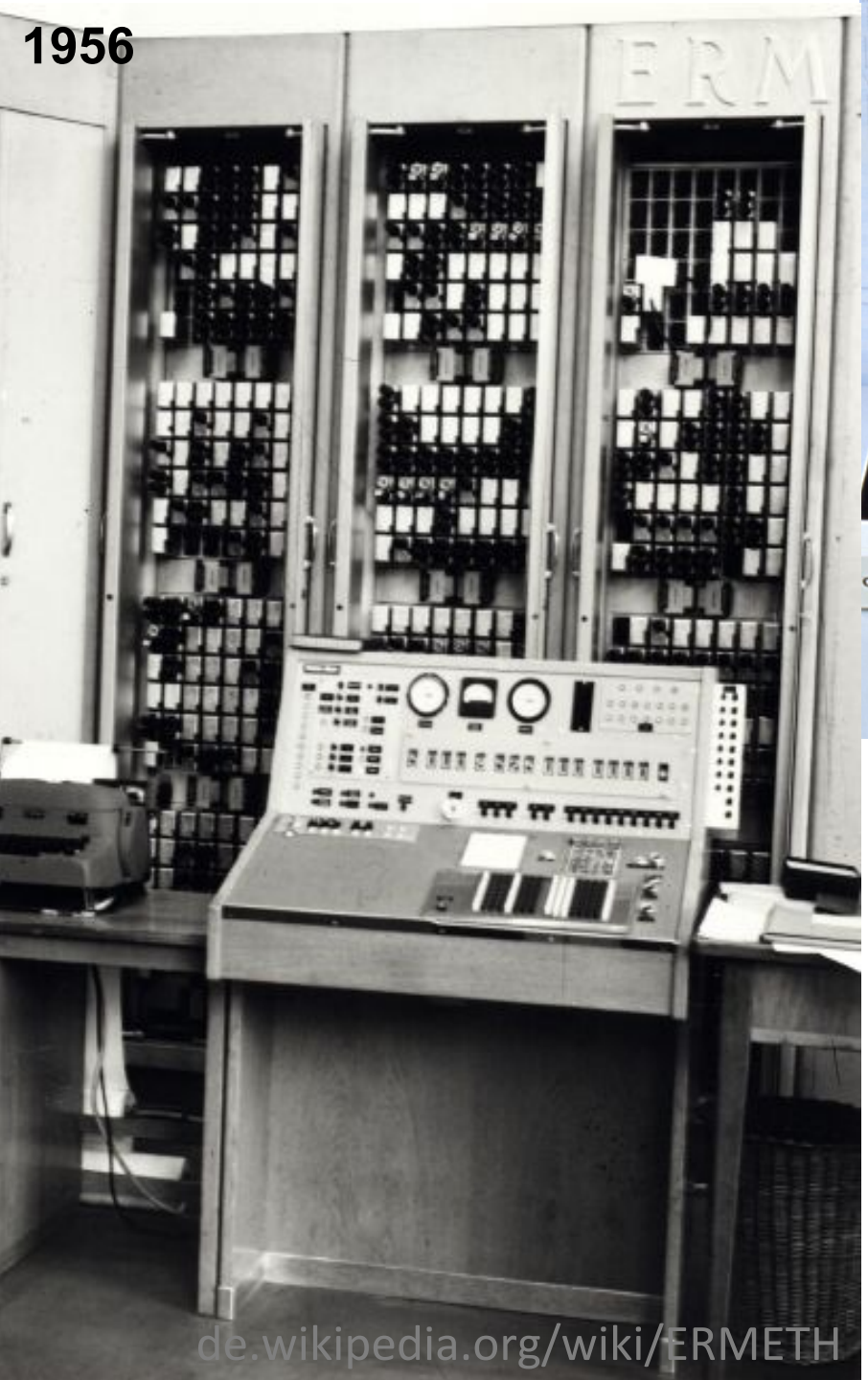
1956

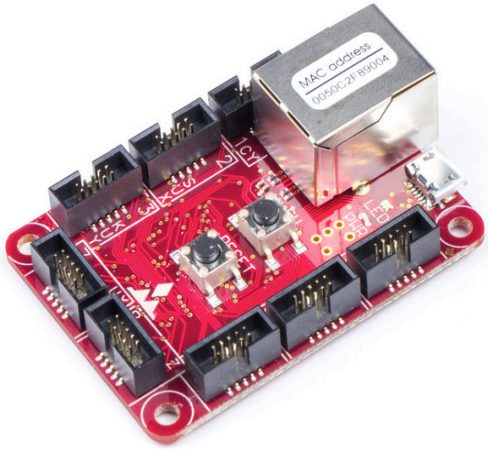


de.wikipedia.org/wiki/ERMETH

1990

Archiv D-INFK

2012

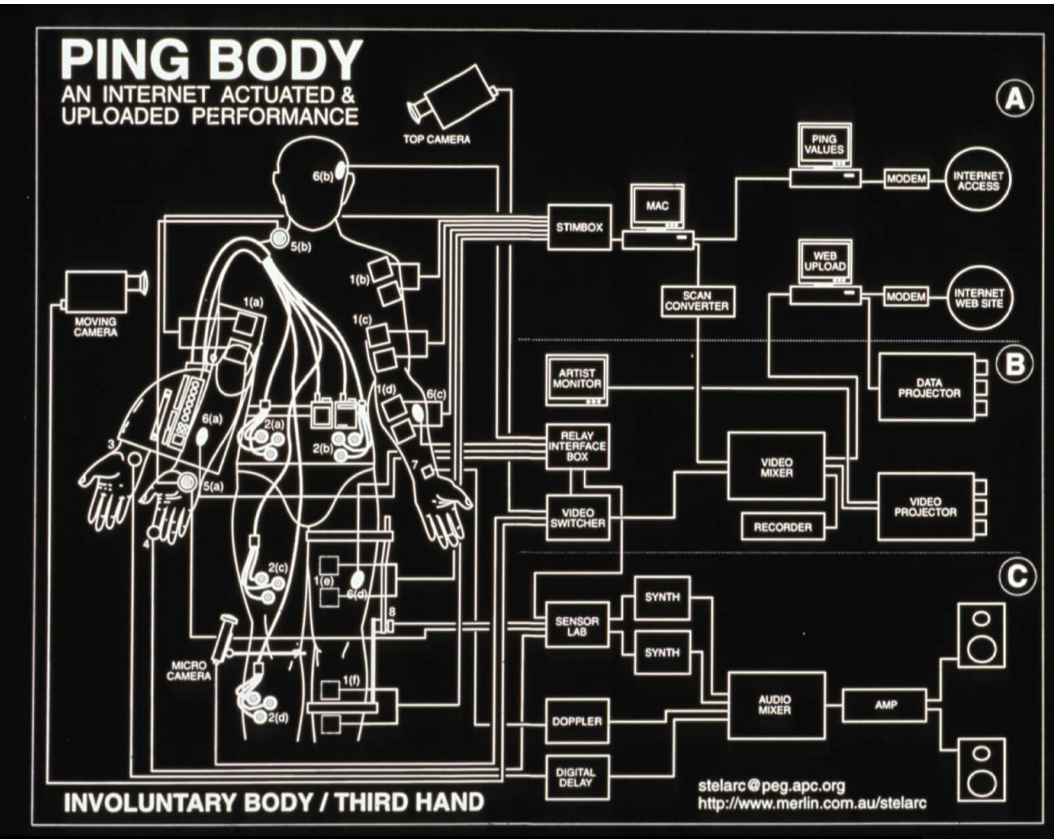


mountaineer-boards.com

John Romkey's Toaster (1990)

Telegarden (1995)

Ping Body (1995)



stelarc.org

Availabot (2006)

berglondon.com/projects/availabot

Botanicalls (2006)

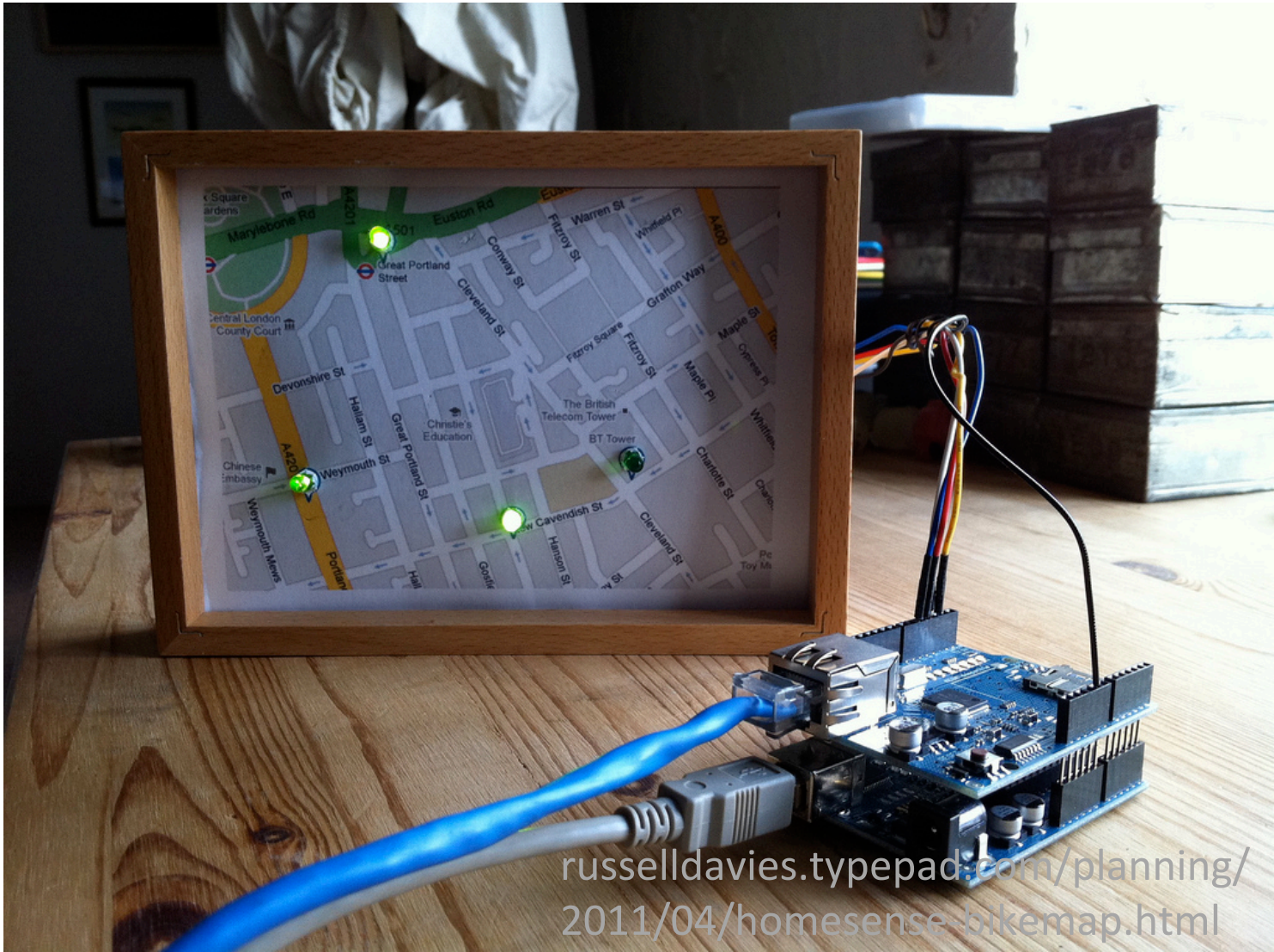
www.botanicalls.com/kits

Bubblino (2009)

WhereDial (2011)

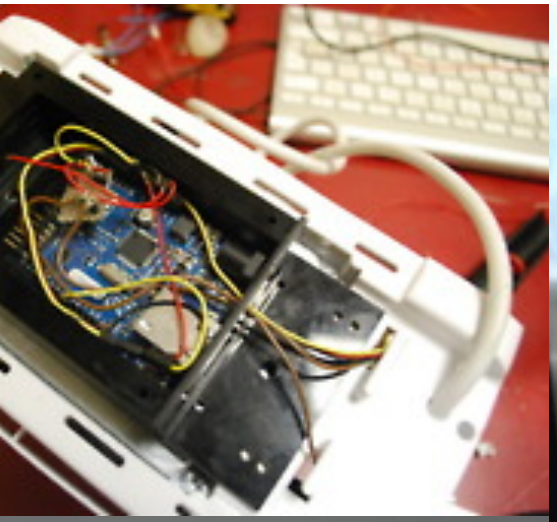
blog.mapme.at/wheredial

Homesense Bikemap (2011)



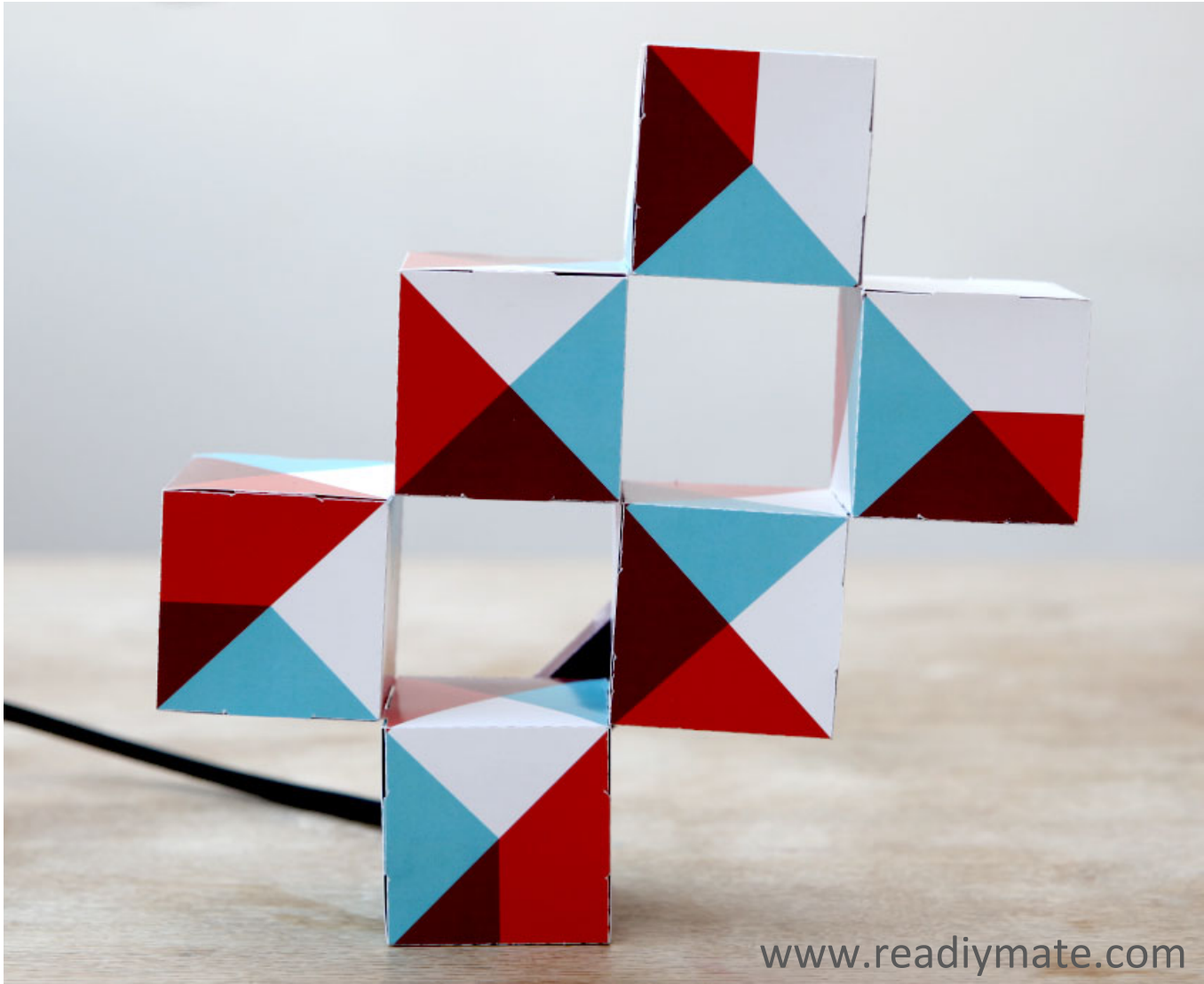
russelldavies.typepad.com/planning/2011/04/homesense-bikemap.html

Addicted Toaster (2011)

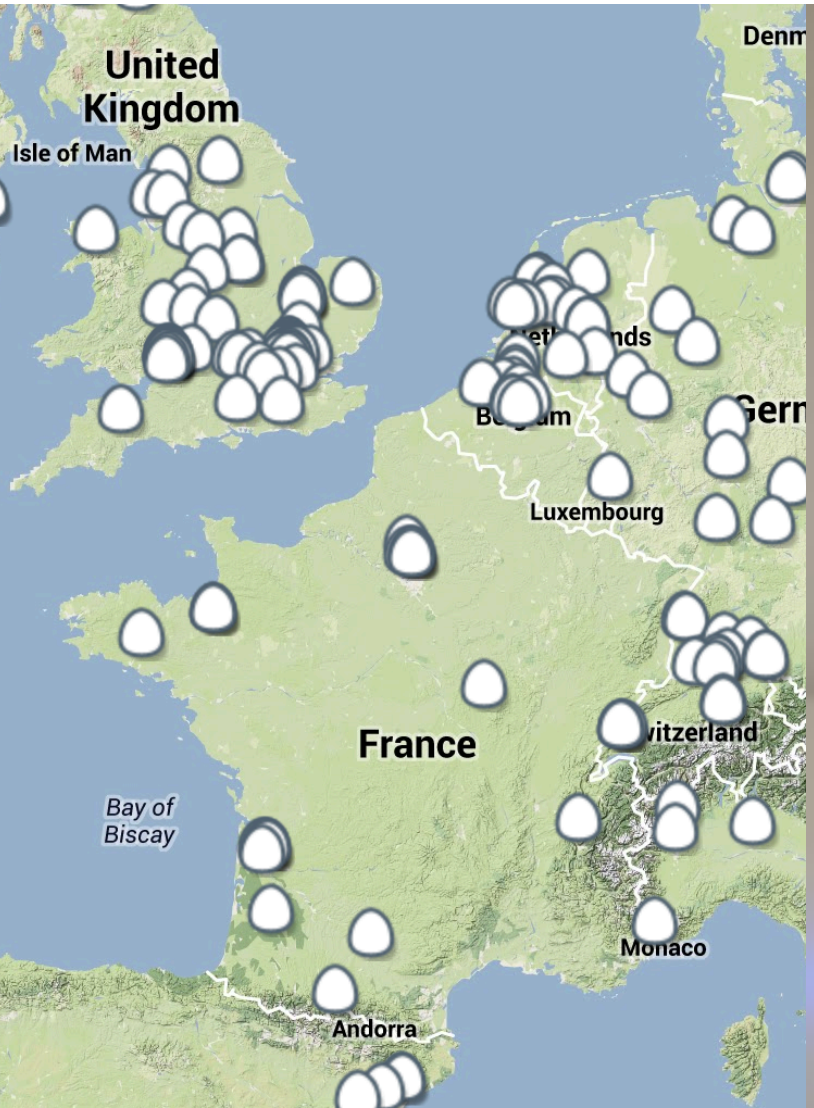


designedaddictions.tumblr.com

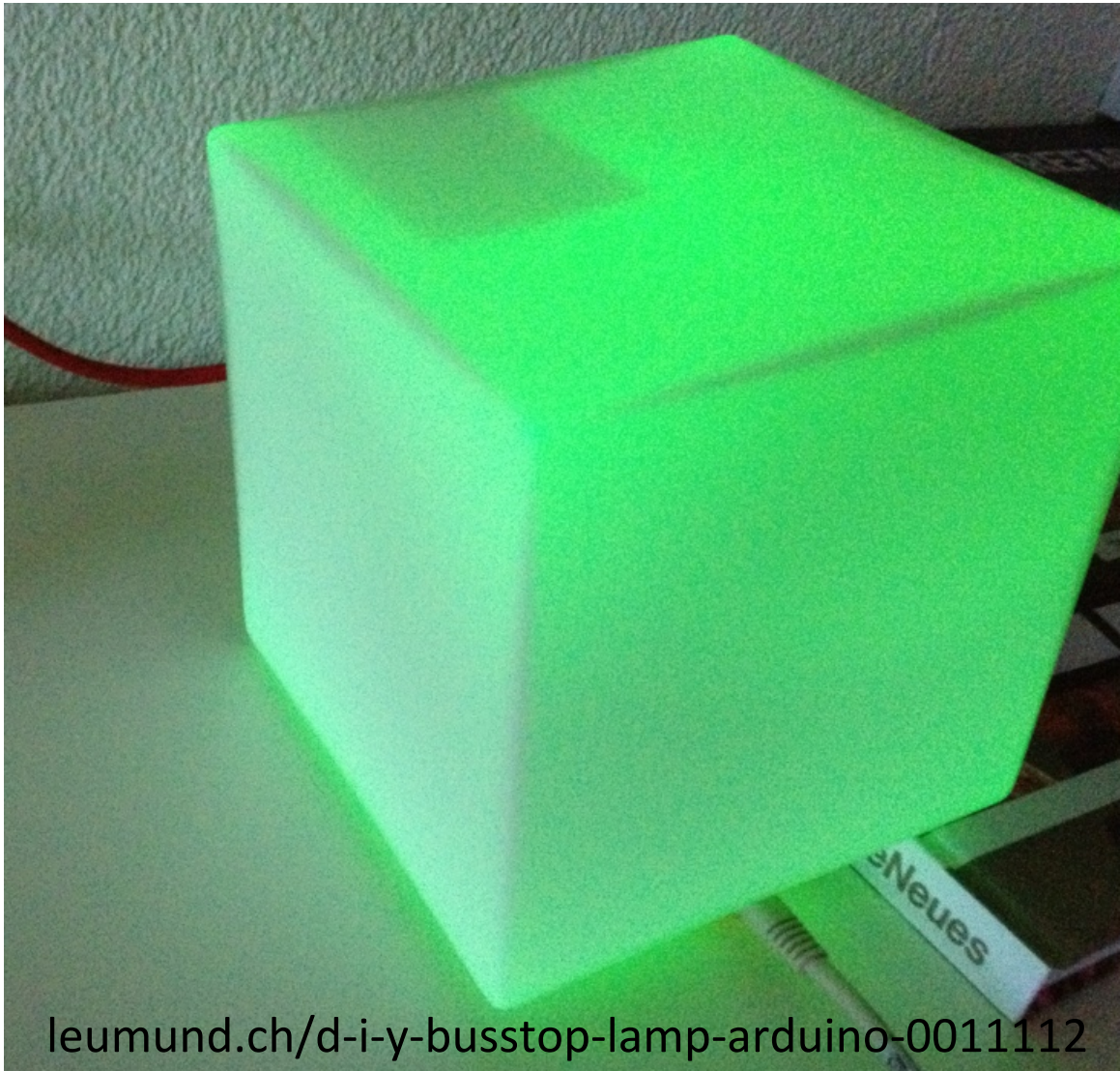
ReaDIYmate (2011)



#AirQualityEgg (2011)

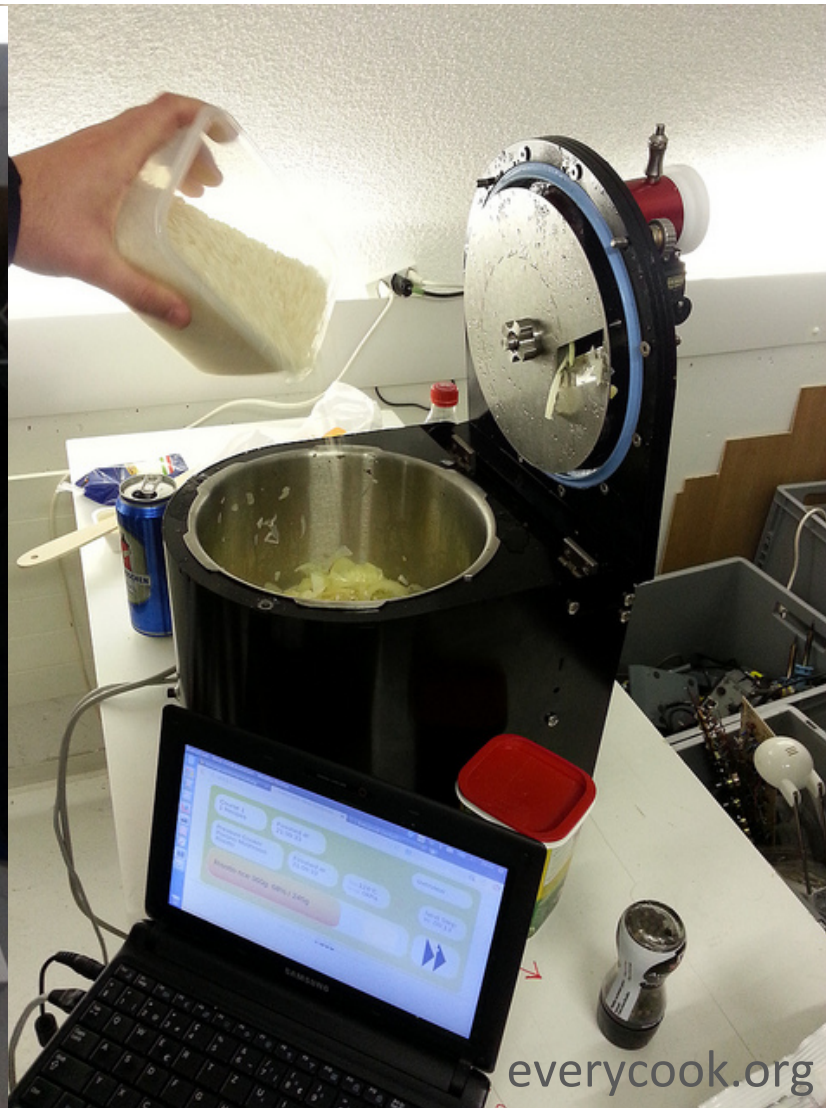


DIY Busstop Lampe (2012)



leumund.ch/d-i-y-busstop-lamp-arduino-0011112

EveryCook (2012)



Descriptive Camera (2012)

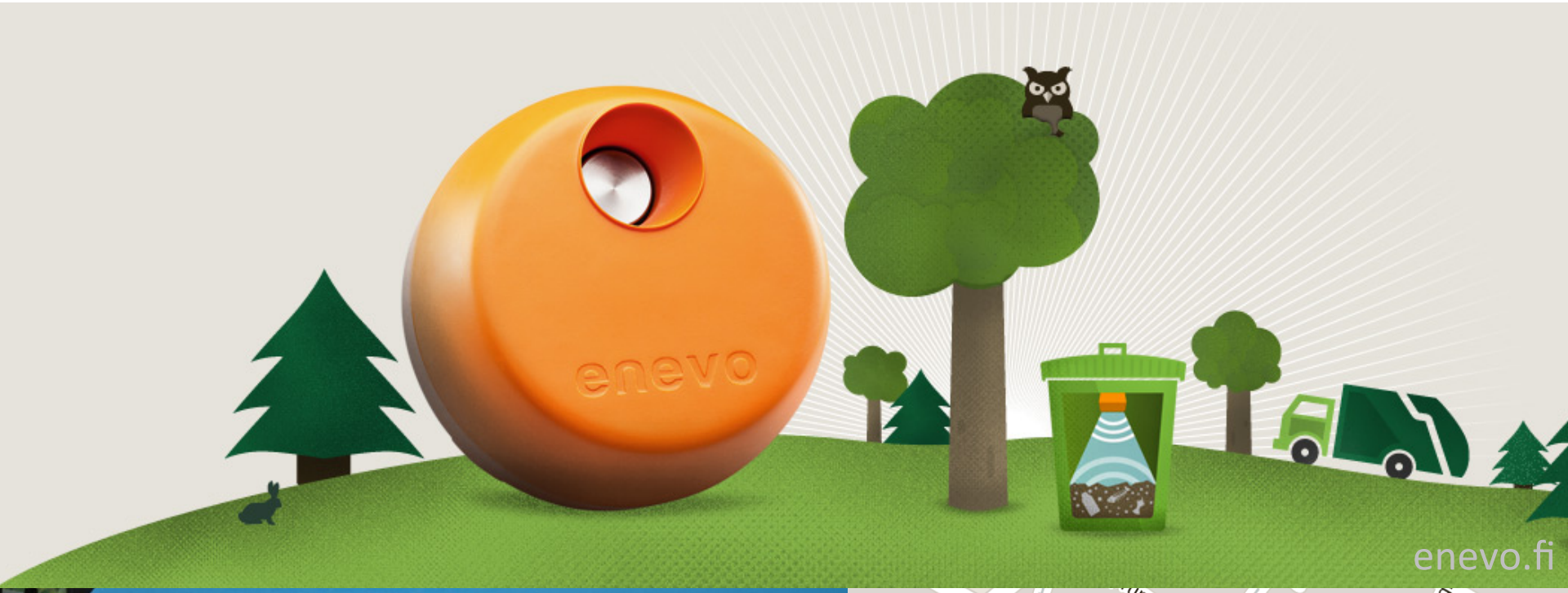
mattrichardson.com/Descriptive-Camera

withings.com

Visualize Your Progress

Play With Friends

nikeplus.nike.com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enevo.fi

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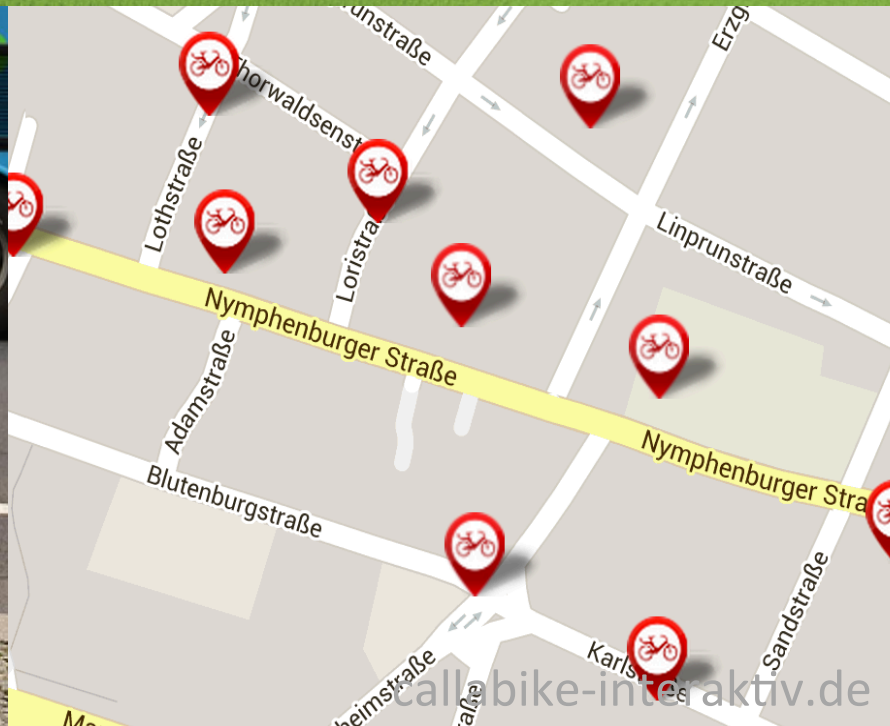
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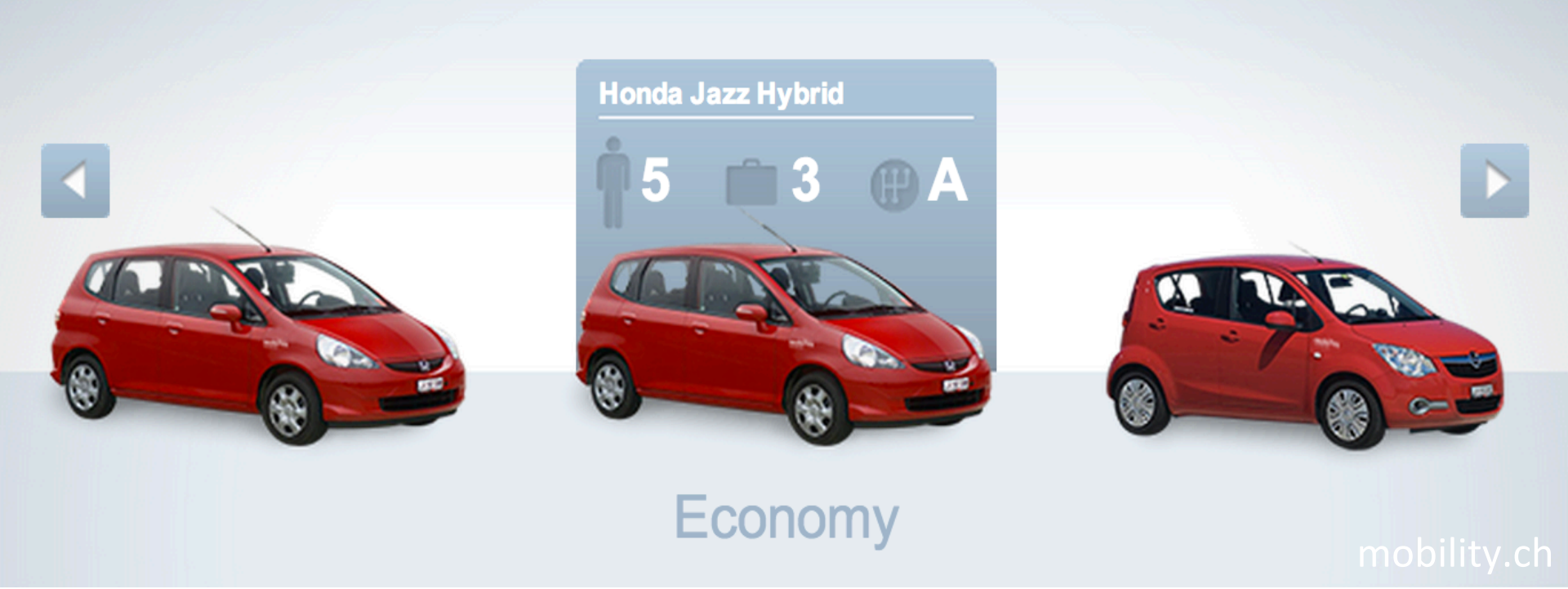
Linprunstraße
Nymphenburger Straße
Adamstraße
Blutenburgstraße
Sandstraße
callabike-interaktiv.de



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amzn.com/kindle

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IFTTT / If I don't work out

https://ifttt.com/recipes/92037

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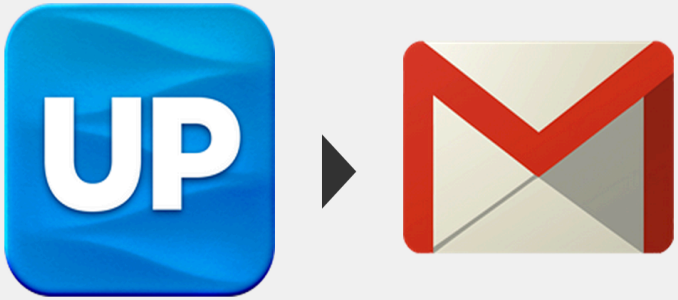
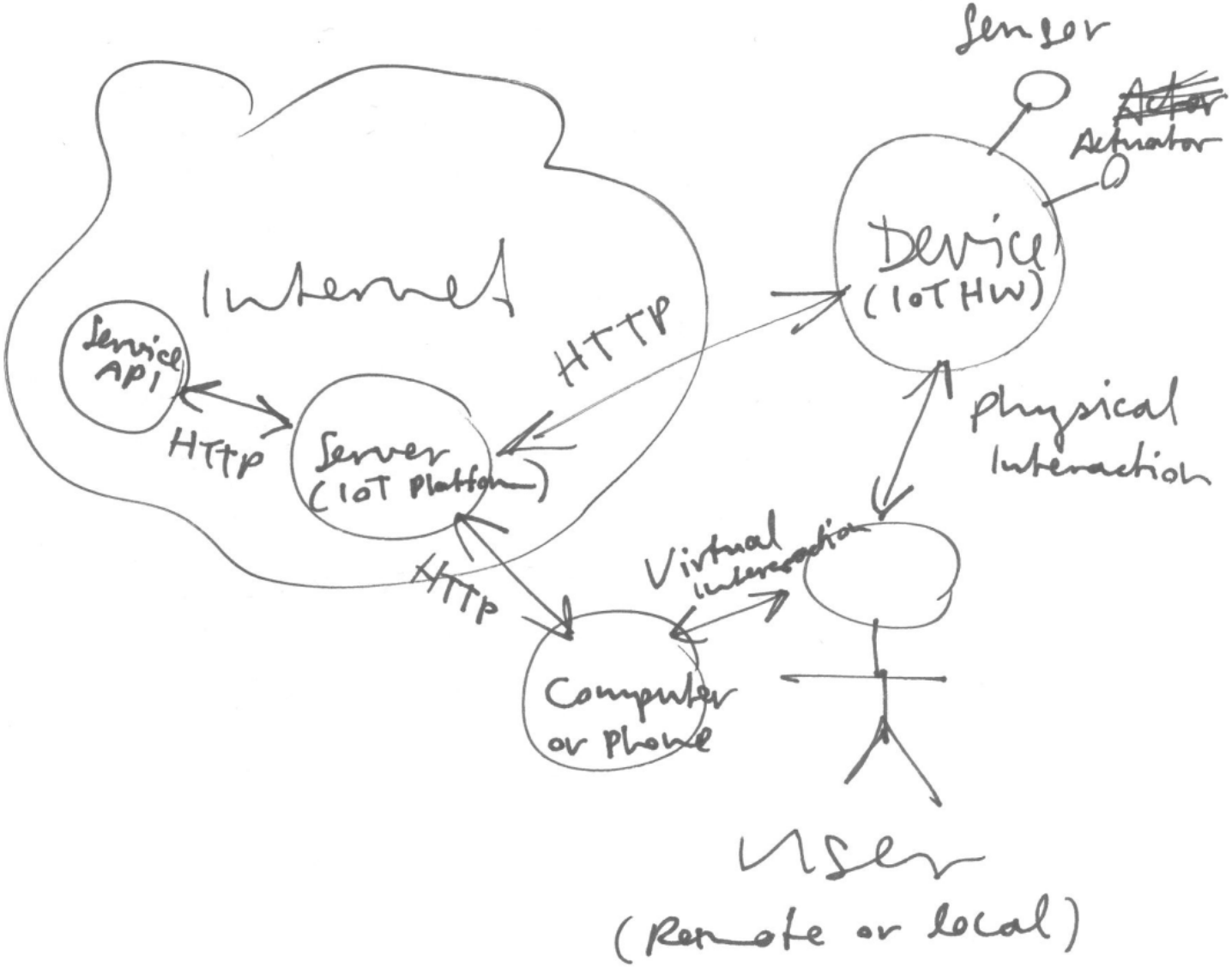


No new workouts in __ days

Send an email

IoT Referenzmodell



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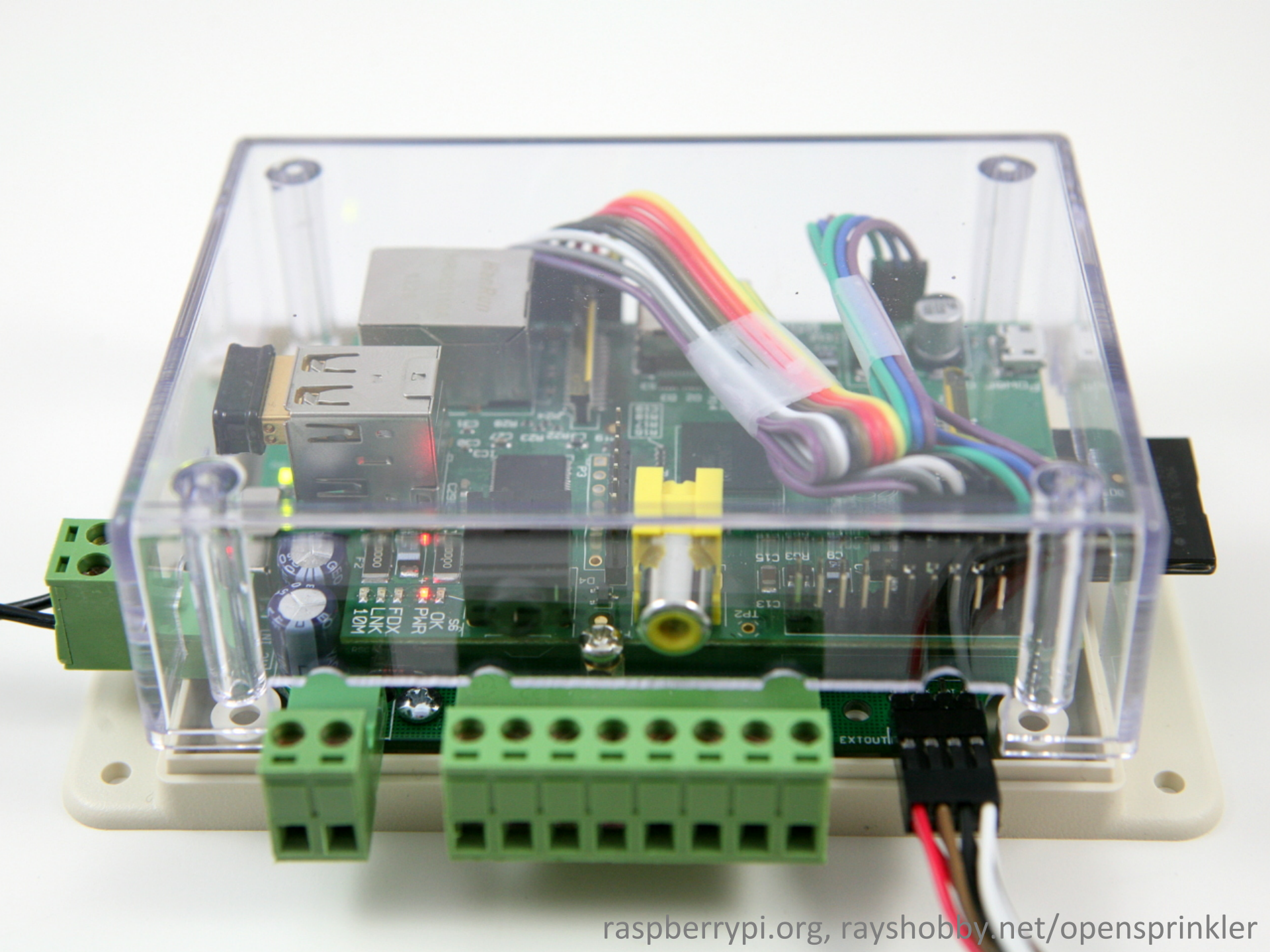
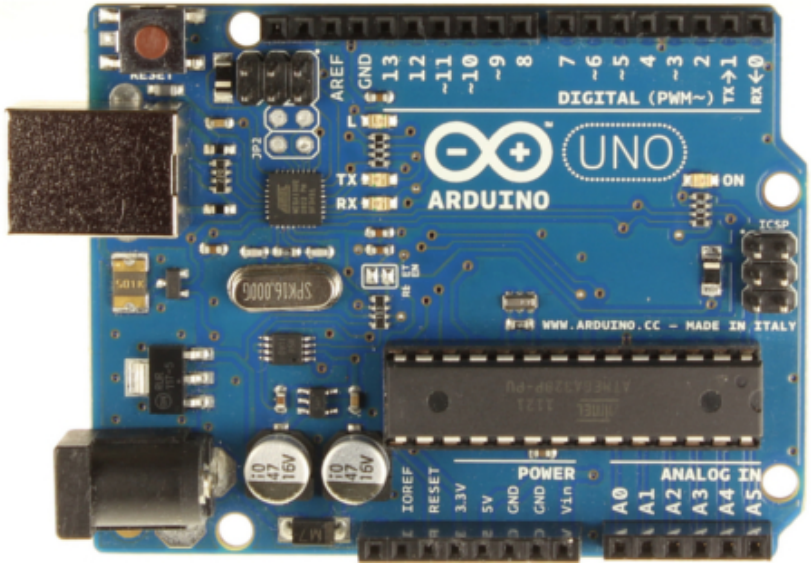
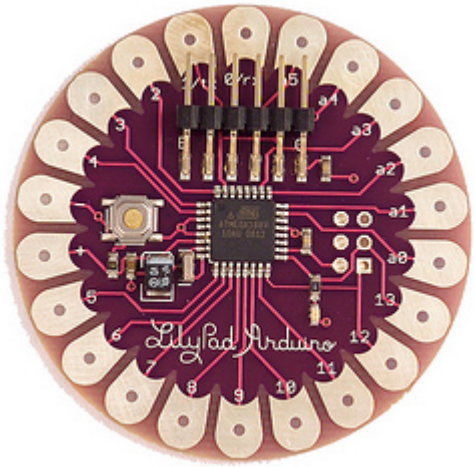


raspberrypi.org, rayshobby.net/opensprinkler



arduino.cc/en/Main/
arduinoBoardUno

tiny-circuits.com/
products/tinyduino



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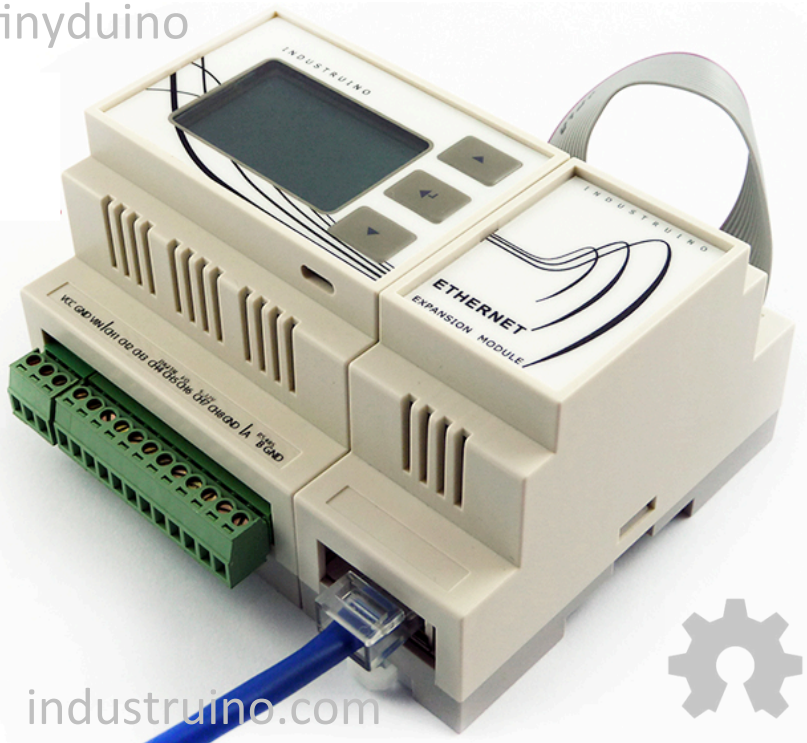
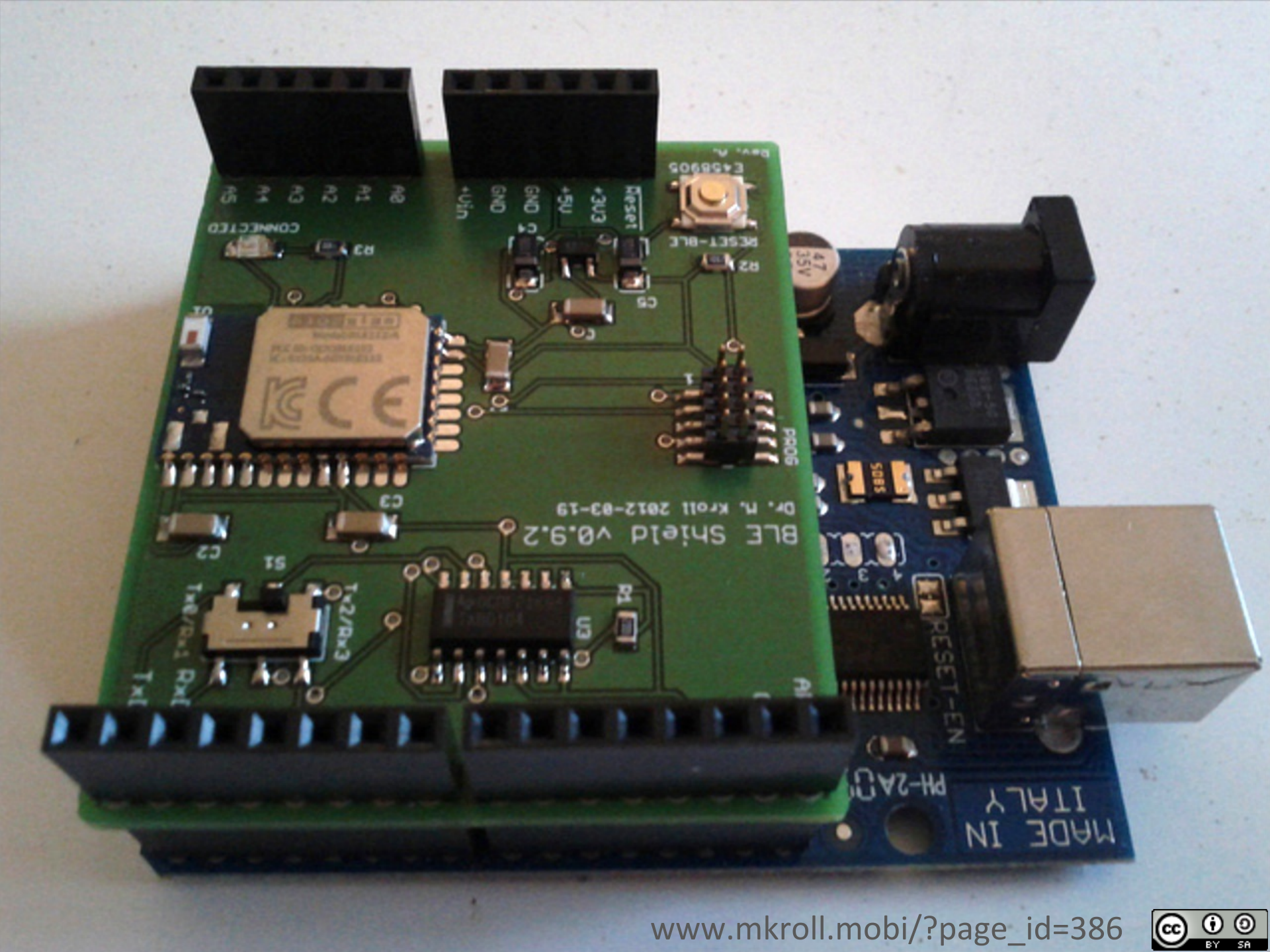
ArduinoBoardLilyPad

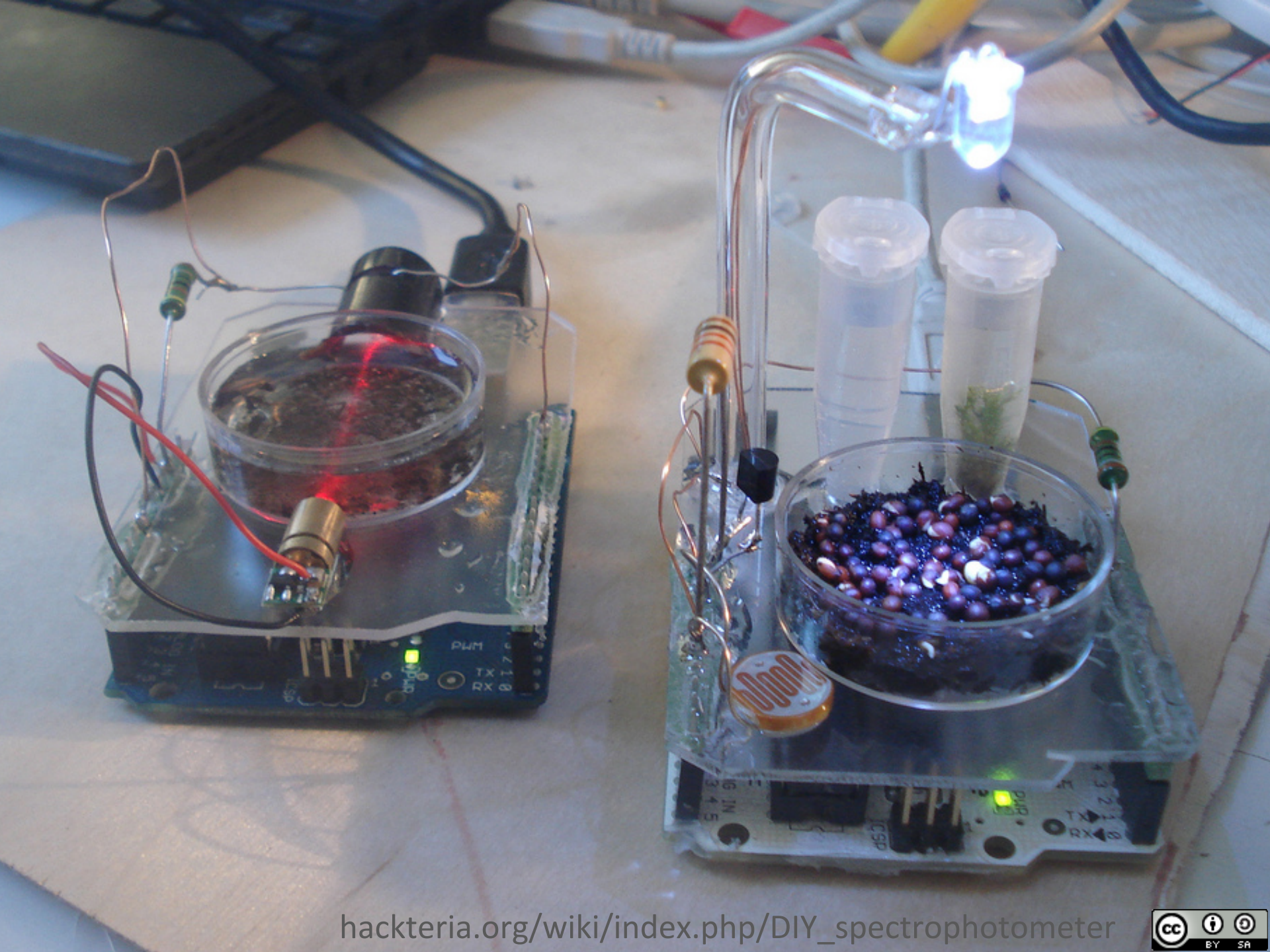
hlt.media.mit.edu/?p=2182



industruino.com



www.mkroll.mobi/?page_id=386



hackteria.org/wiki/index.php/DIY_spectrophotometer

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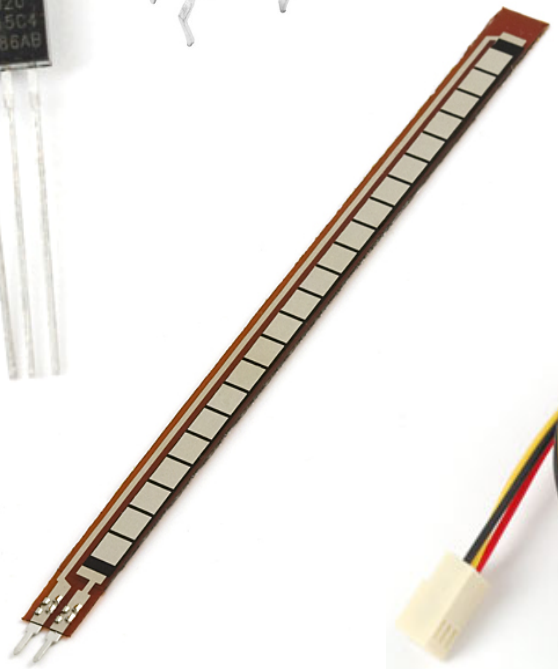
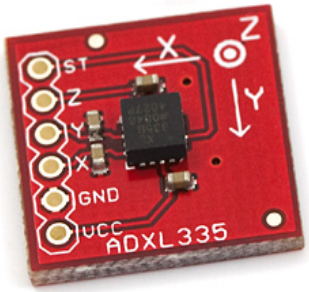
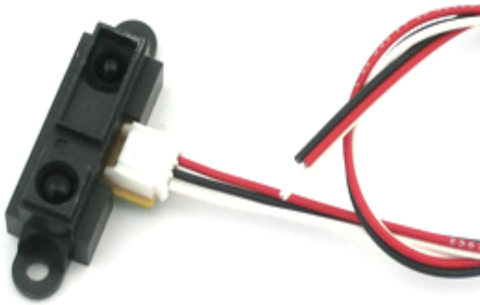
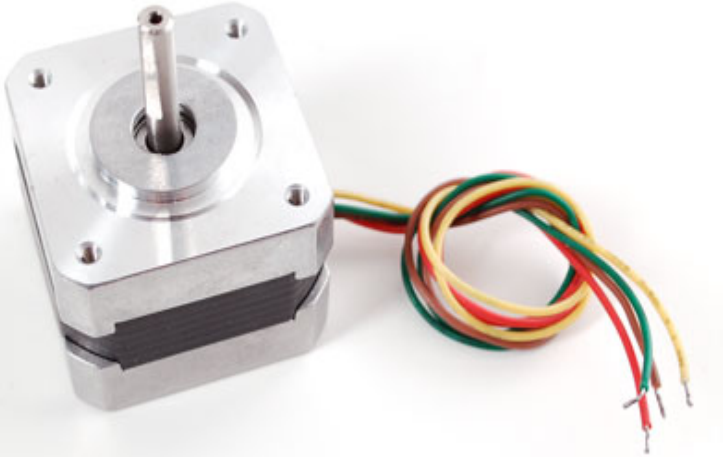




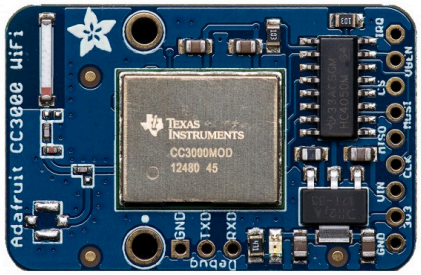




adafruit.com, sparkfun.com

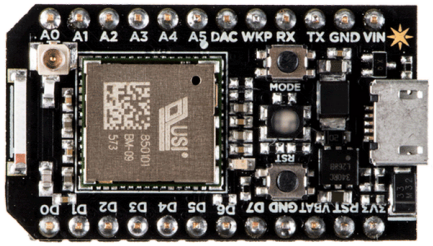
www.gprsbee.com

arduino.cc/en/Main/
ArduinoEthernetShield

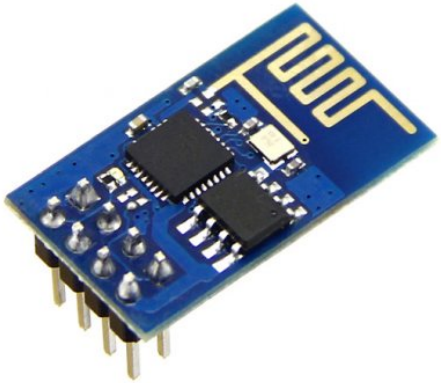


www.adafruit.com/
product/1469 (39$)

store.arduino.cc/index.php?
main_page=product_info&
products_id=289 (€20)

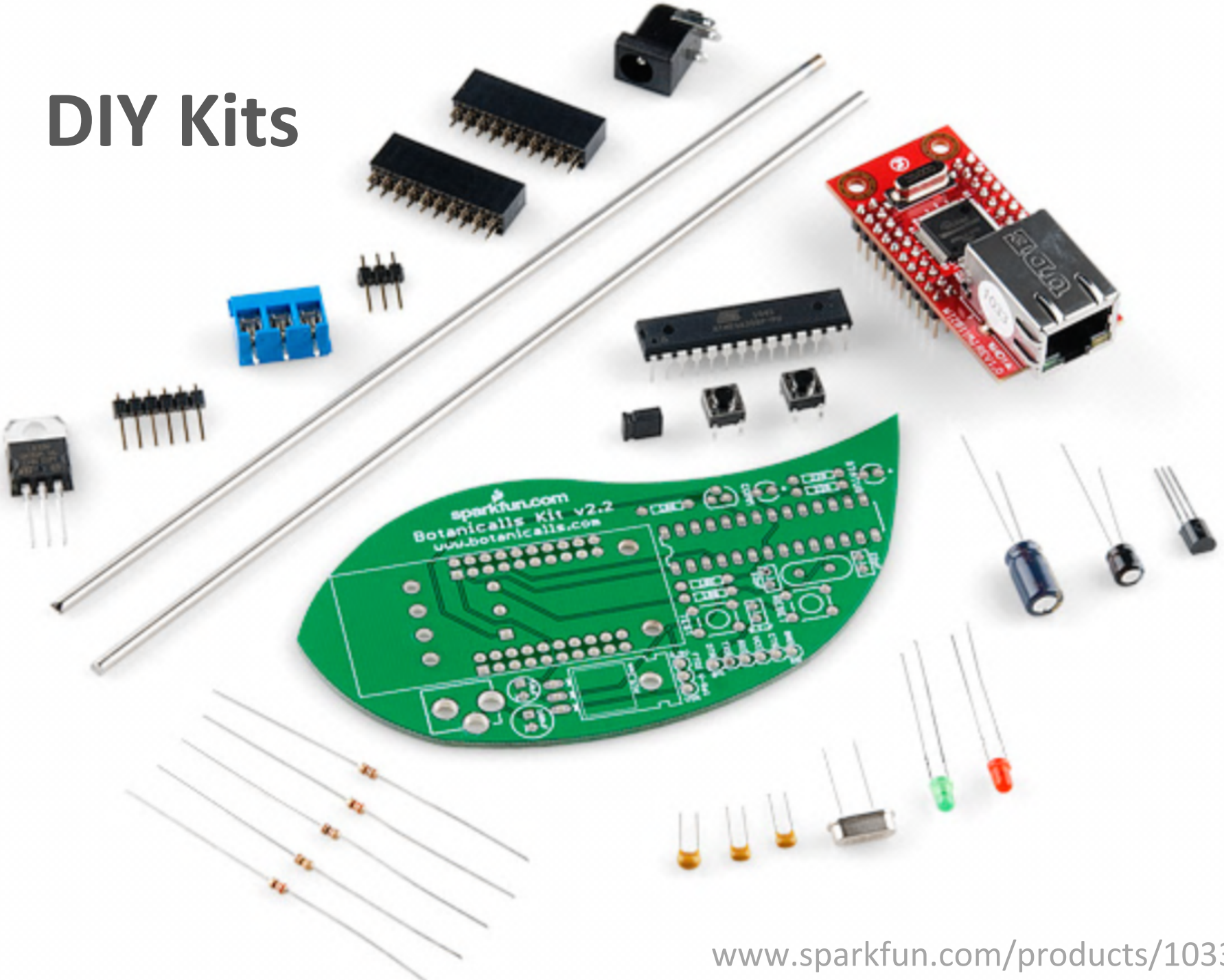


spark.io (Photon, 19$, March 2015)

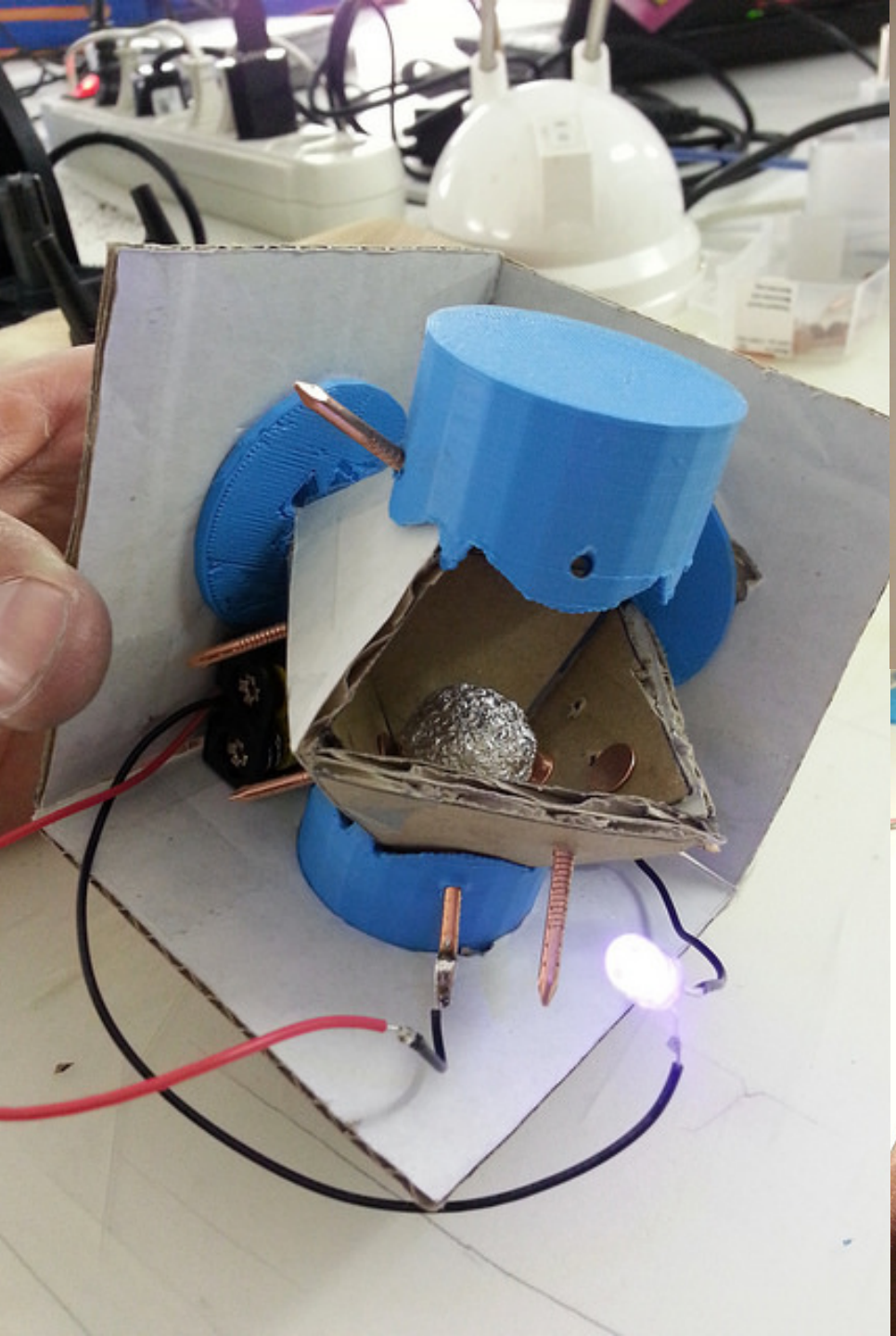


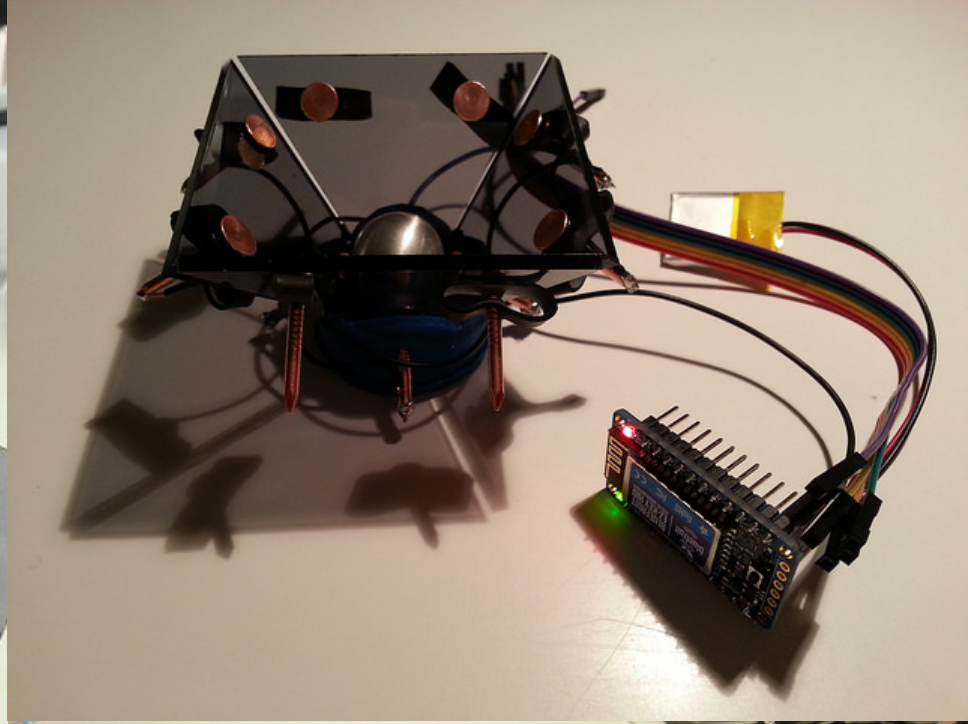
www.seeedstudio.com/depot/WiFi-Serial-
Transceiver-Module-w-ESP8266-p-1994.html (7$)

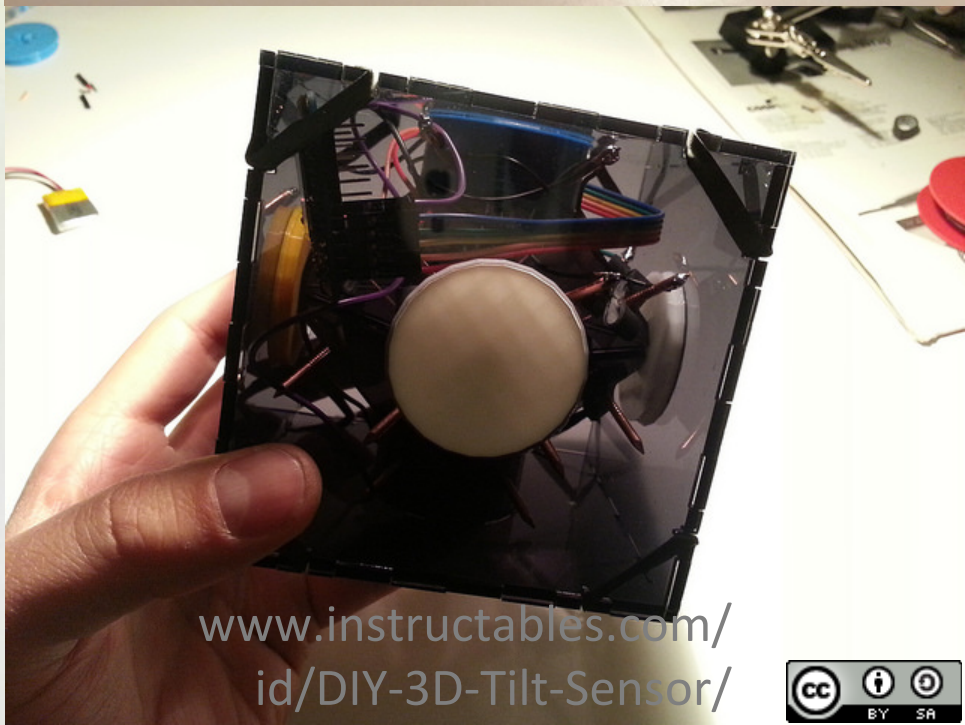
DIY Kits



www.sparkfun.com/products/10334







www.instructables.com/
id/DIY-3D-Tilt-Sensor/

http://www.instructables.com/id/Laser-cut-AirCasting-Sensor/

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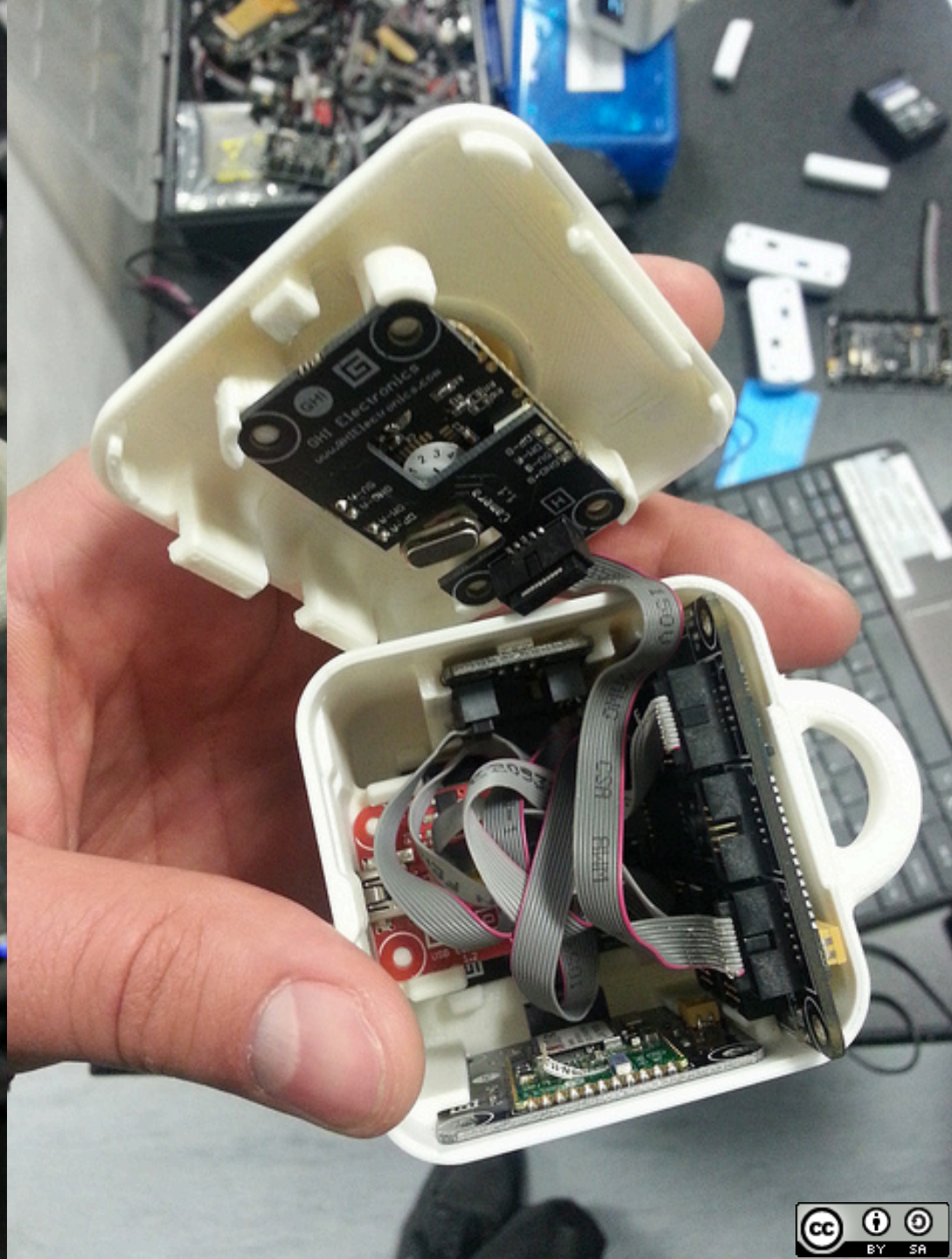

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DIY 3D Tilt Sensor by tamb

www.thingiverse.com/thing:306251

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by tamberg, published Apr 22, 2014

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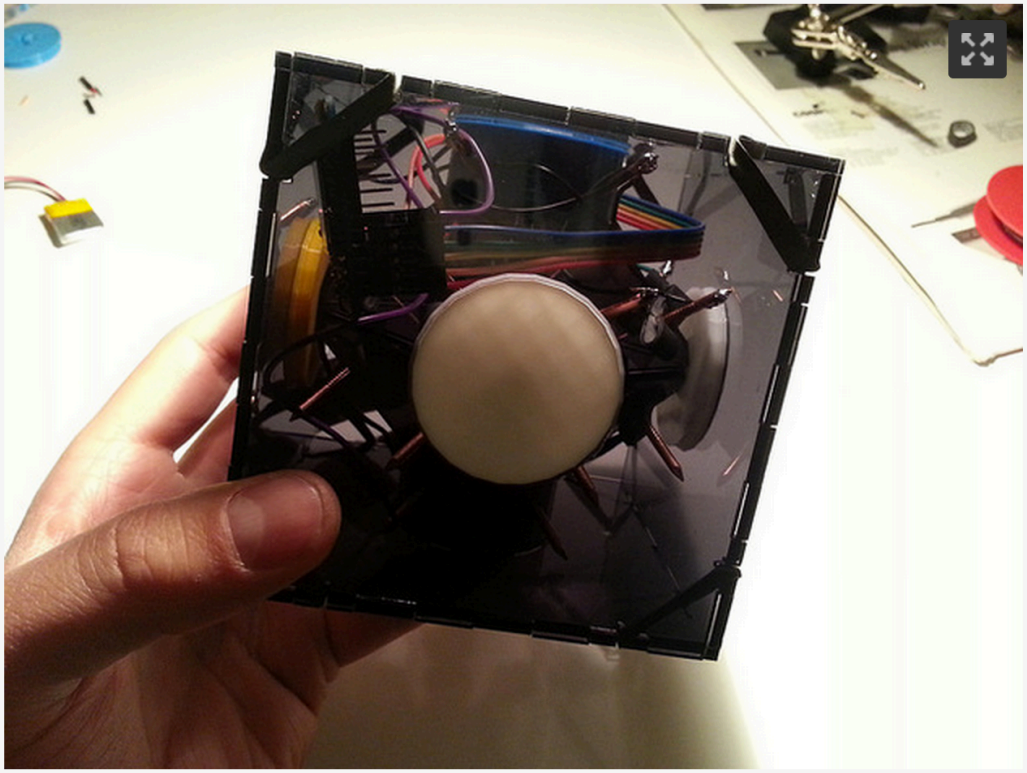

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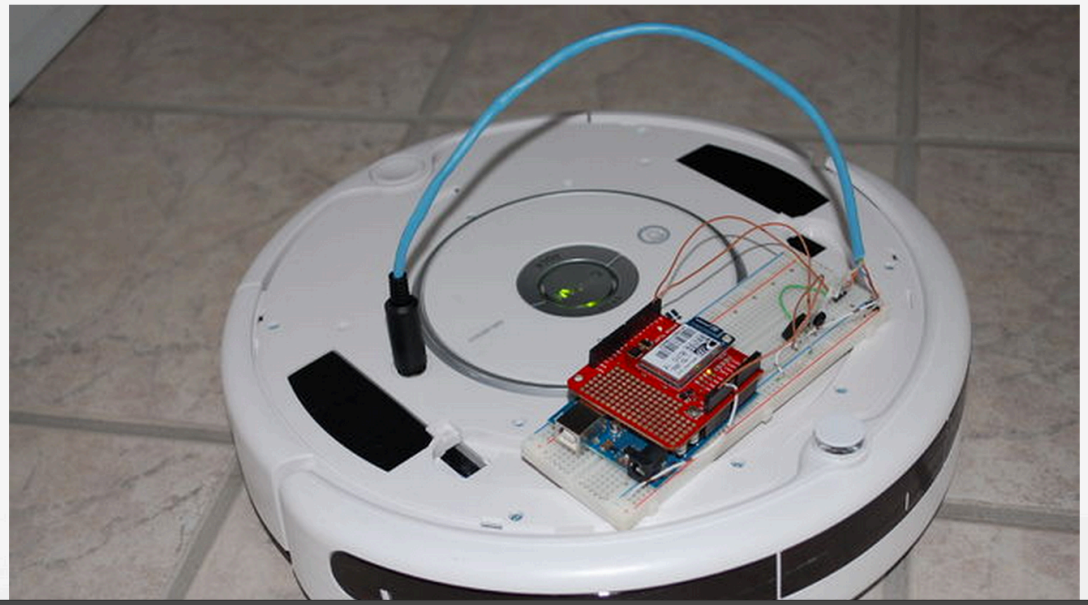

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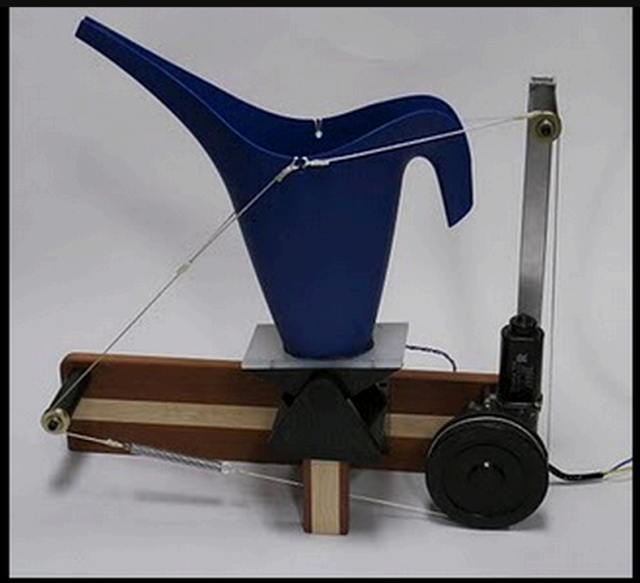

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Feb
14

IoT Zurich

IoT and people

Friday, February 14 at 6:00 PM | 3 Comments

12 Meetups in your groups

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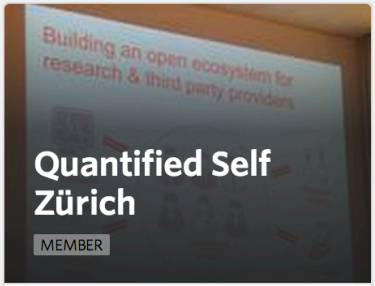
420 Members
Next Meetup: Feb 14

204 Members



152 Self-Quantifiers
Next Meetup: Today

1,406 Zuripreneurs
Next Meetup: Feb 11

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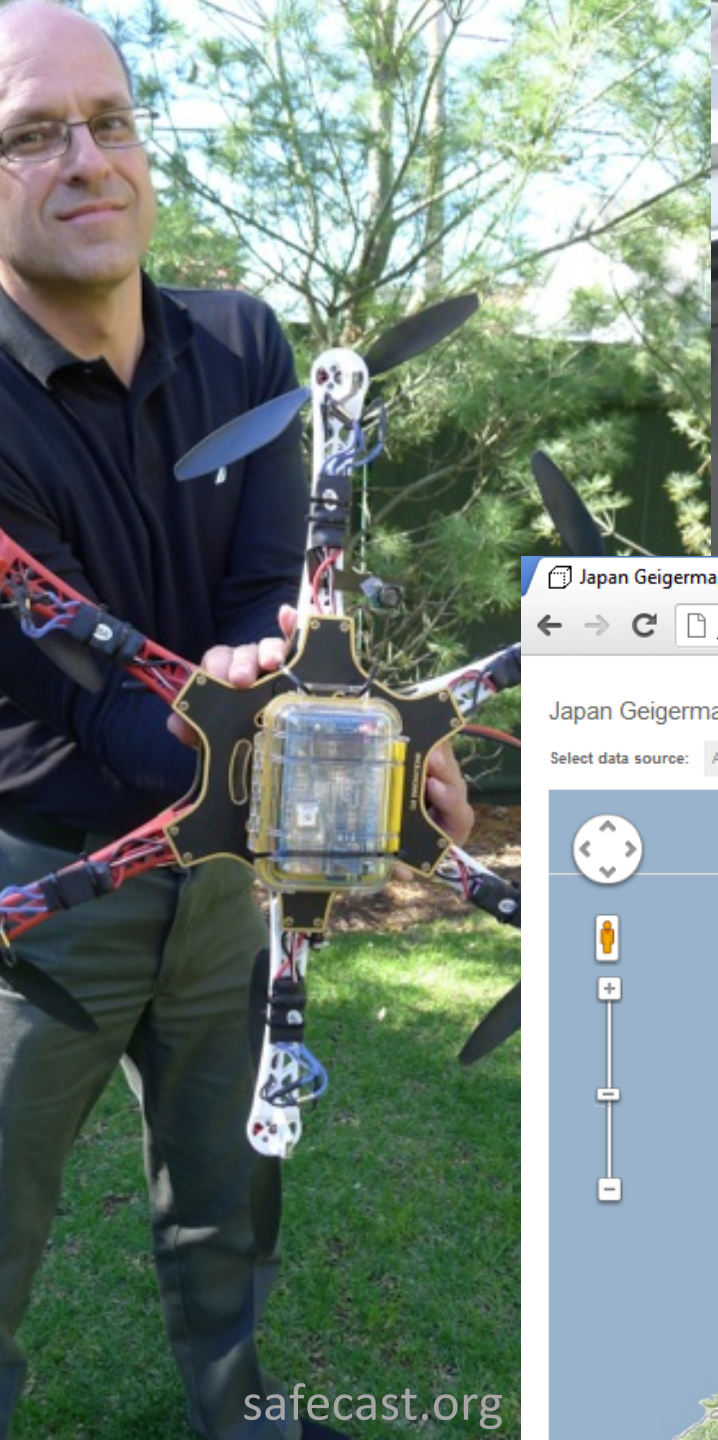

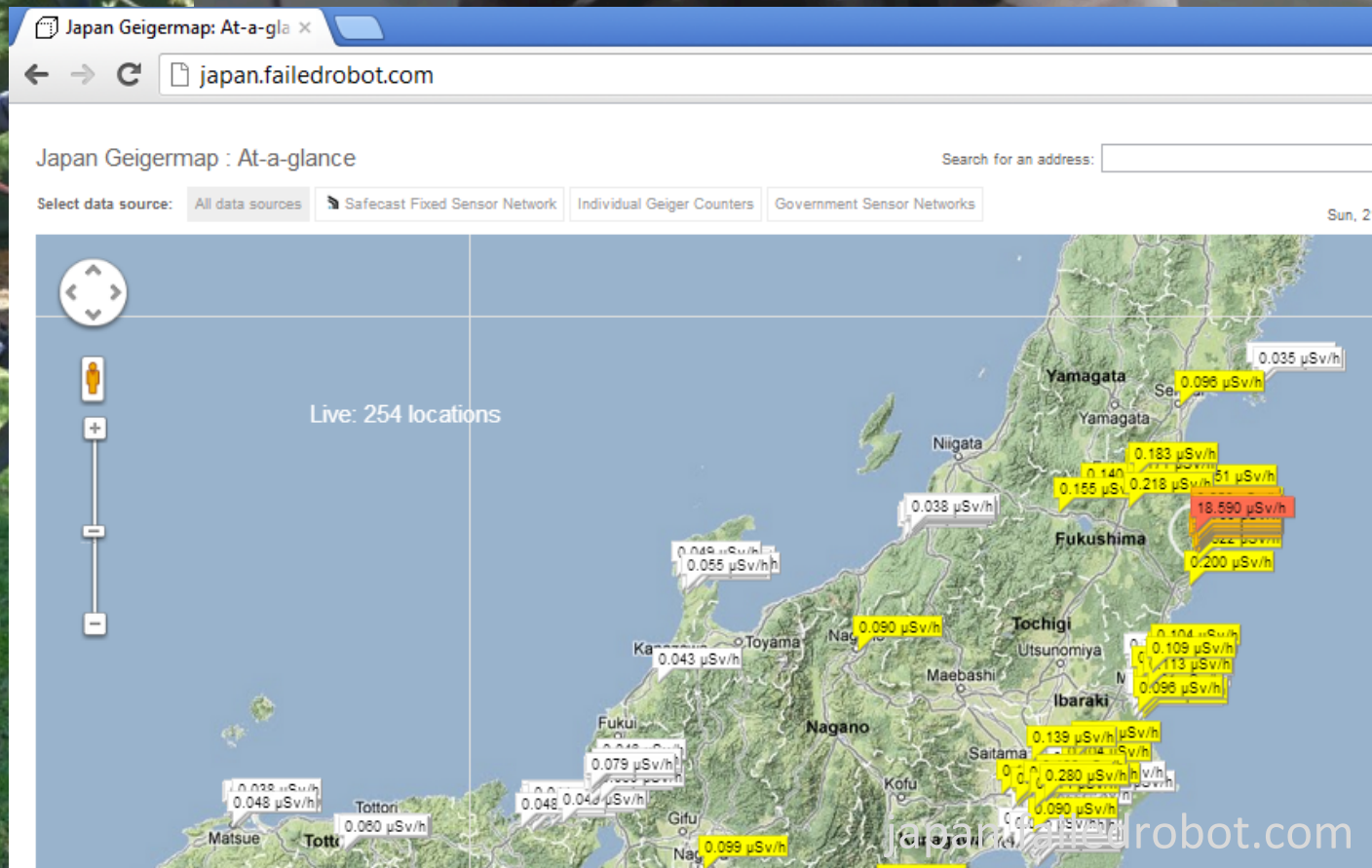

safecast.org
japan.failedrobot.com

oktoberfestofthings.tumblr.com

www.mkroll.mobi

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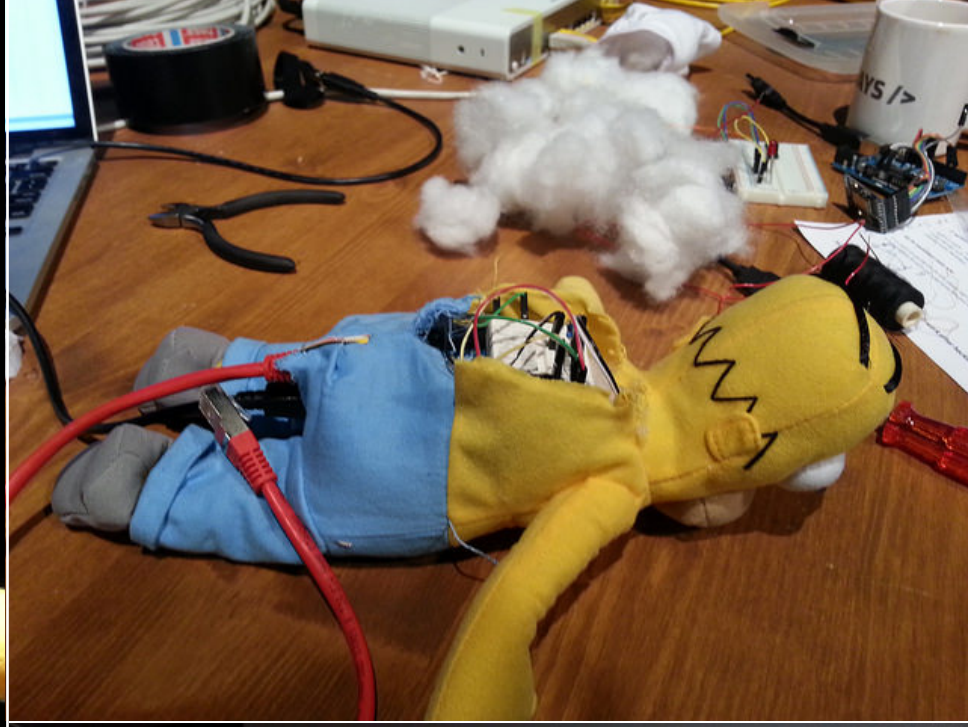

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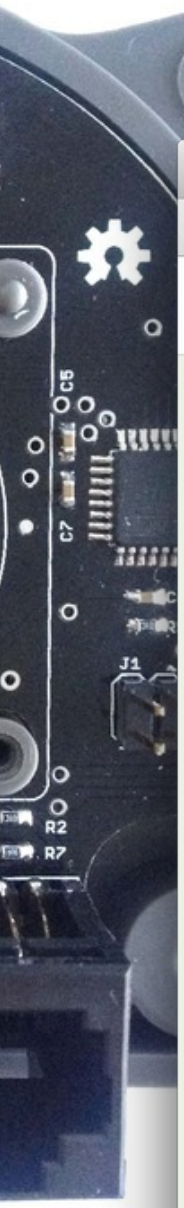

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https://www.kickstarter.com/projects/partyrobotics/bartendro-a-cocktail-dispensing-robot

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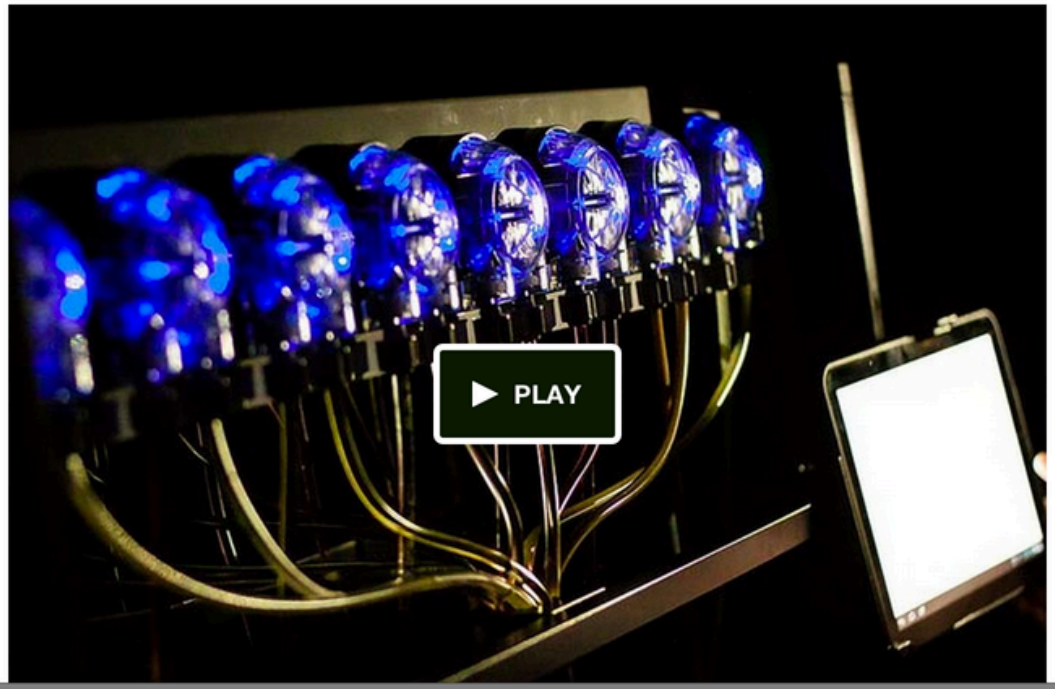

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Project by
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San Luis Obispo, CA
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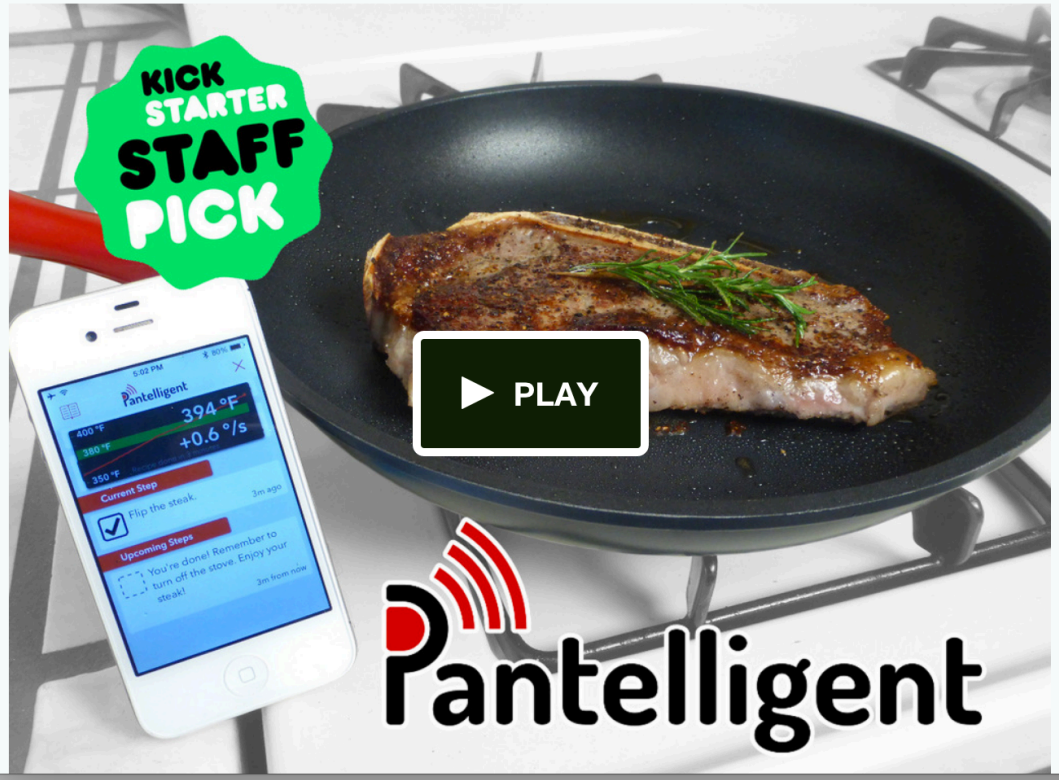
Pantelligent: Intelligent Pan - Cook Everything Perfectly

by **Humberto Evans**



464
backers

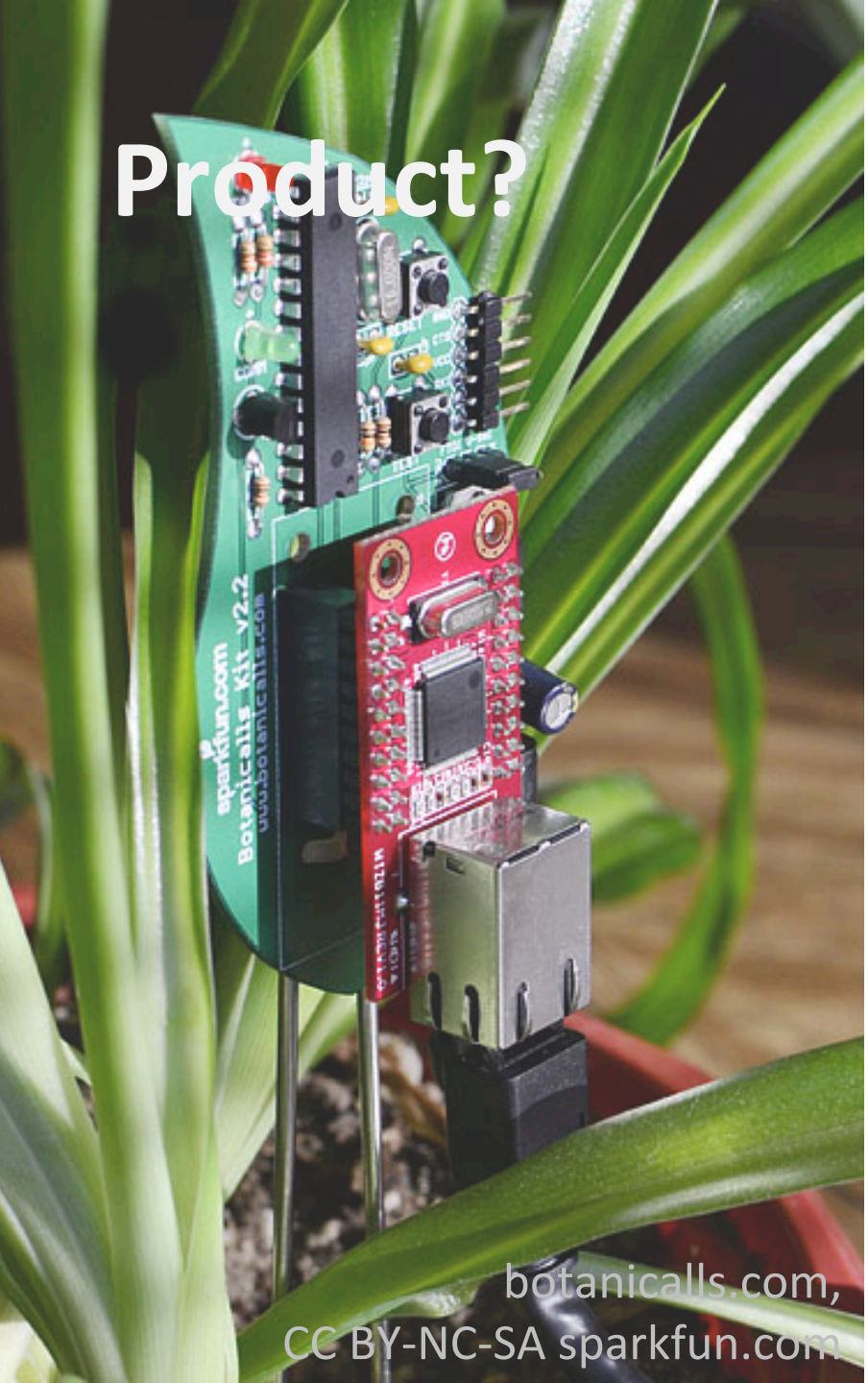
$83,206
pledged of $30,000 goal

0
seconds to go

Funded!

This project was successfully funded on January 6.

Product?



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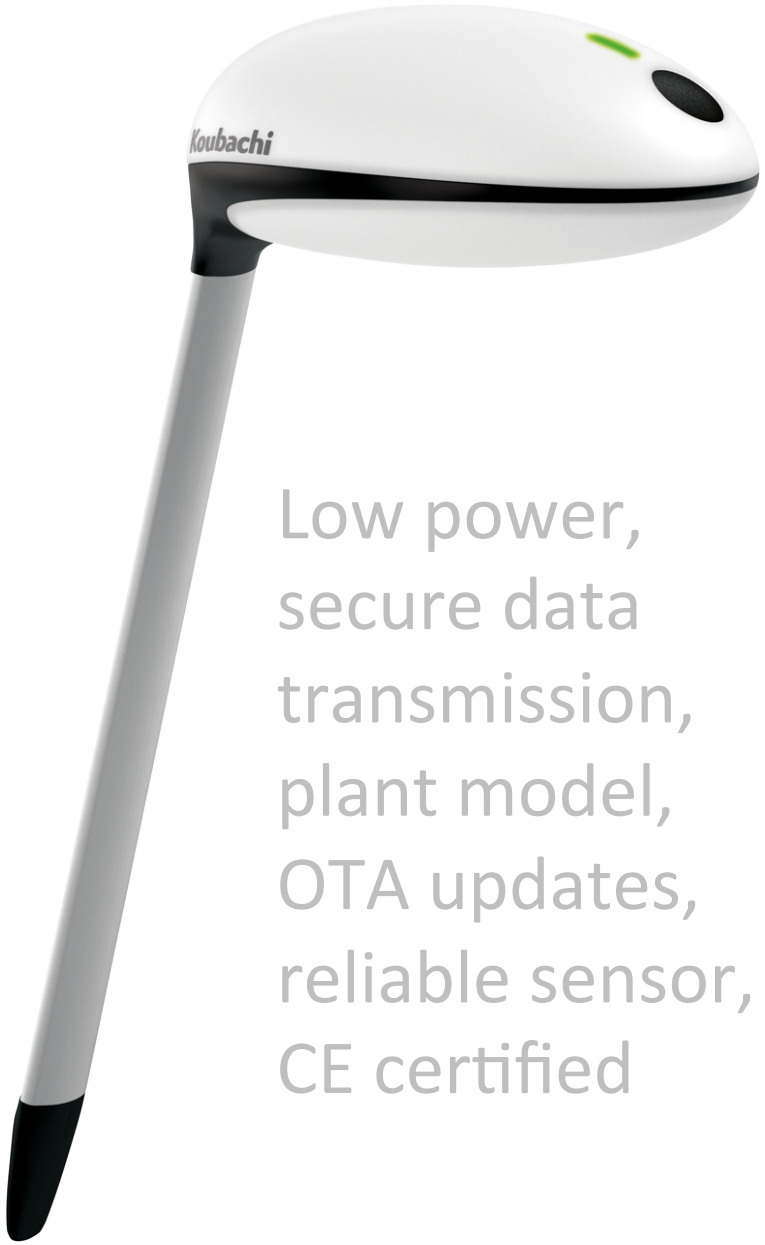

Low power,
secure data
transmission,
plant model,
OTA updates,
reliable sensor,
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Anyone can build a prototype, but manufacturing at scale is a bigger, tougher problem.

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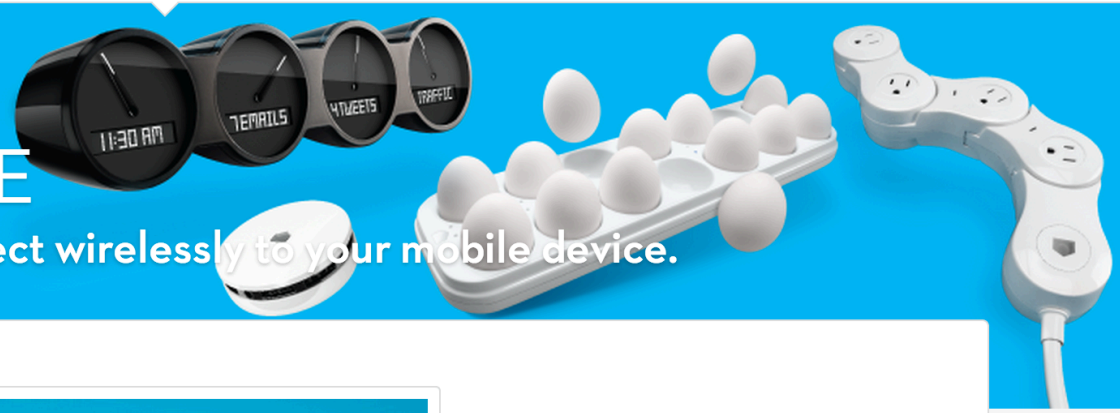
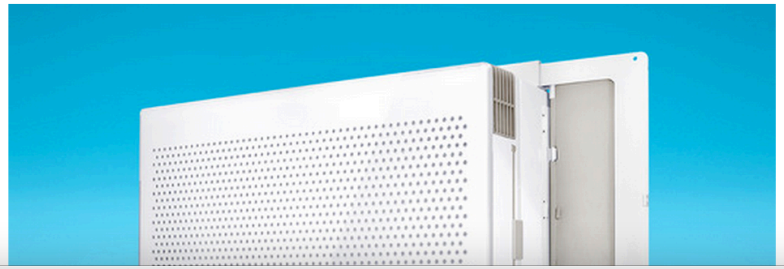
Thomas Amberg



QUIRKY + GE

Inventions that connect wirelessly to your mobile device.



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Smart window A/C

Aros learns from your budget, location, schedule, and usage to

Influence | Quirky

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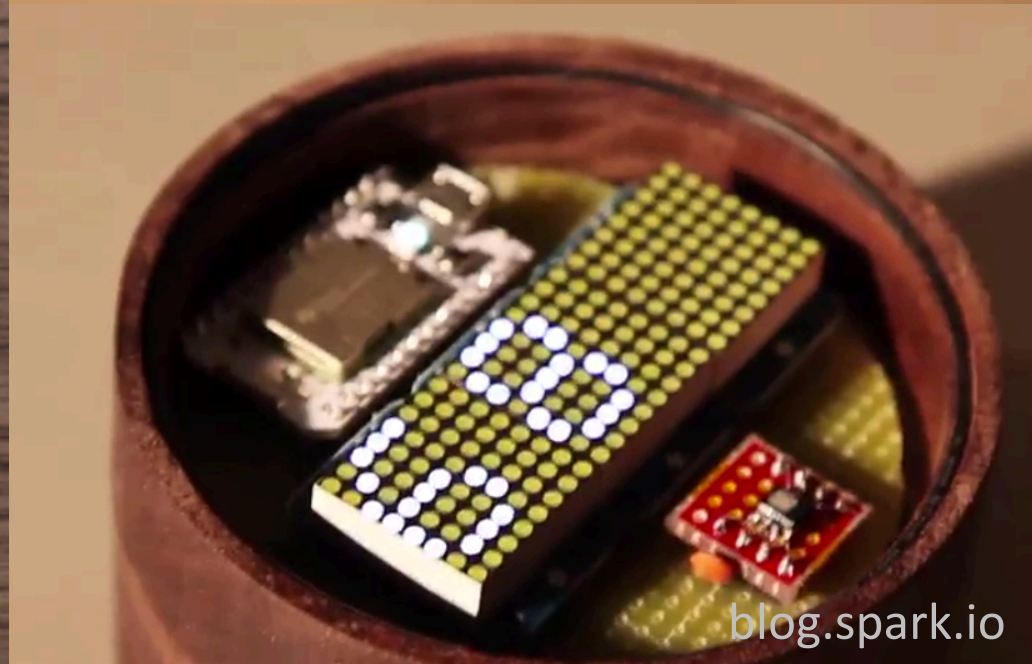
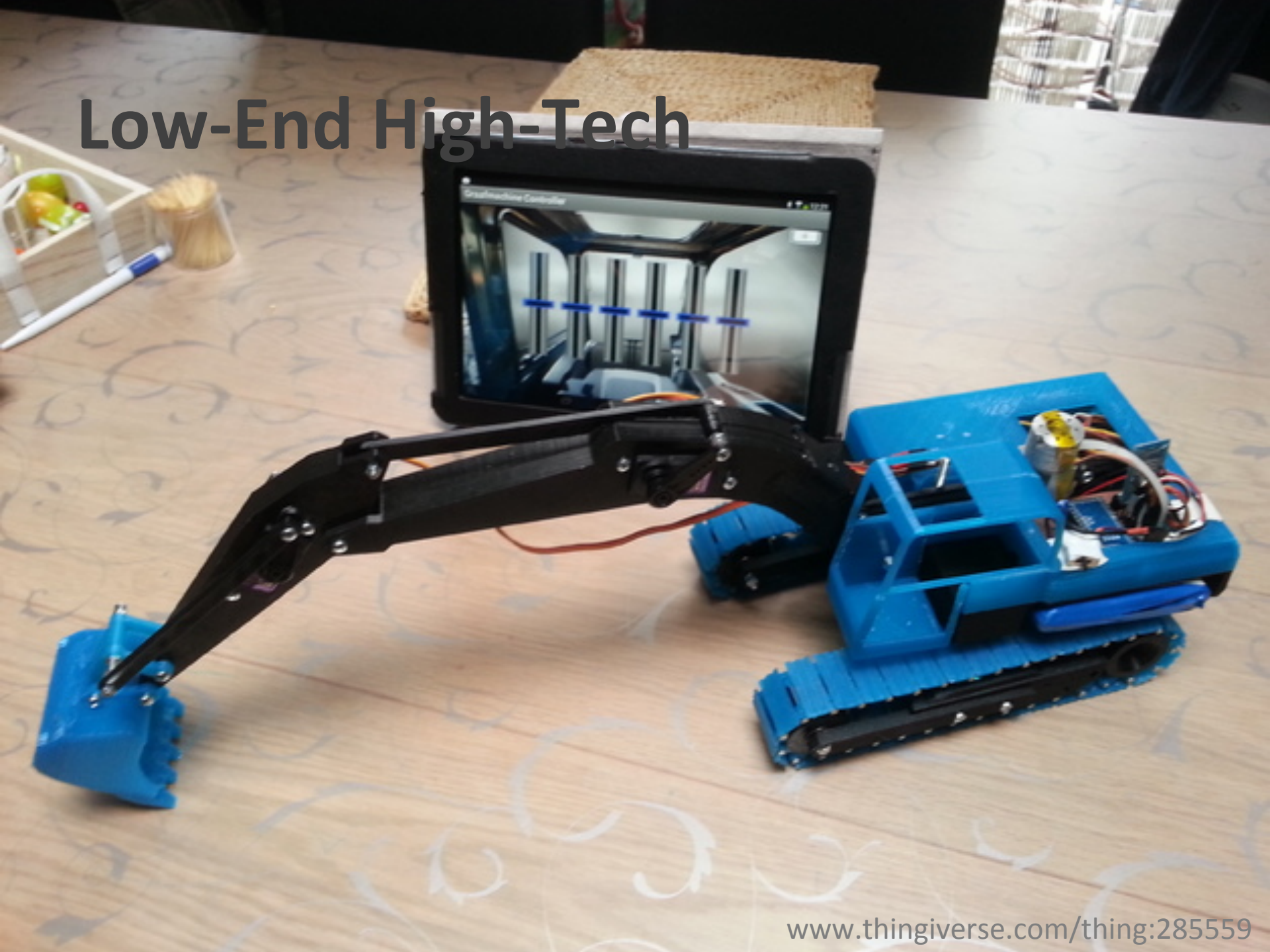


blog.spark.io

Low-End High-Tech



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Epic Struggle

openHAB – empowering th

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openHAB
empowering the smart home

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Developer

Technologies Resources Programs Support Member Center

HomeKit

HomeKit is a new framework for communicating with and controlling connected devices in a user's home. Apps can enable users to discover devices in their home and configure them, or you can create actions to control those

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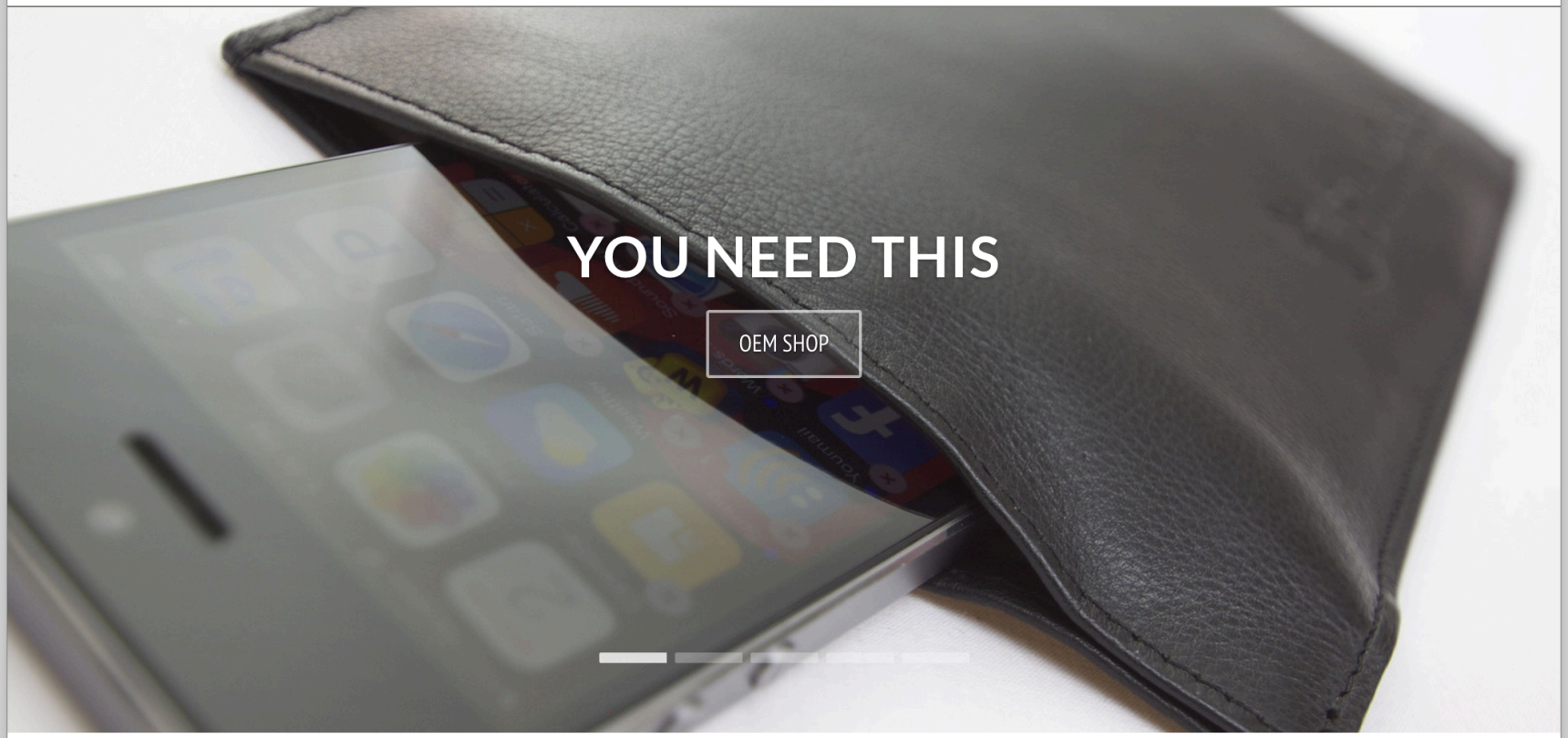

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How can we help?

Beacon Zone - Zones

https://beaconzone.io/de_DE/page/zones

Das Pilotprojekt

Fakten | Zahlen | Ziele

#WiedikonValley

Sprung in die Gegenwart

Wiedikon ist im Wandel und voll von scheinbaren Widersprüchen. Höchste Zeit, den Schmelztiegel von Tradition und Moderne im Herzen von Zürich zu entdecken: **#Start-up #KMU #Smart**

Digito ergo sum

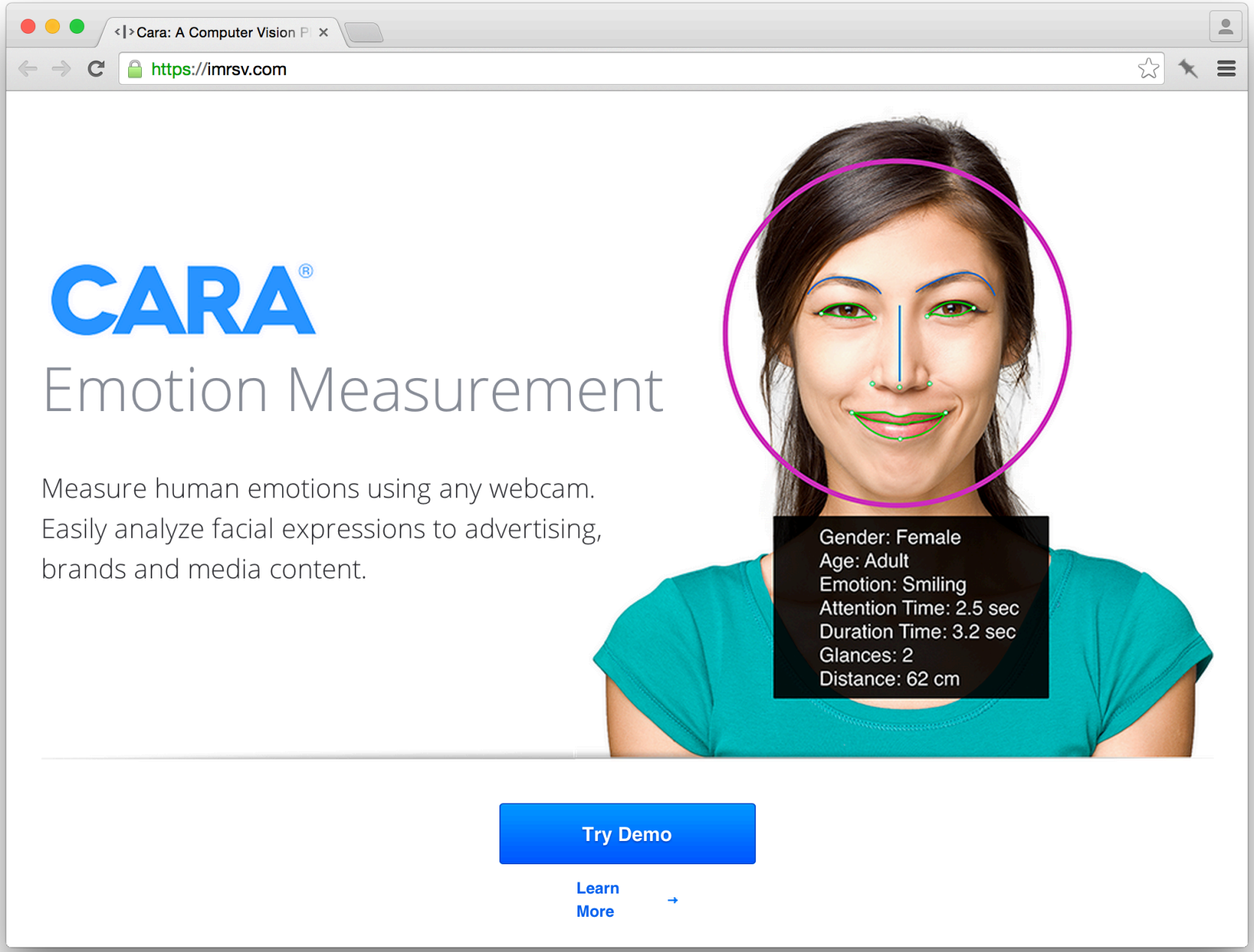
Smartphones erreichen Menschen

4.3 Millionen Menschen in der Schweiz verlassen sich auf ihre Smartphones als ständige Begleiter. **Projektthese:** wenn etwas auf dem Smartphone stattfindet, wird es in der "Realität" oft erst

BeaconZone

20 Pioniere gestalten den Wandel

iBeacons sind die Vorboten des Internets der Dinge oder eine Brücke vom physischen in den digitalen Raum. 20 Geschäfte in Wiedikon verbinden sich mit Bluetooth-Sendern und einer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CARA®
Emotion Measurement
Measure human emotions using any webcam.
Easily analyze facial expressions to advertising,
brands and media content.
Gender: Female
Age: Adult
Emotion: Smiling
Attention Time: 2.5 sec
Duration Time: 3.2 sec
Glances: 2
Distance: 62 cm
Try Demo
Learn More →

SceneTap | View Age, Crow

https://scenetap.com

SceneTap

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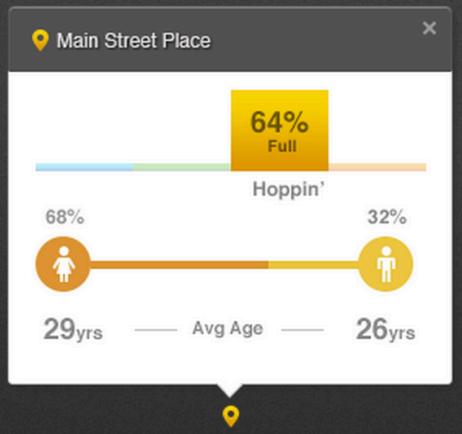
SceneTap lets you check out the scene in real-time.



What is SceneTap?

With the tap of a button, view information on how many people are at a place, the male to female ratio, and the average age of everyone inside.

Start using desktop app

Download mobile app

Learn more about SceneTap here

Mehr zum Thema

Danke.

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