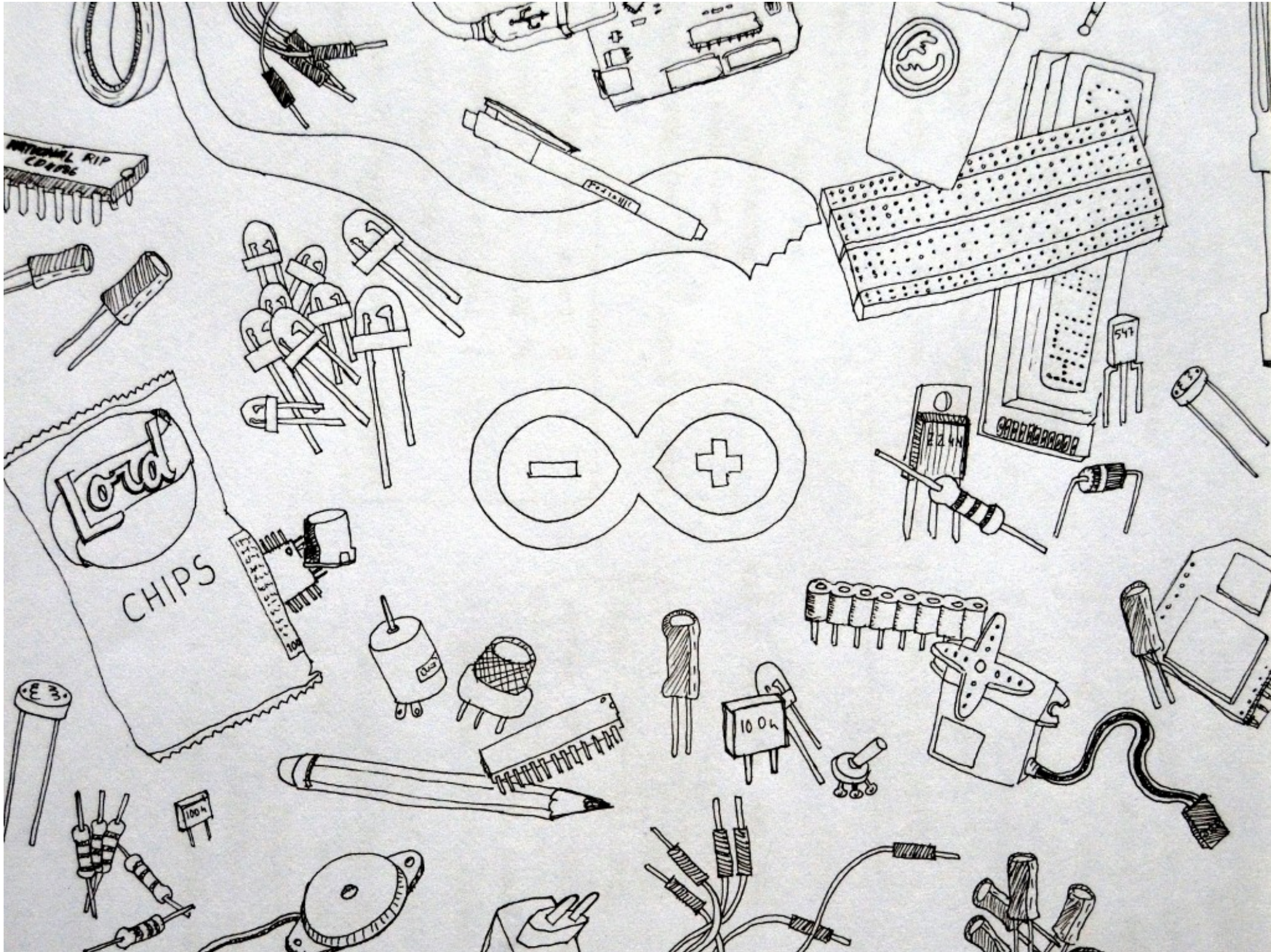
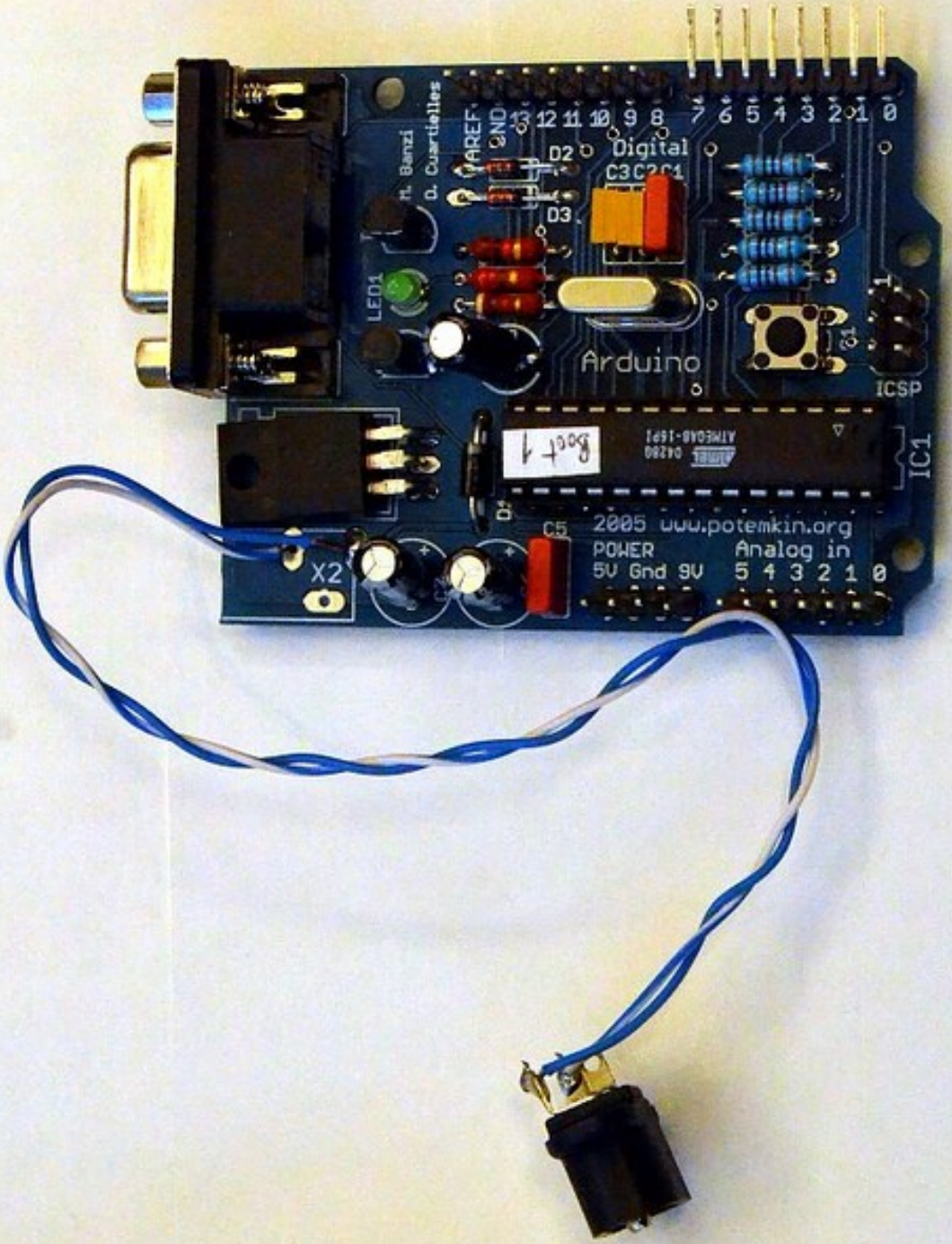
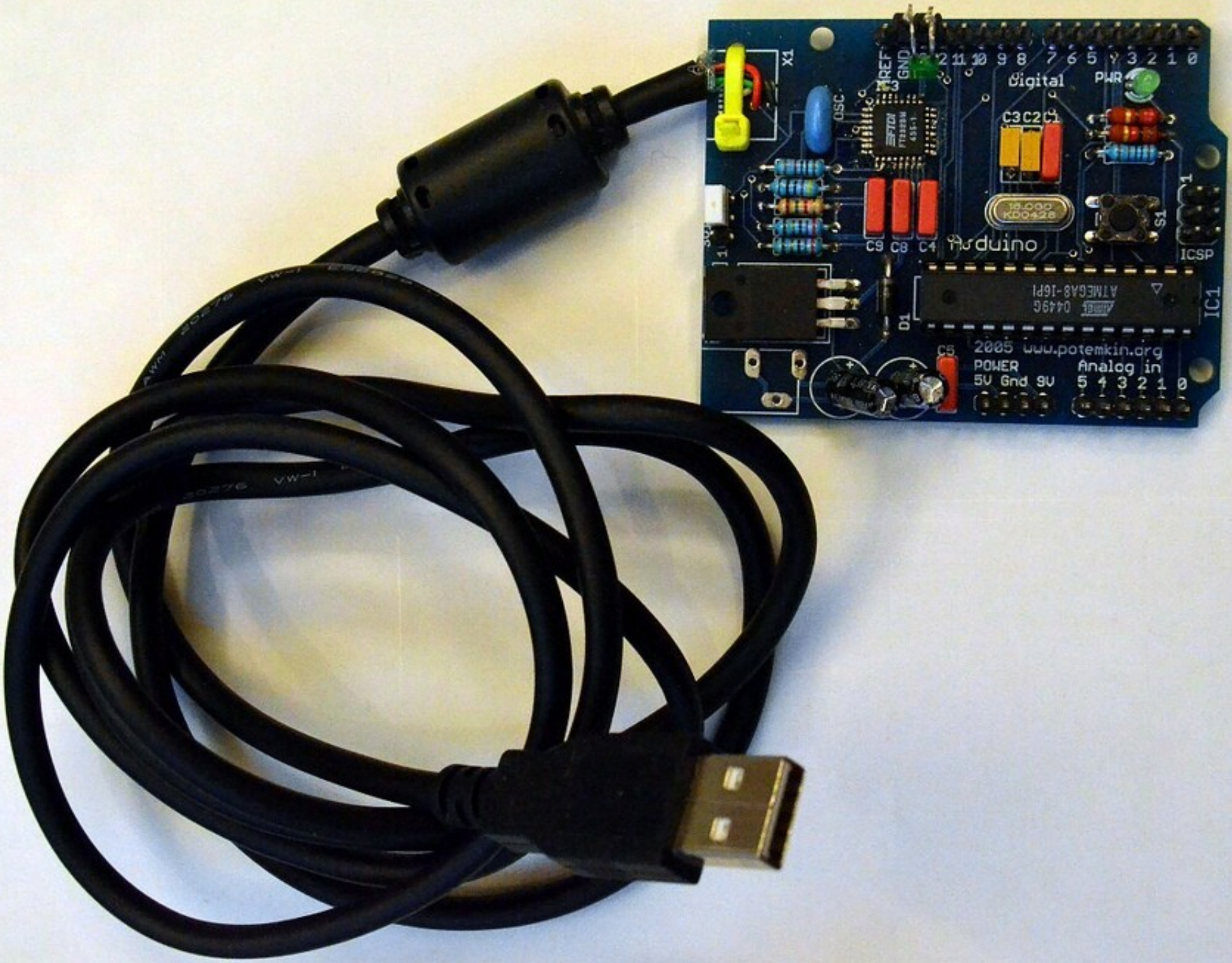

Lord
CHIPS

DISCLAIMER

do NOT try to make the things you'll see in the show without help from an adult, ask a professor, a senior fellow or your granddad

do NOT use this for medical applications, do not lick batteries, do not put your wet fingers into power-plugs, not swallow parts, wires are not candy…

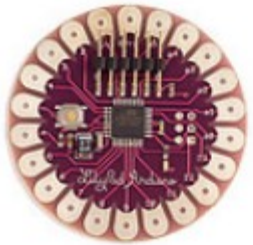

M. Banzi
D. Cuartielles
AREF
GND
13 12 11 10 9 8
7 6 5 4 3 2 1 0
Digital
D2
D3
C3 C2 C1
LED1
Arduino
ICSP
IC1
C5
2005 www.potemkin.org
POWER
Analog in
5V Gnd 9V
5 4 3 2 1 0
X2


AREF
GND
Digital
PWR
ICSP
2005 www.potemkin.org
POWER
Analog in


UNO
ARDUINO
DIGITAL (PWM~)

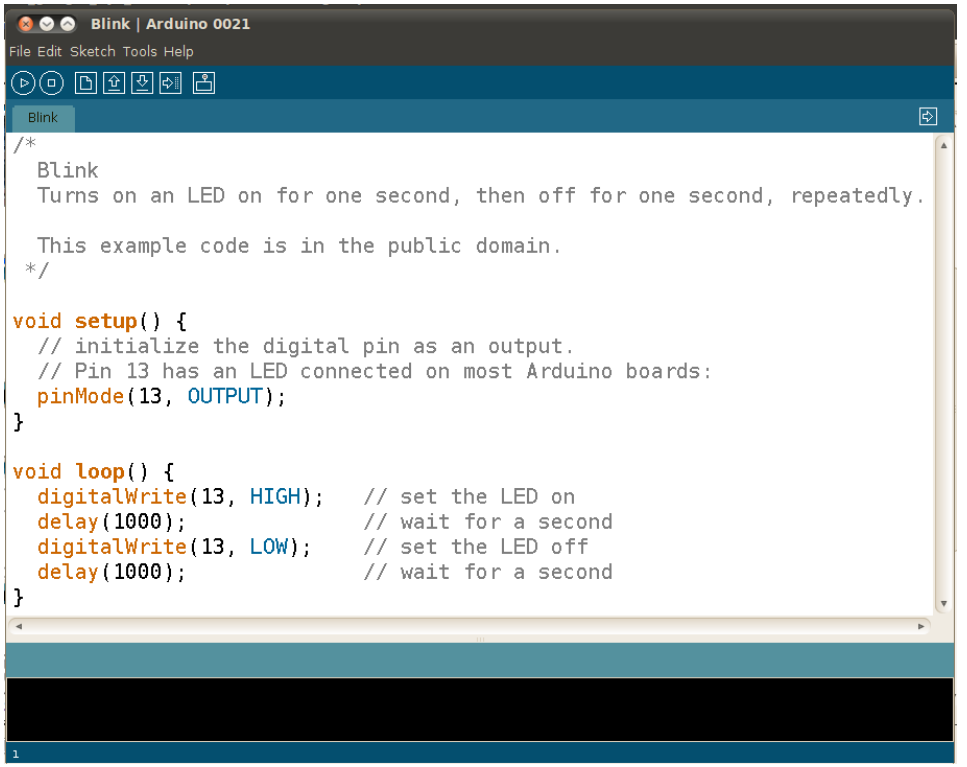

UNO

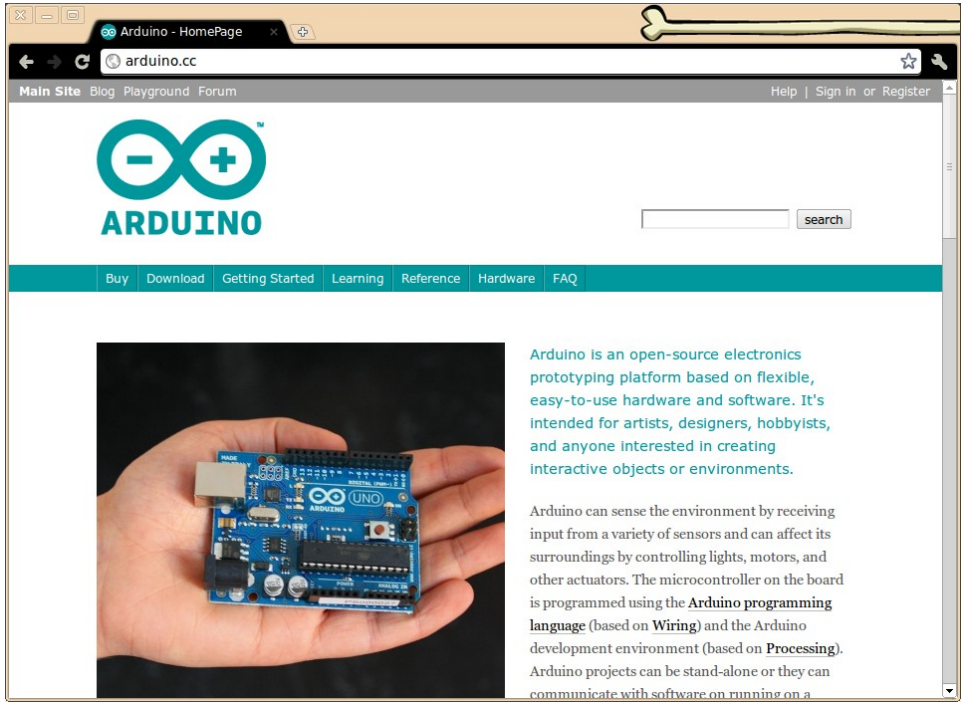

MEGA




XBee


tinkerit





Community

ARDUINO™

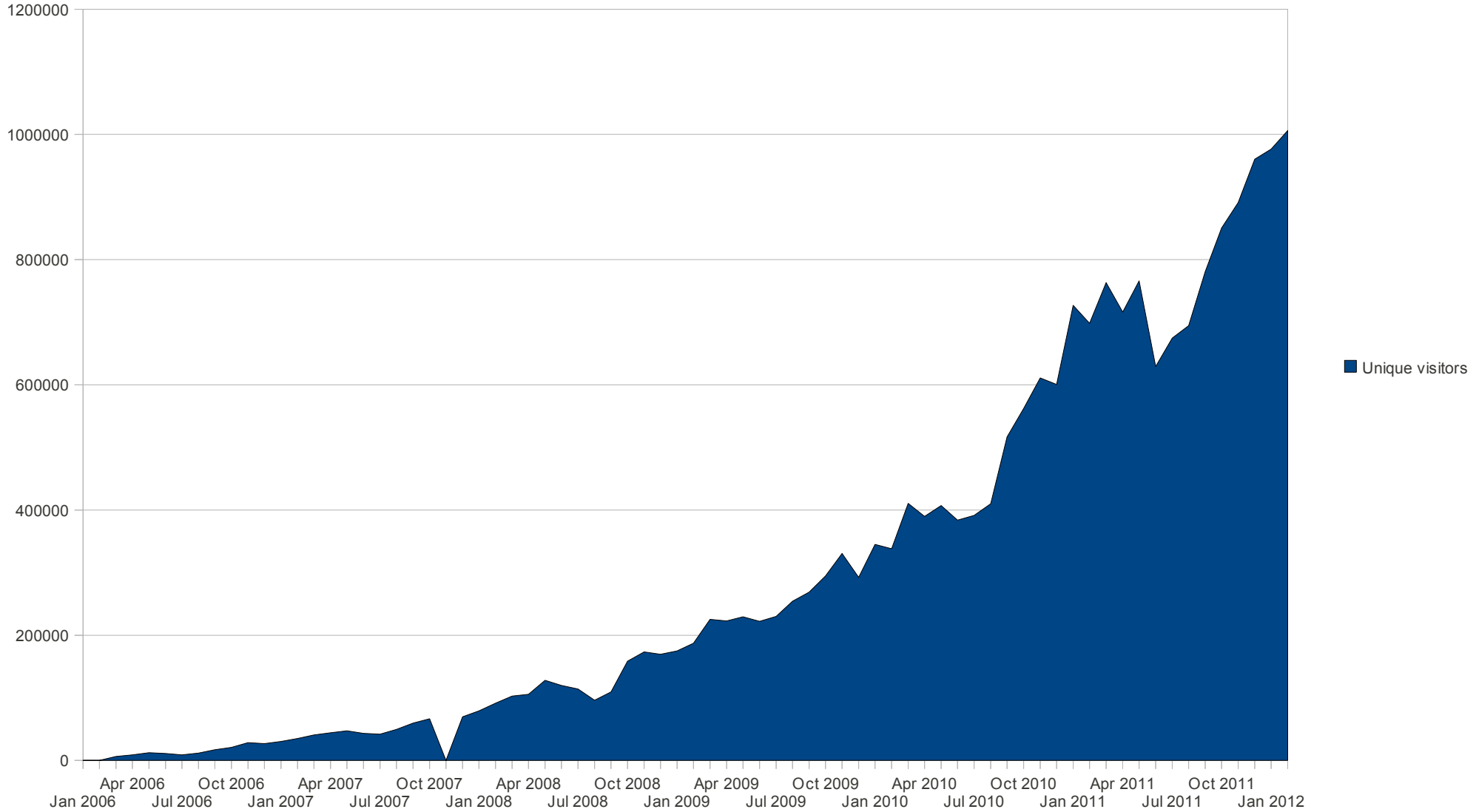
And this adds up to ...

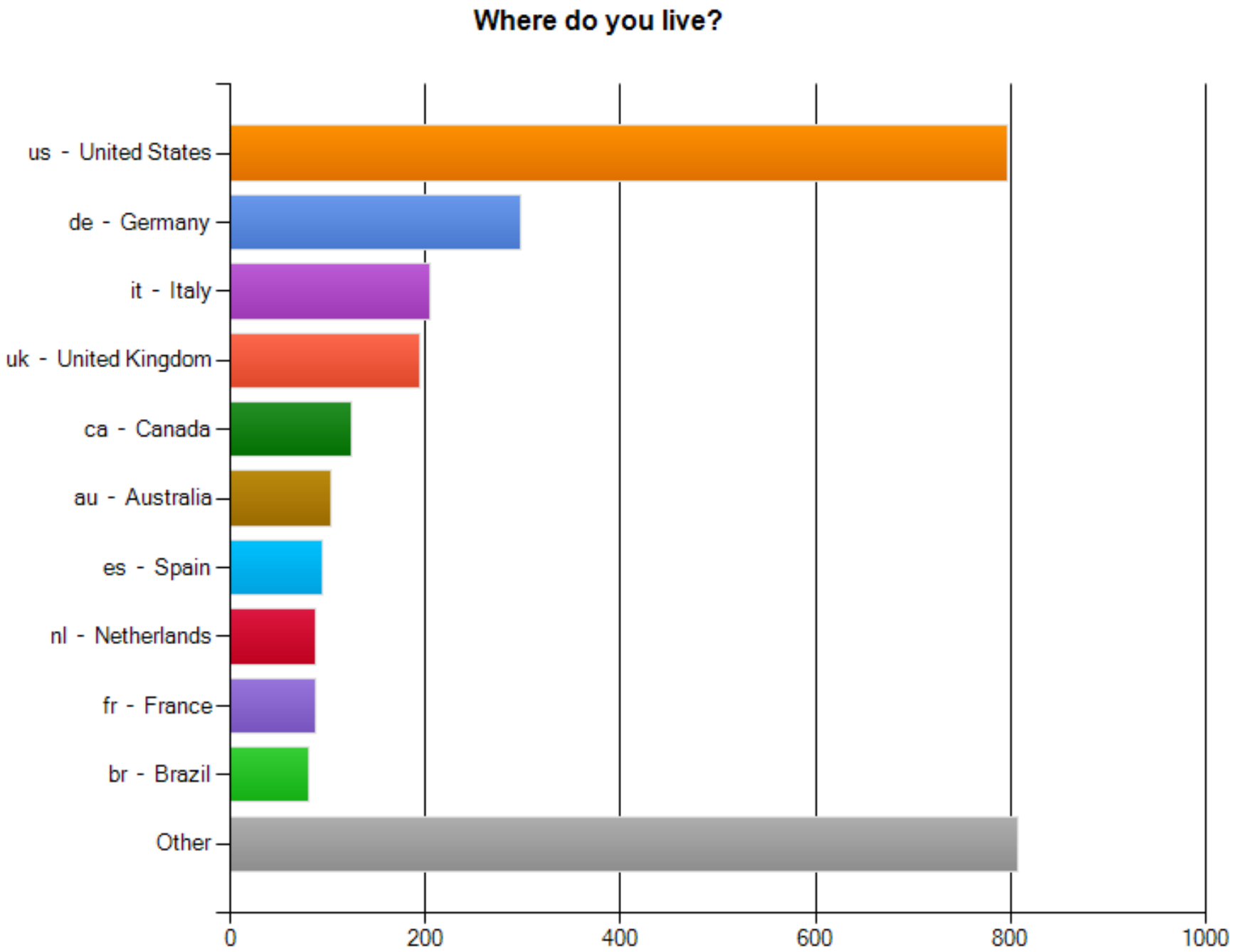
450.000 units

between Sept 2005 and Mar 2012

Arduino Web Stats

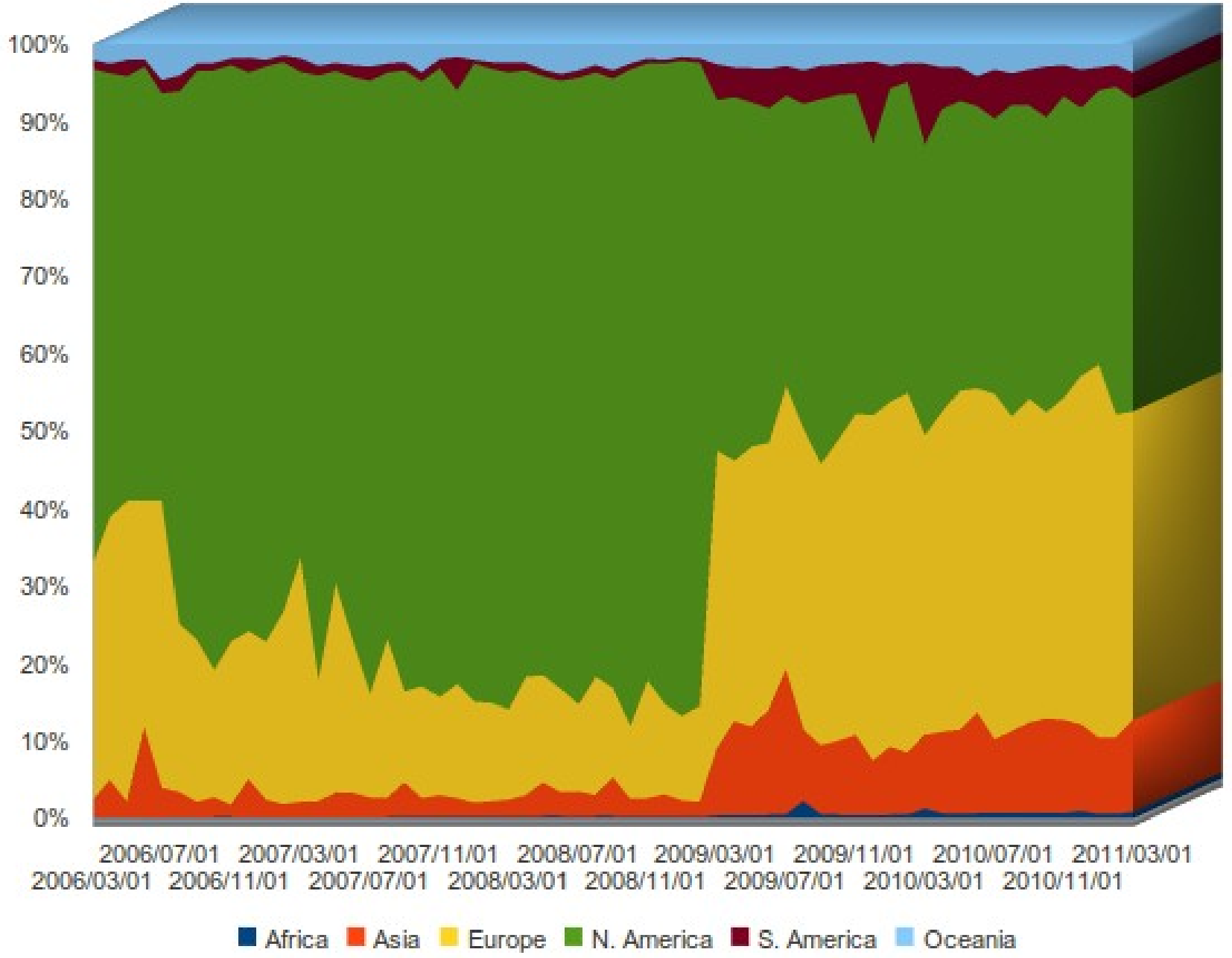
Unique IPs 2006-2012




Where do you live?
us - United States
de - Germany
it - Italy
uk - United Kingdom
ca - Canada
au - Australia
es - Spain
nl - Netherlands
fr - France
br - Brazil
Other
0
200
400
600
800
1000

Percentage distribution users by month

arduino.cc 2006/03 - 2011/03



Arduino user:

1) male 20 - 40

2) interest in technology

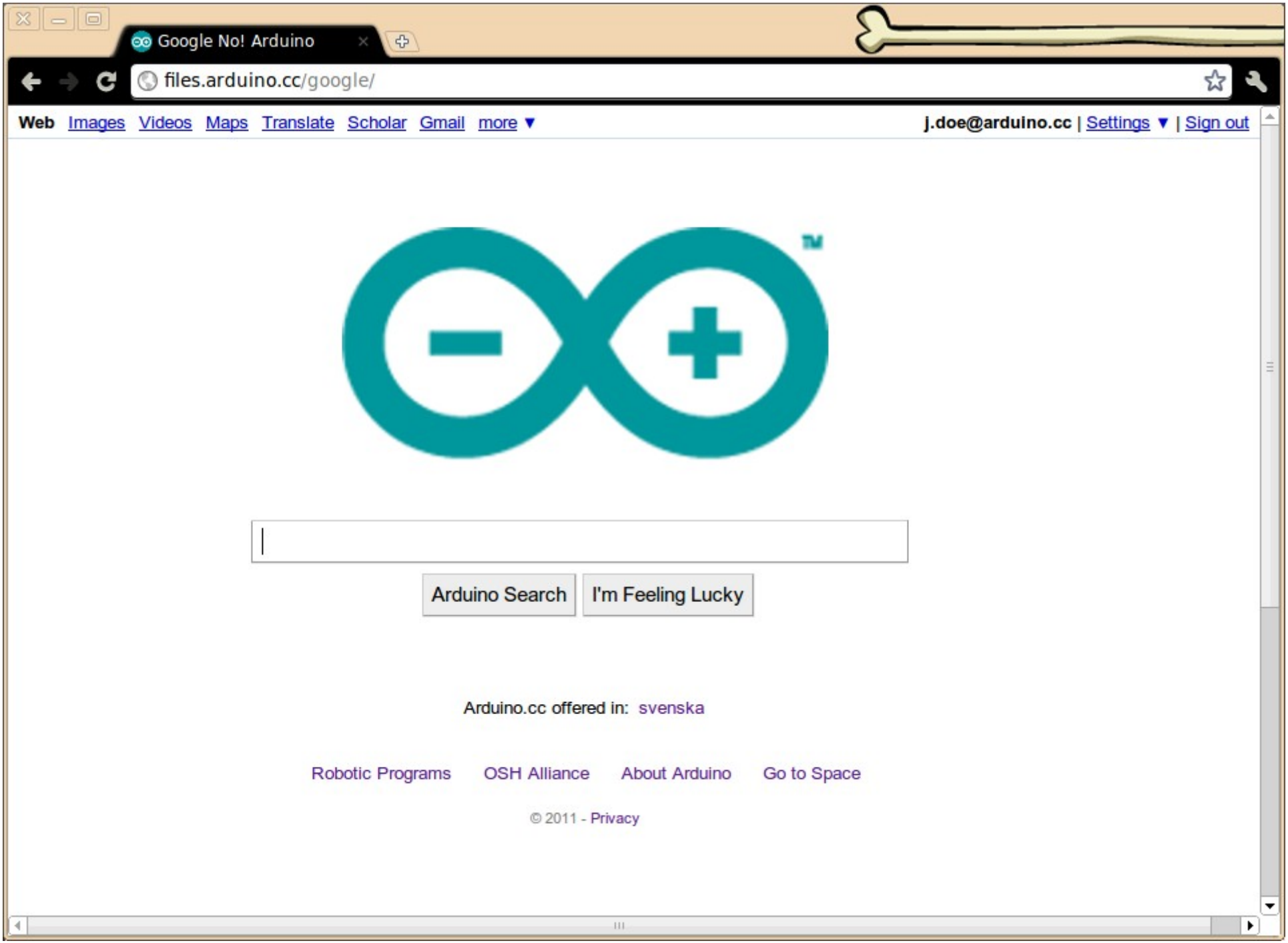
3) windows user but with Firefox

4) without prior experience in digital electronics

5) with some experience in software

6) with internet connection

7) likes google a lot


Google No! Arduino
files.arduino.cc/google/
Web Images Videos Maps Translate Scholar Gmail more ▼
j.doe@arduino.cc | Settings ▼ | Sign out
Arduino Search
I'm Feeling Lucky
Arduino.cc offered in: svenska
Robotic Programs
OSH Alliance
About Arduino
Go to Space
© 2011 - Privacy

What is that people do?

1) learning

2) information systems

3) having fun

4) robots

5) art installations

6) music

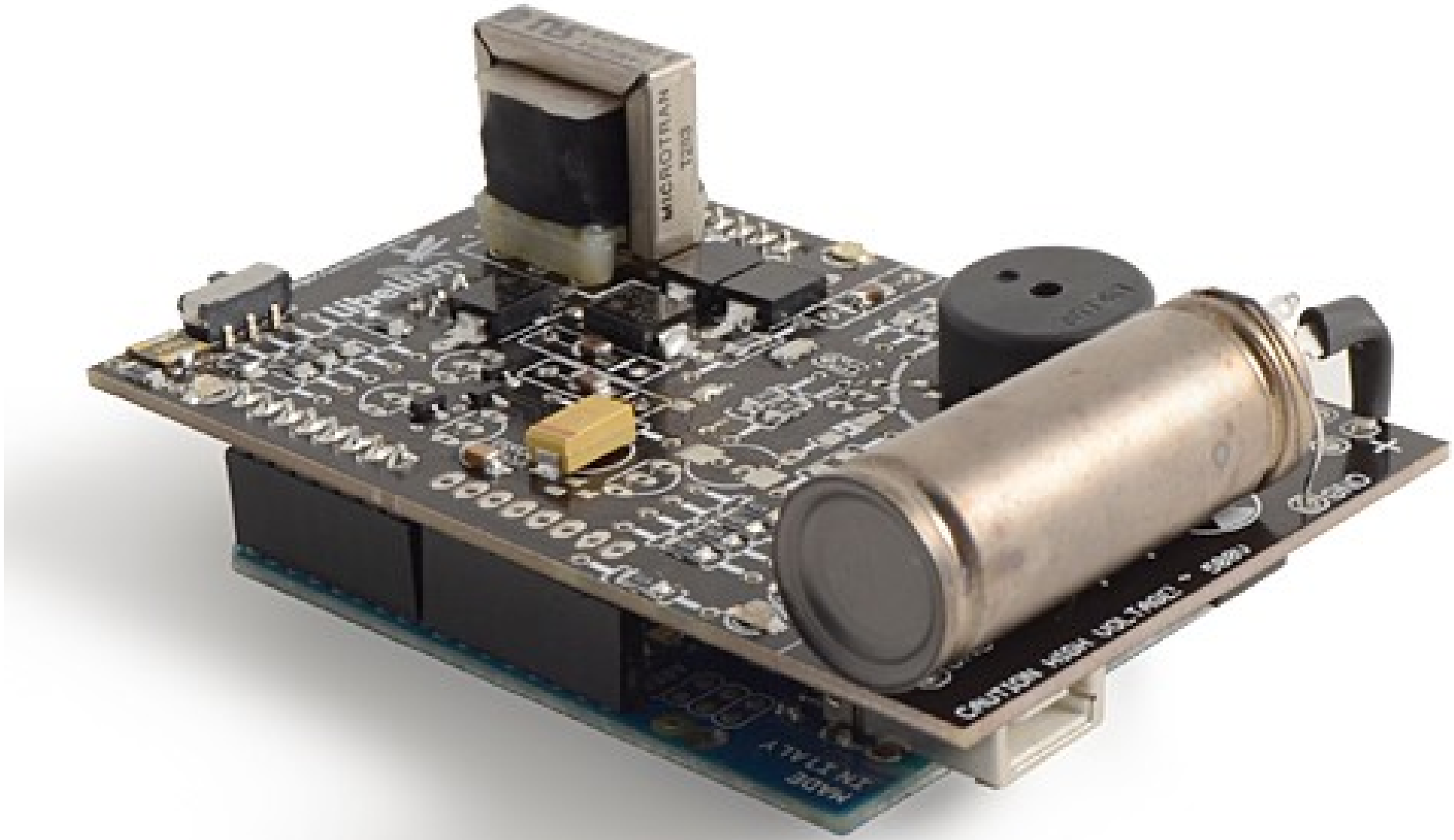
7) wireless sensor networks

source: *K3 - 2005*

source: *K3 - 2005*

https://twitter.com/#!/alarmasismos

source: *Sebastian, Chile - 2011*



source: *Libelium - 2011*

Japan Geigermap : At-a-glance

Search for an address: Search

Select data source: All data sources | Safecast Fixed Sensor Network | Individual Geiger Counters | Government Sensor Networks

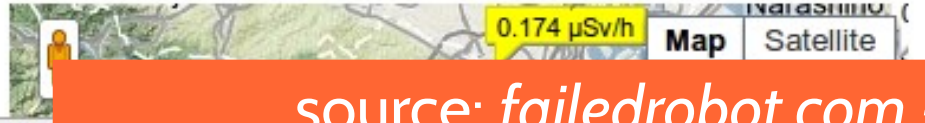
Most recent reading:
Thu, 22 Mar 2012 08:18:09 GMT

日本語 | Eng

This map v
sourced ra
counter re
Japan. Cli
get more i
source of

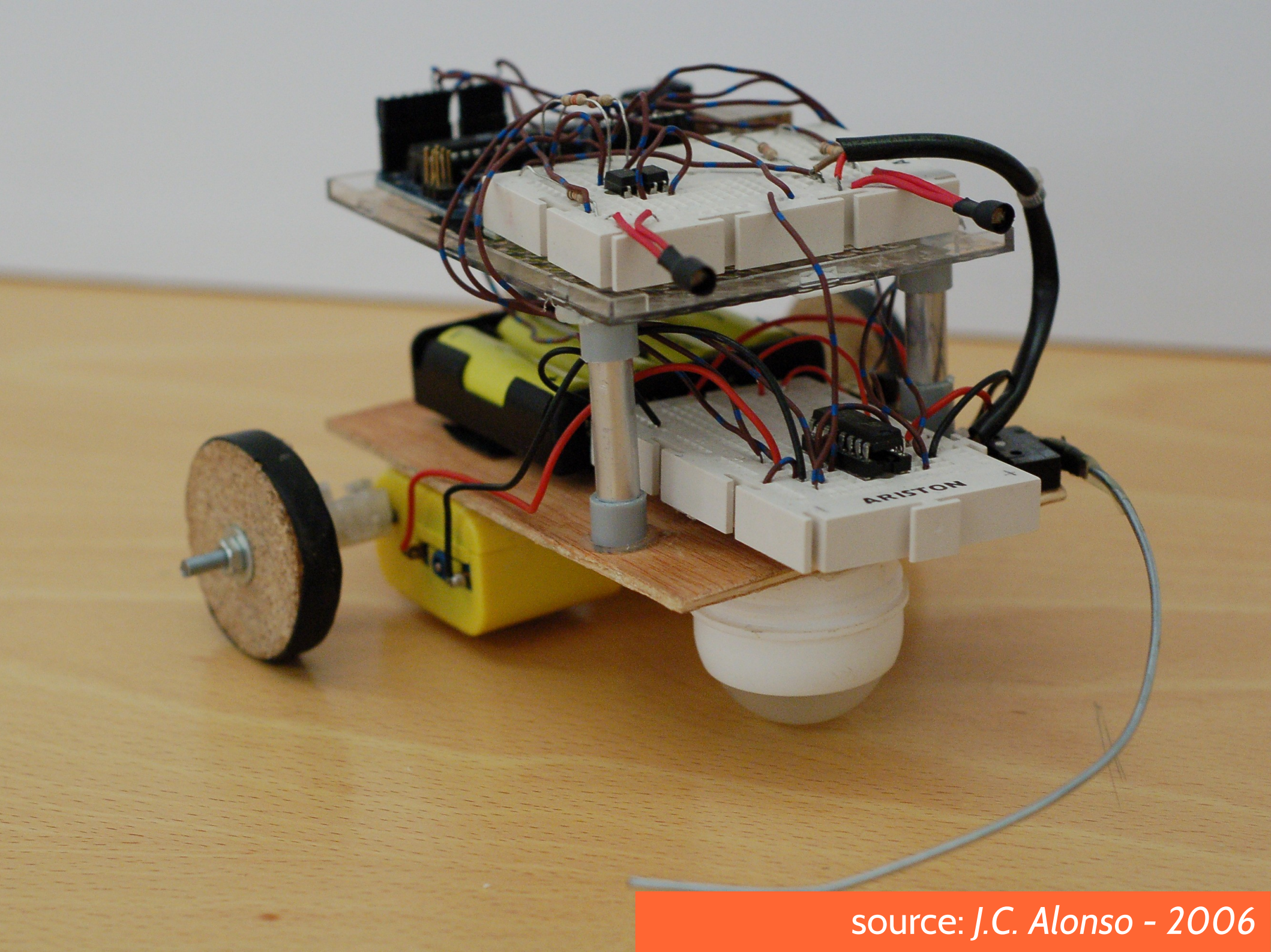
The numbe
fluctuate d
the data fe
approxima
the official
governmen
the rest ar
such as th
universitie
concerned

Readings
Pachube h

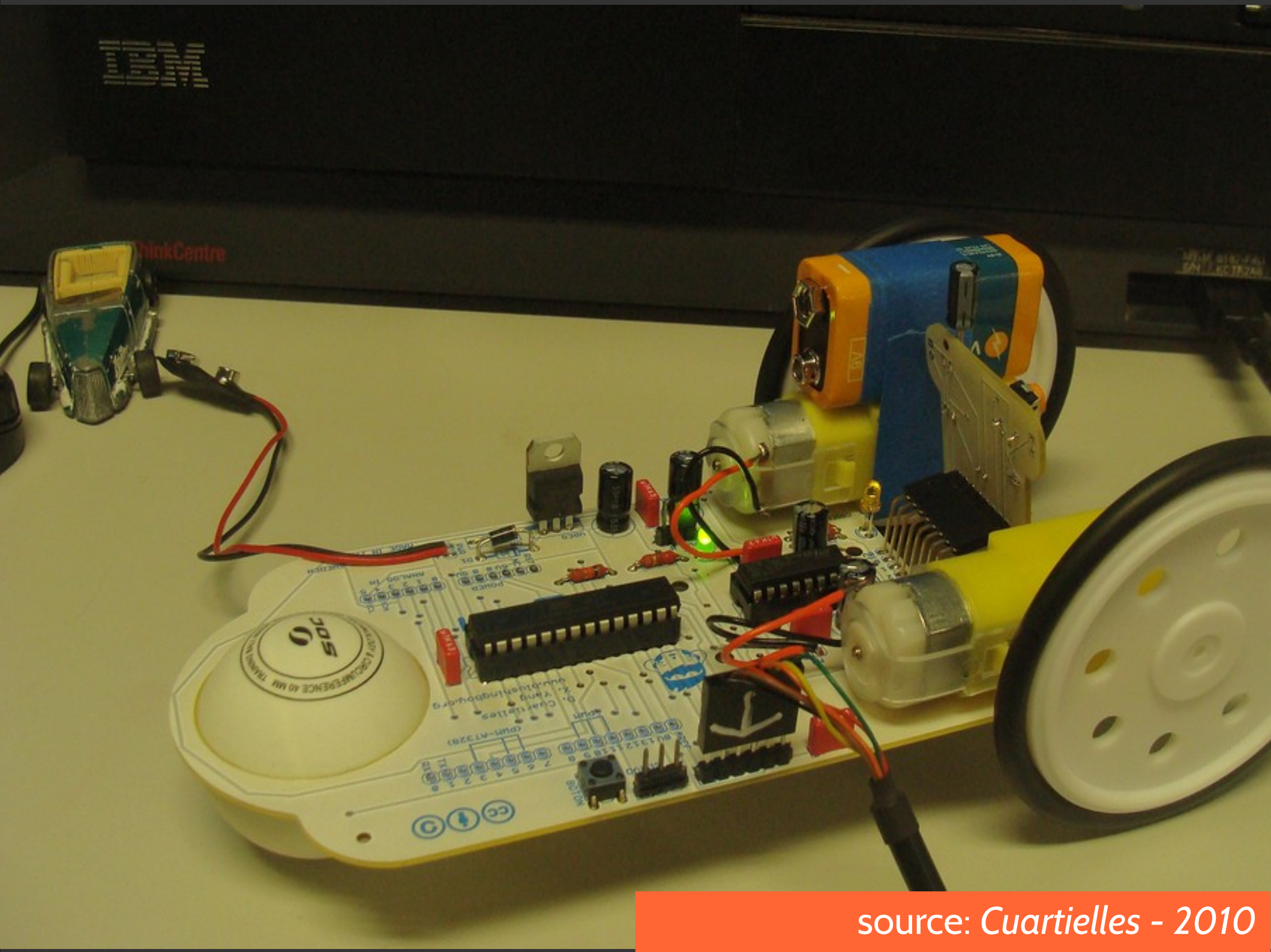


source: *failedrobot.com - 2012*

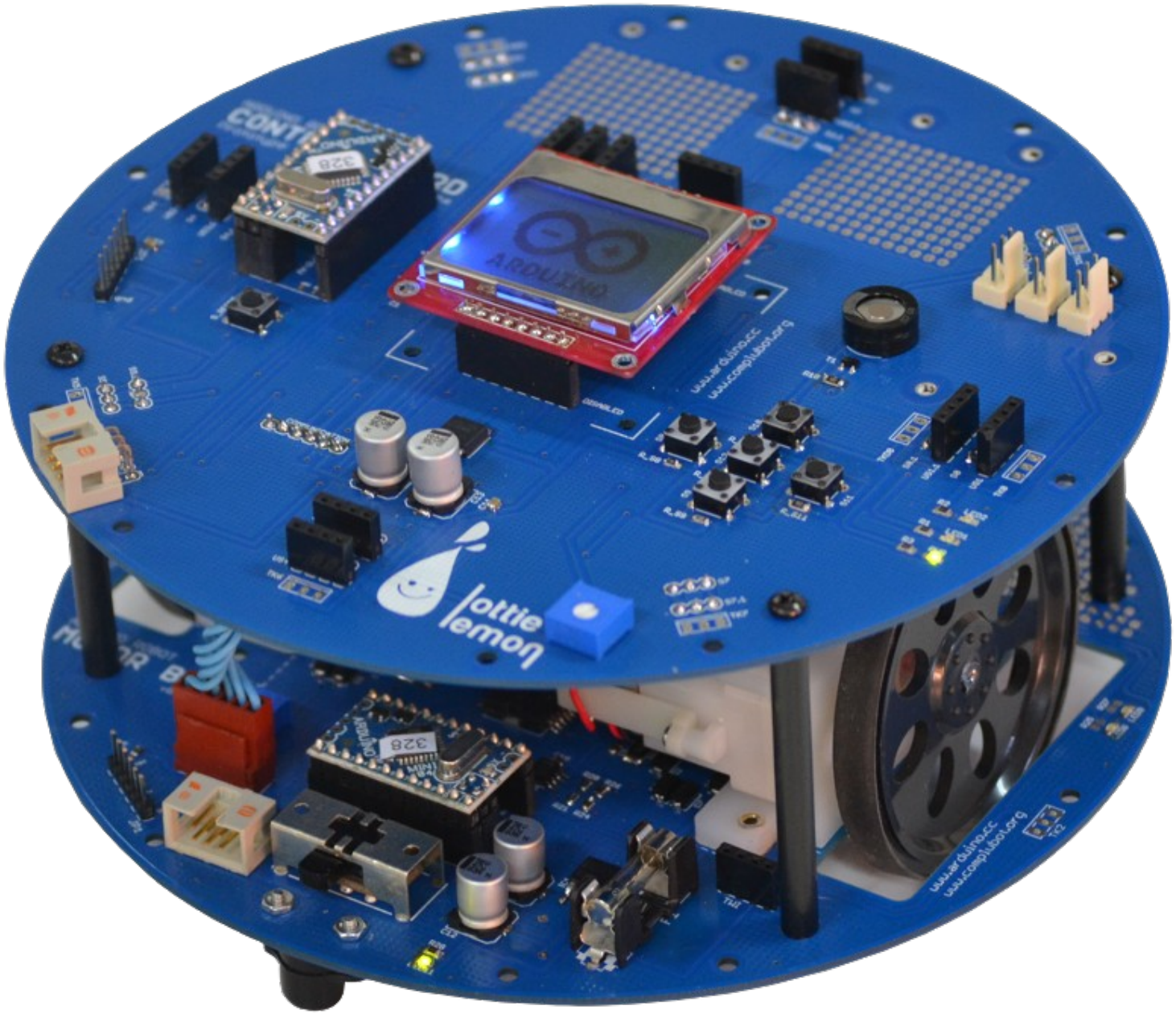
source: *Fallen - 2005*



source: *J.C. Alonso - 2006*

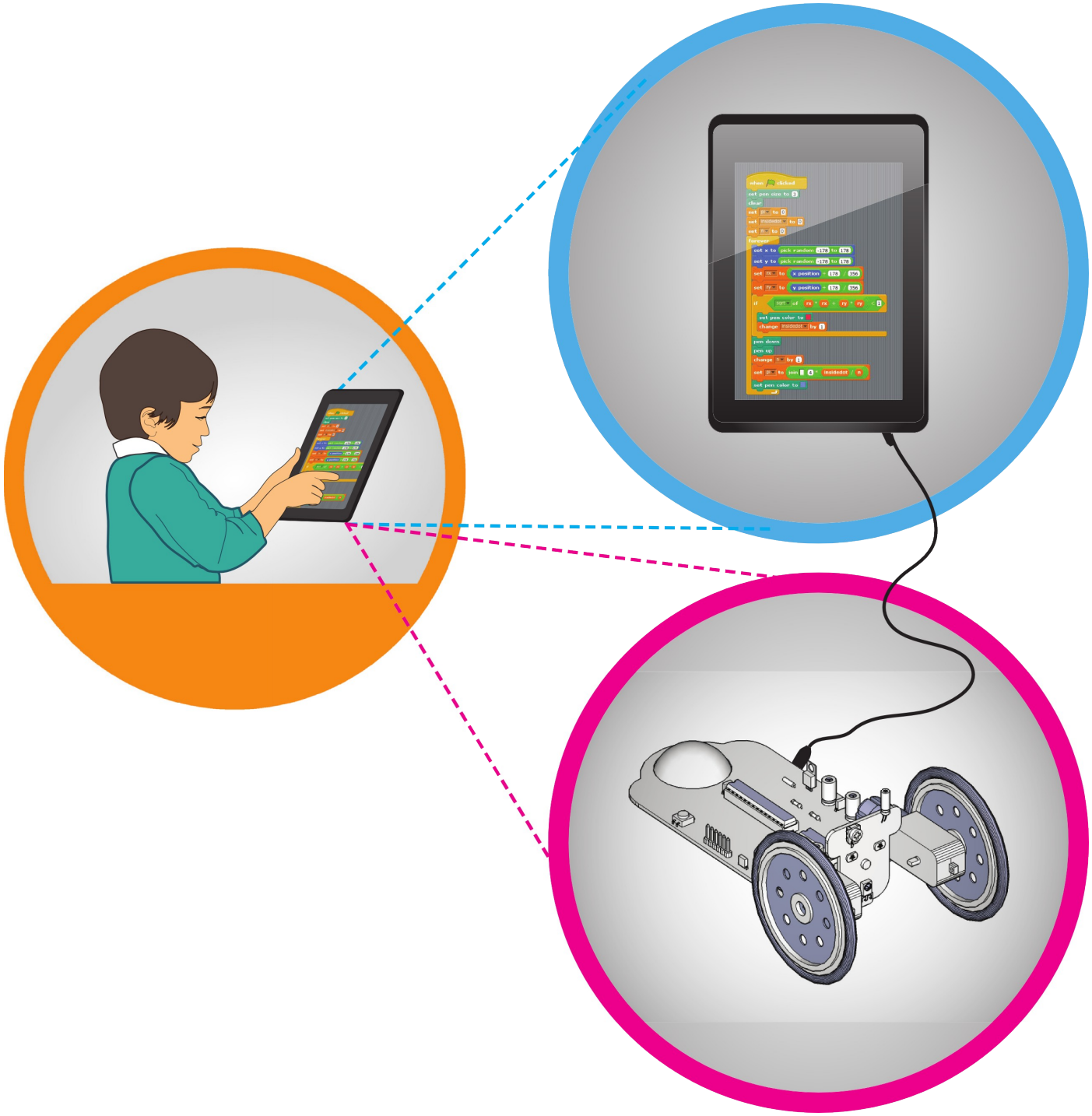


source: *Cuartielles - 2010*

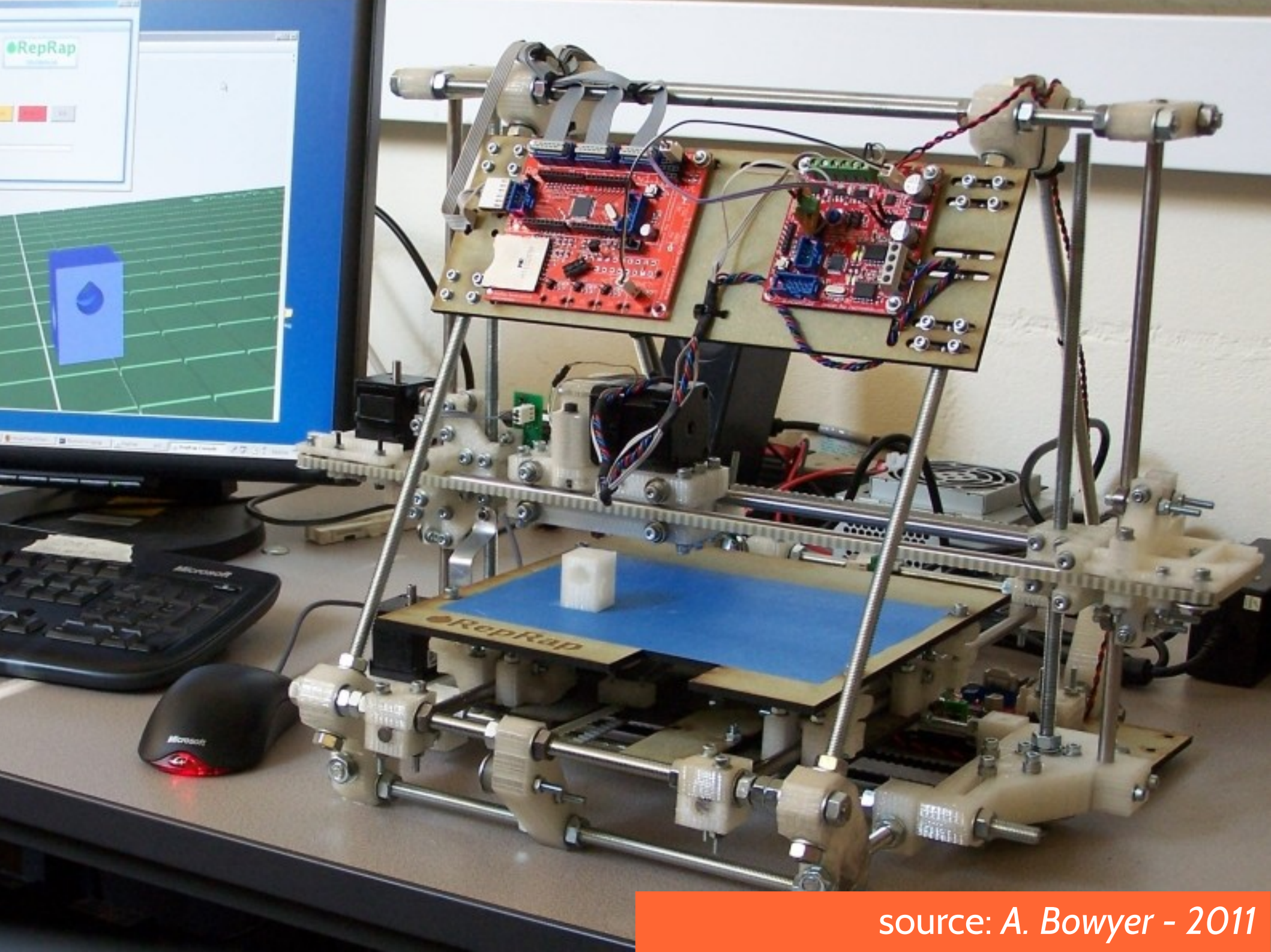


source: *Complubot.org - 2012*


source: Complubot.org - 2008



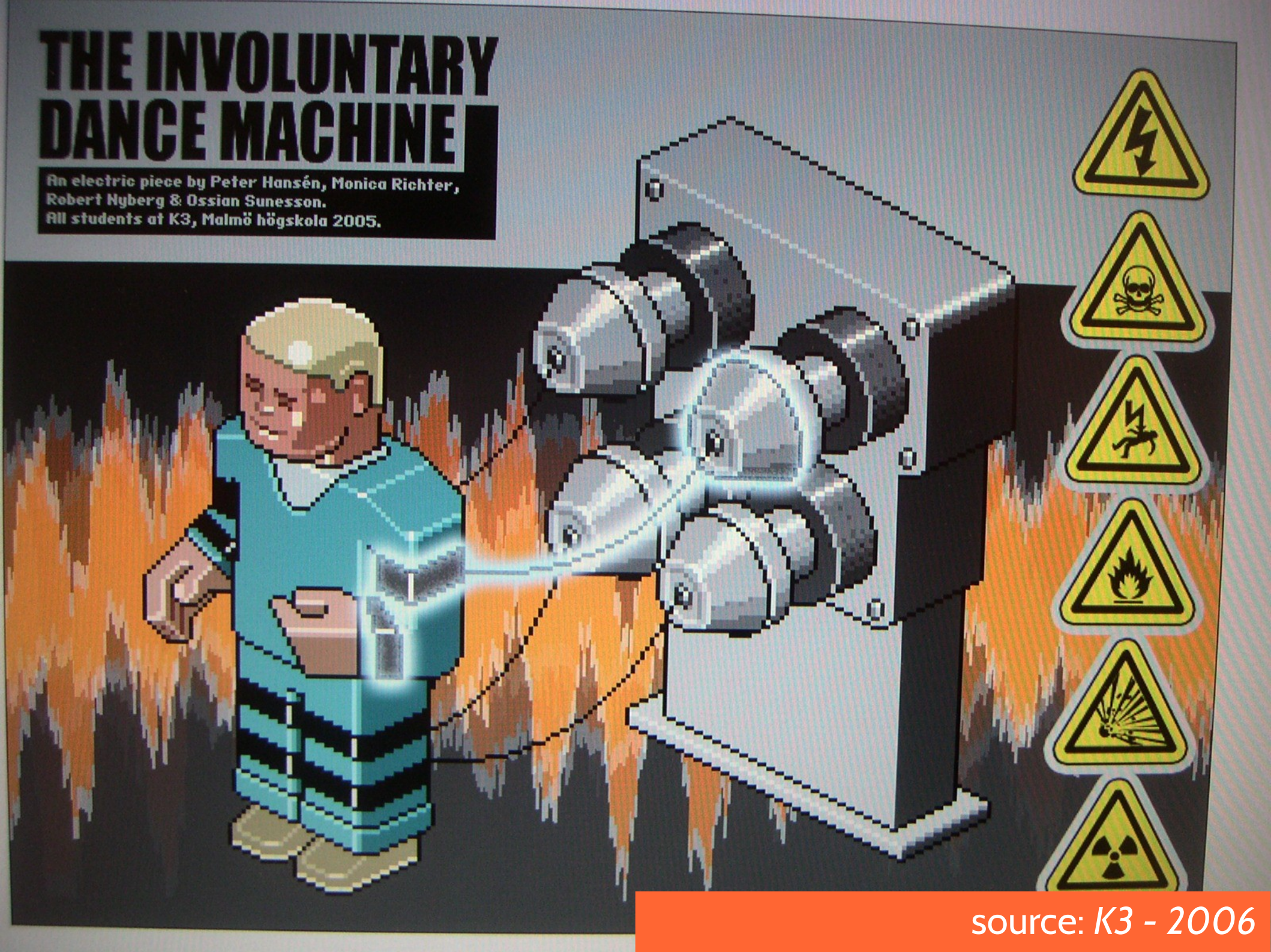
source: *Arduino.cc - 2012*



source: *A. Bowyer - 2011*

source: *D. Palacios - 2011*

source: *K3 - 2006*



source: *K3 - 2006*

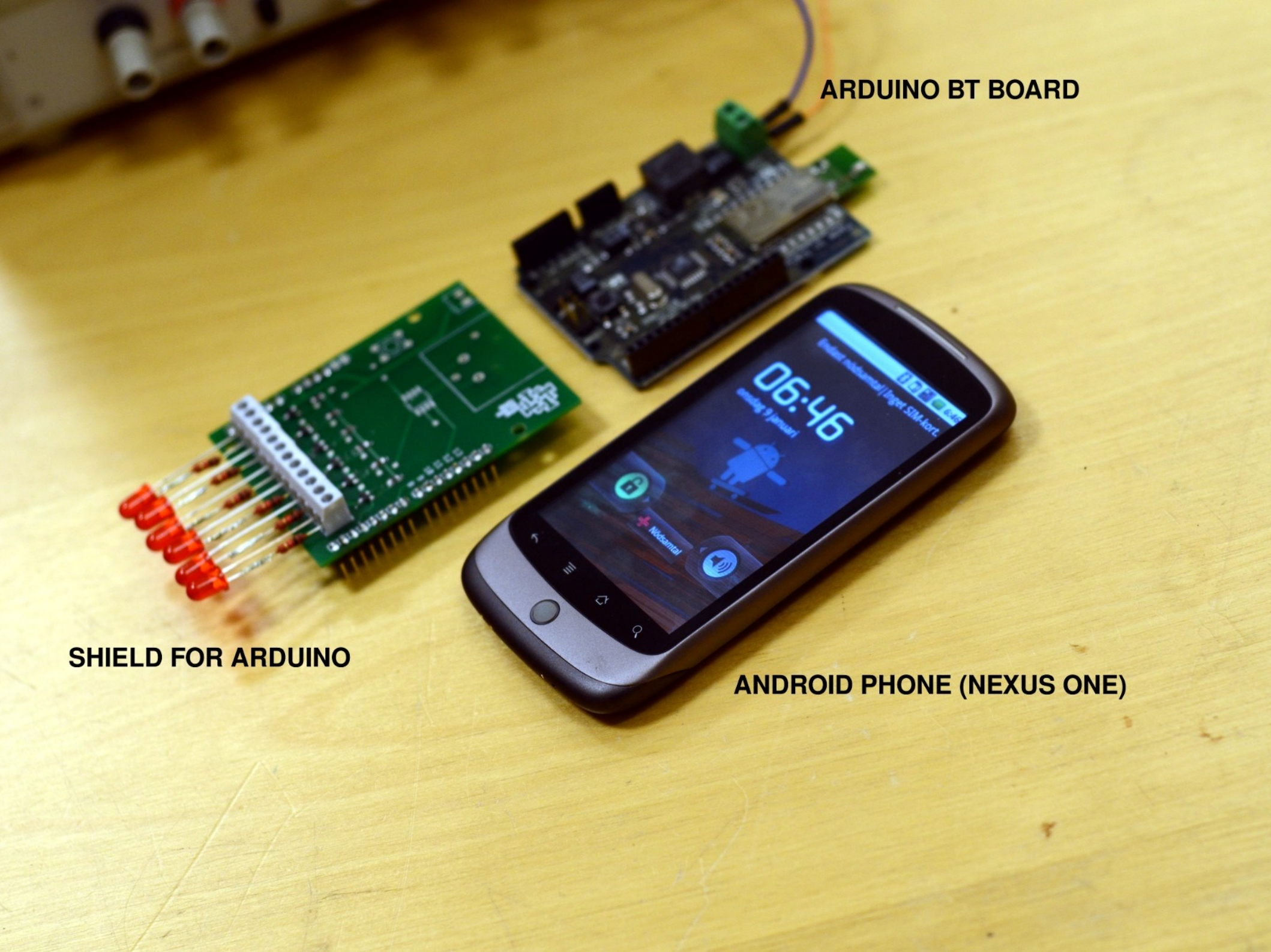
ARDUINO and the Internet of Things

1) using Android phones over BT

2) using Android phones and one of the multiple wired connection methos

3) using the iPhone Redpark Serial Cable

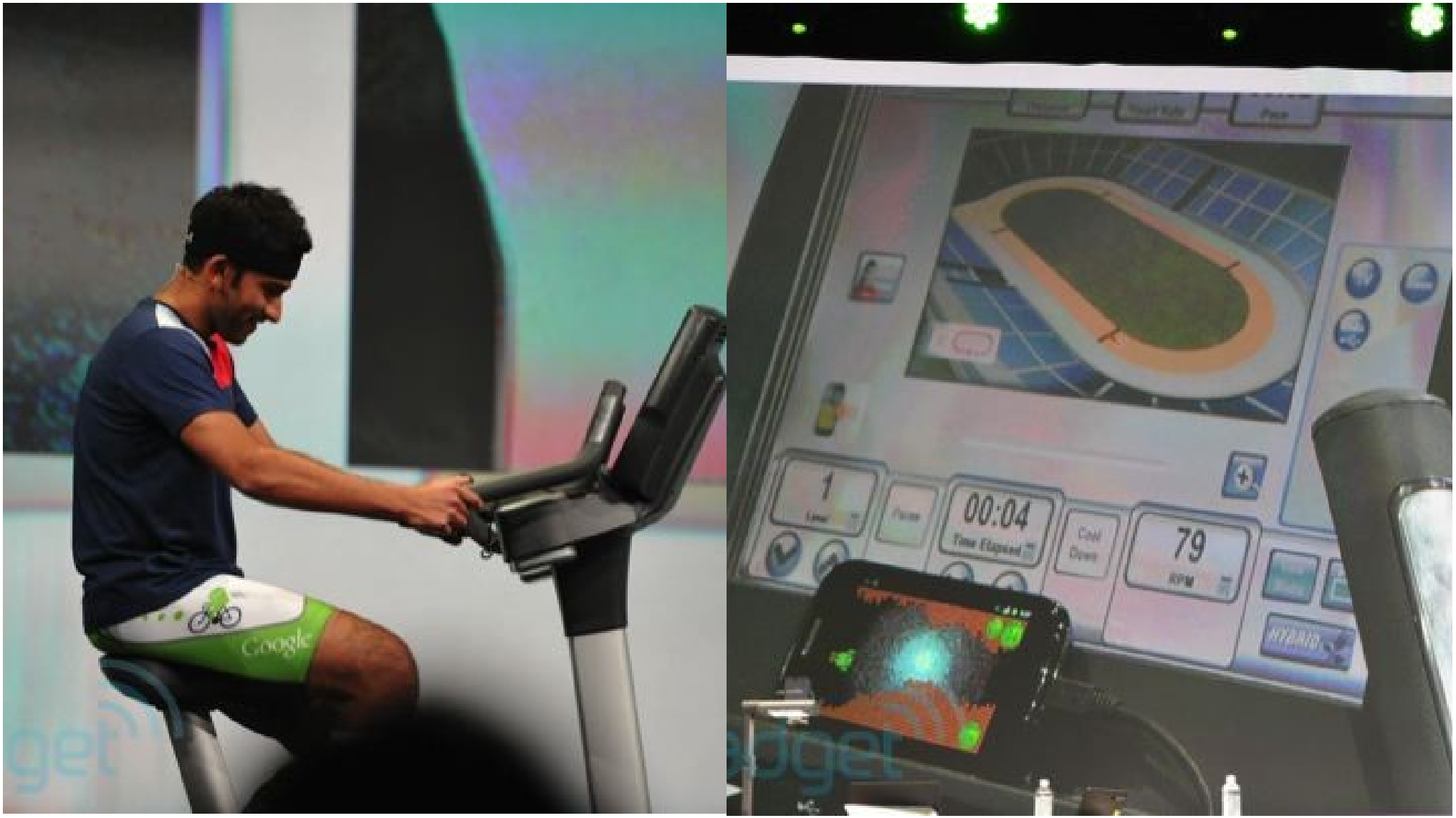
4) using GPRS/GSM modems


ARDUINO BT BOARD
SHIELD FOR ARDUINO
ANDROID PHONE (NEXUS ONE)
06:46


ÅTERLÄMNAS TILL
KITS
PONSAB
040-93 55 90
CABLES


RELAY 2
NC
COM
NO
NC
COM
NO
RELAY 1
SERVOS
NOTE: EACH RELAY
24VDC 1A MAX
RESET
K2
K1
AREF
GND
13
12
11
10
9
8
Reset
+3V3
+5V
GND
GND
+Vin
Temp
Light
LED1
LED2
LED3
7
6
5
4
3
2
TX0→1
RX0←0
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
Tx3 14
Rx3 15
Tx2 16
Rx2 17
Tx1 18
Rx1 19
SDA 20
SCL 21
Google
ANDROID
Accessory
Demo Shield

Connected Gym as seen at Google IO



http://www.engadget.com/2011/05/10/live-from-google-i-o-2011s-opening-keynote/


AREF
GND
PWM
COMMUNICATION
TX
RX
L
ON
RESET
ICSP
WWW.ARDUINO.CC
DEVELOPER EDITION
RESET-EN
ARDUINO
MEGA ADK
for Android
ANALOG IN
DIGITAL
3.3V
5V
GND
Vin


FISKERIET
FISKERIET
FISKERIET


ARDUINO
GSM
SHIELD
antenova
1049
DEVELOPED WITH
Telefónica I+D
QUECTEL
M10
0700

Open Hardware

the open hardware licensing establishes the freedom for anyone to copy the PCB design and firmware and to create derivative works based on the others

Visit: http://www.ohwr.org/cernohl (the CERN license)

Visit: http://freedomdefined.org/OSHW (the definition)

The Business Model

… *I cannot talk about others … but we do it like this:*

CC BY-SA

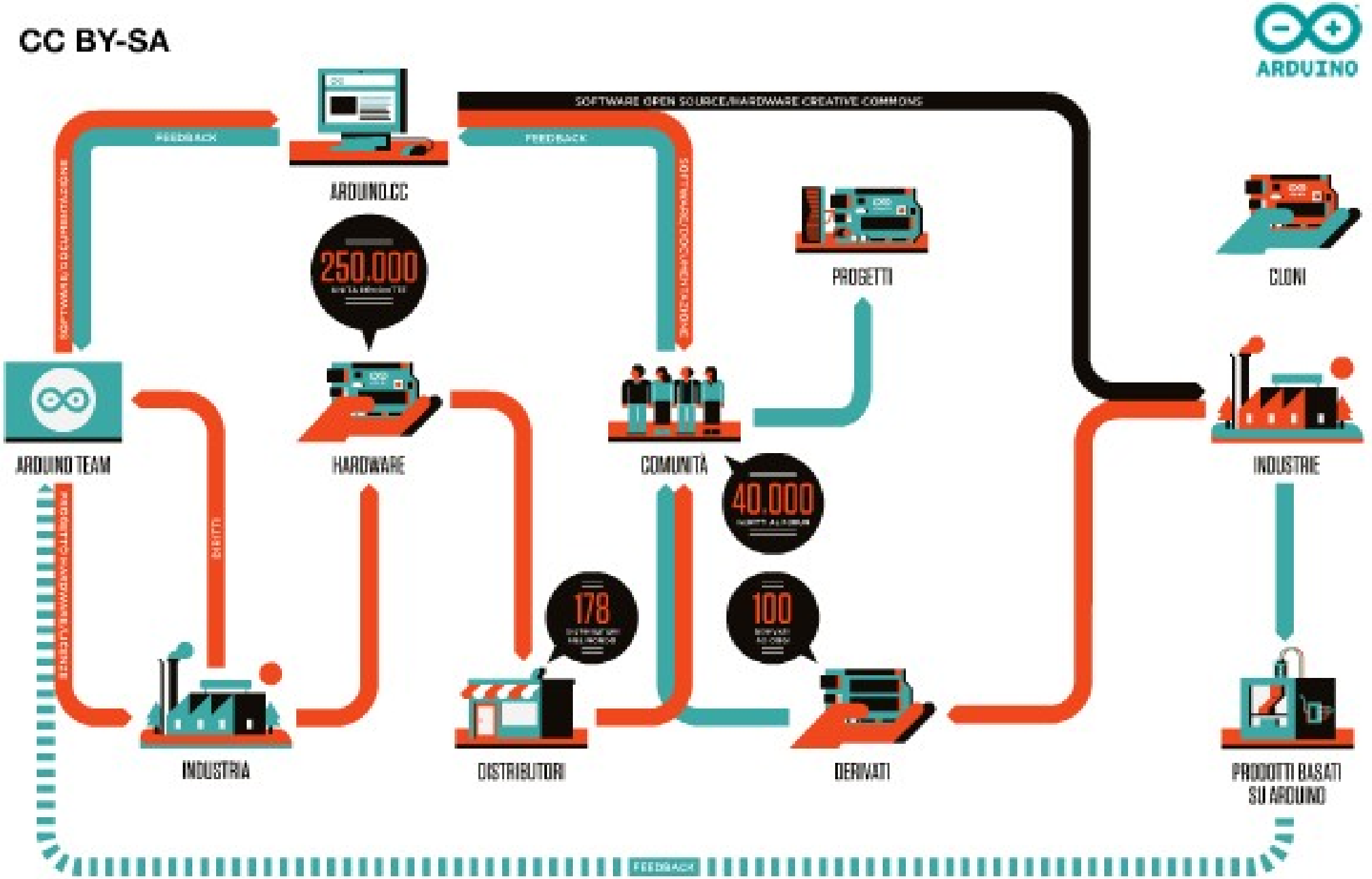
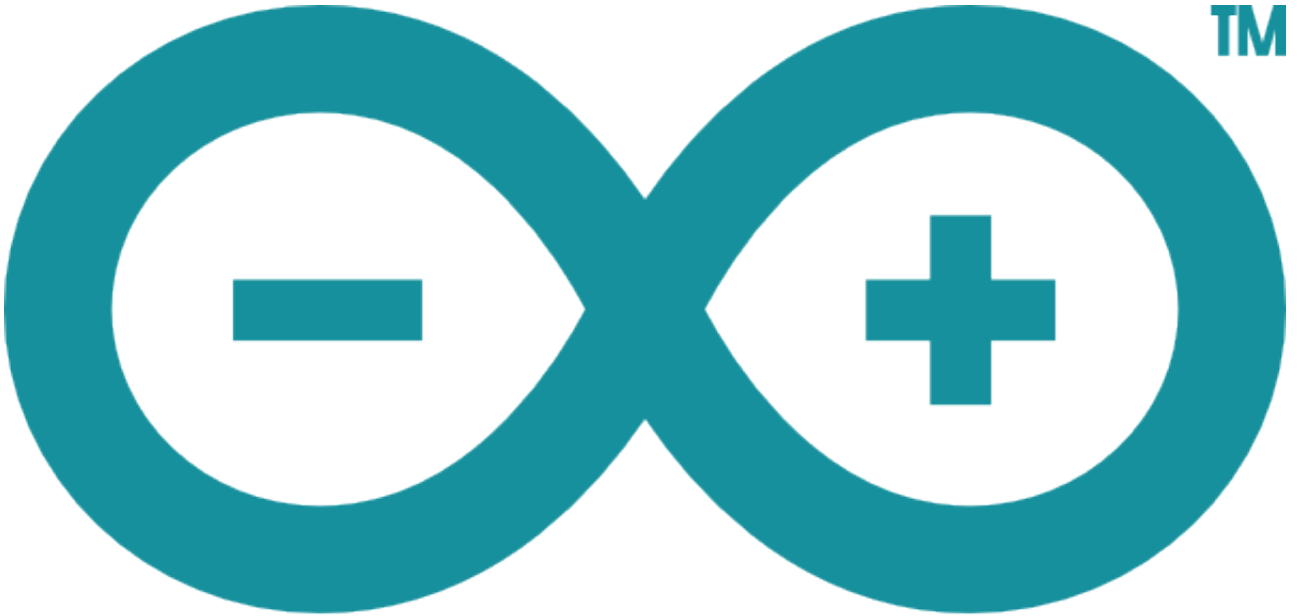


Illustration: Francesco Muzzi for Comitato Italia 150

Business Model



ARDUINO