HELLO
my name is

Catarina Mota

I’m a…

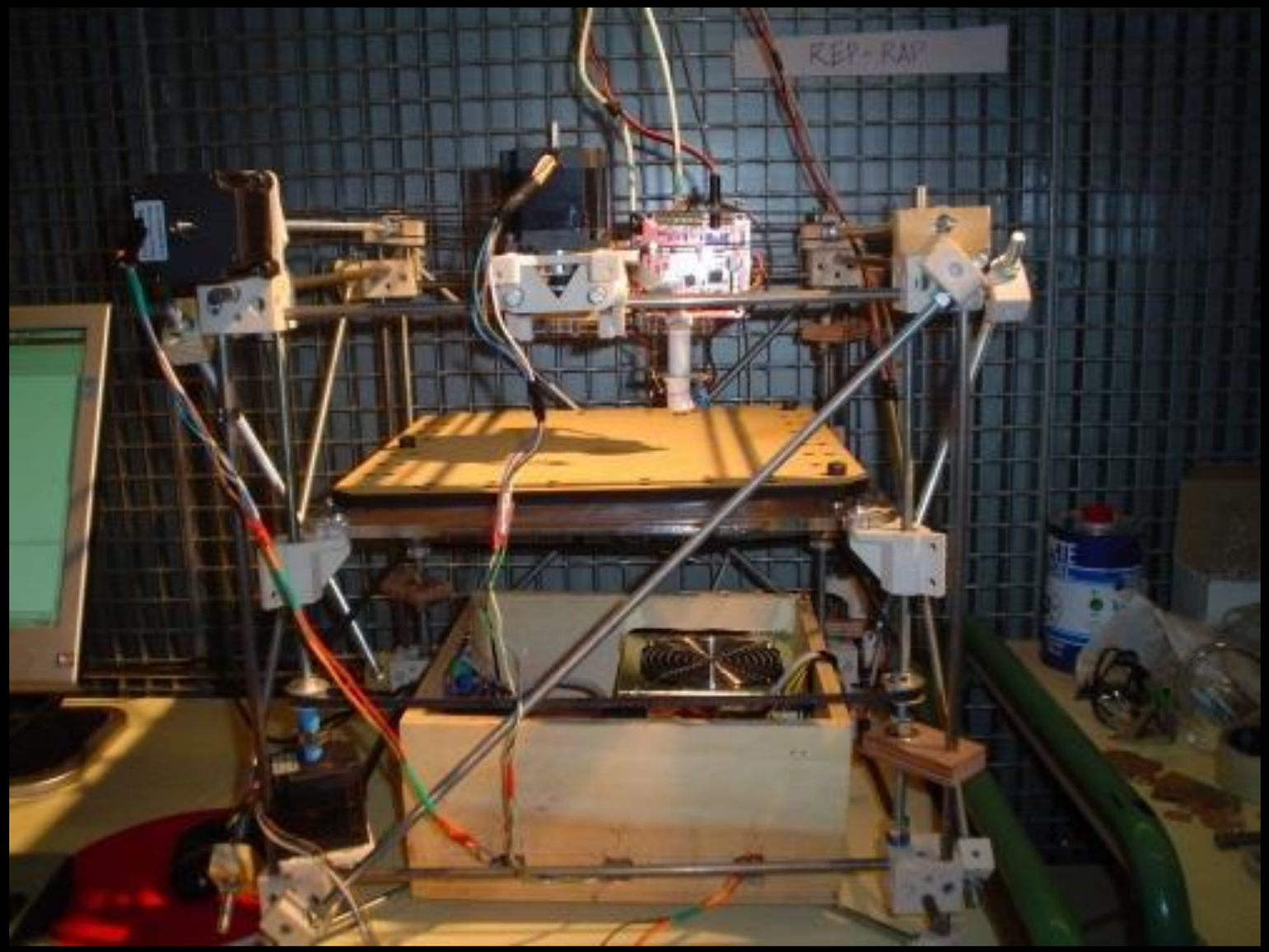
open sorcerer
hardware hacker
farmer in training
humanities scholar

IMAGE
5

SUBMIT YOUR
DEMO
A

Blind Spot, 1998

AltLab, Lisbon, 2009



RepRap Darwin, January 2009
Medialab Prado, Madrid

What is happening?

Who is involved?

How does it work?

Why?

Why should I care?

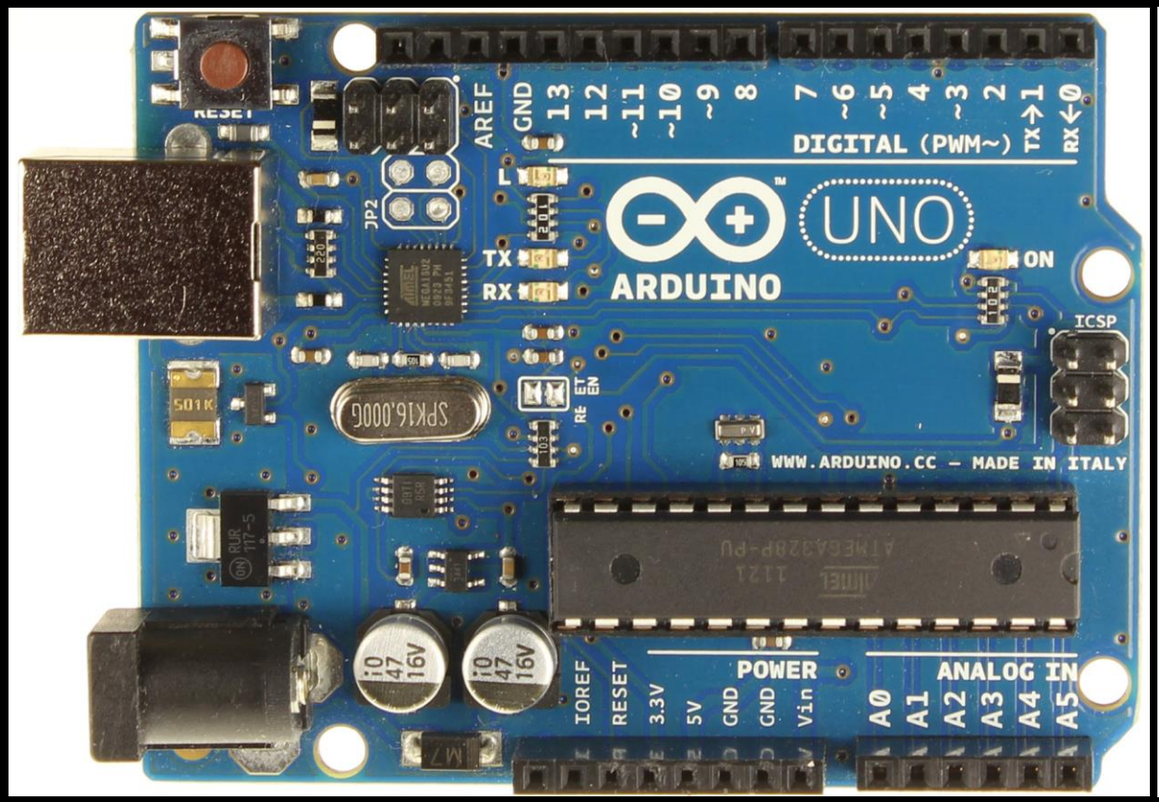
What is happening?

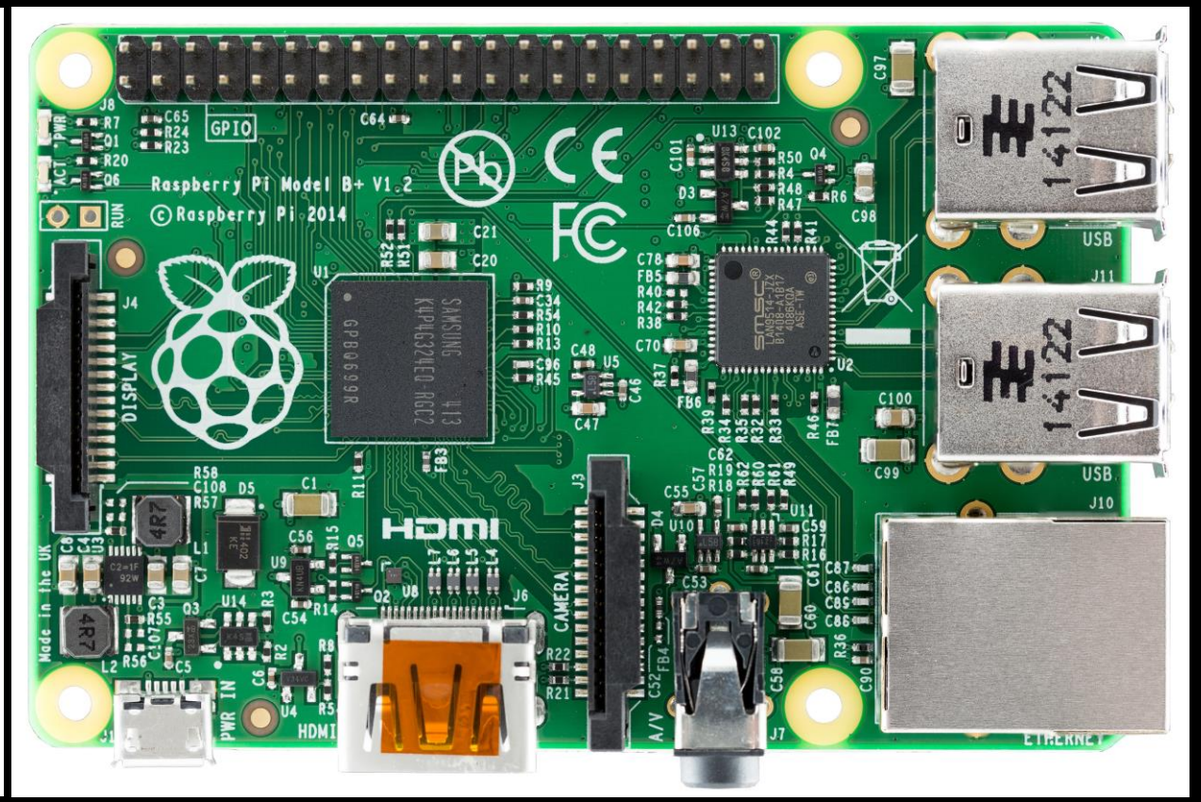
“If the past 10 years have been about discovering post-institutional social models on the Web, then the next 10 years will be about applying them to the real world.”

–Chris Anderson, 2010

DIY Hardware

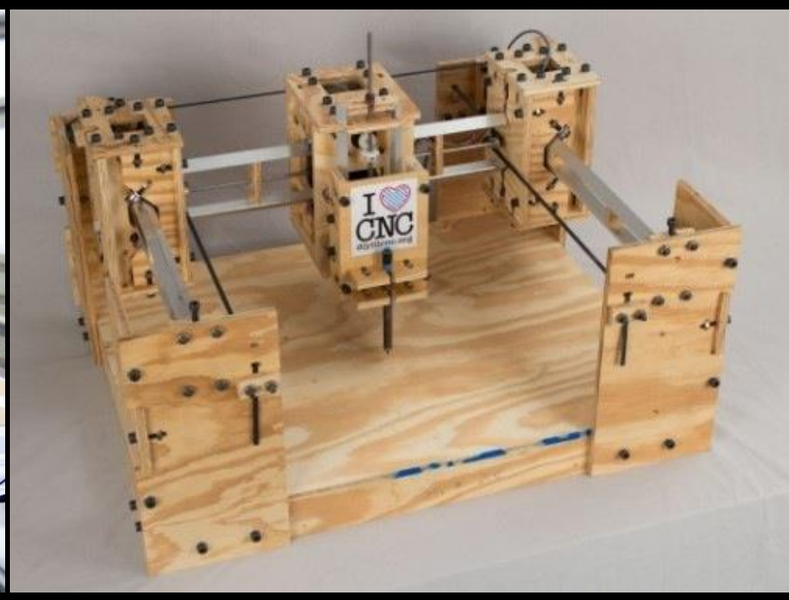
DIY Hardware





Electronics

DIY Hardware



Personal Digital Fabrication Tools

“The RepRap project seeks to put manufacturing power into the hands of the people by delivering a manufacturing technology which can self-replicate.”

–Ed Sells, 2009

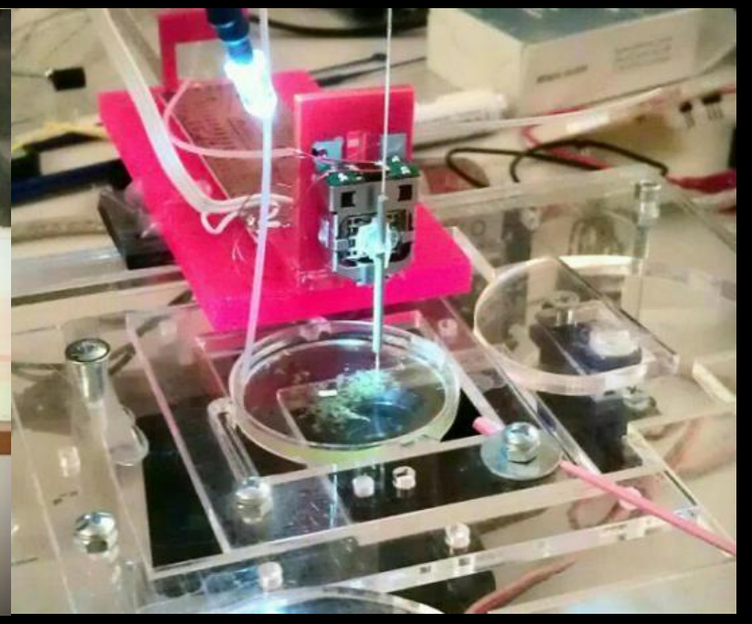
“If world-changing and powerful technologies are controlled by a few people, then the few advance and the rest (to a greater or lesser extent) go hungry. The only way to avoid that was to give RepRap away for free, and to ensure that future developments stayed free.”

–Adrian Bowyer, 2009

DIY Hardware

Satellites & Drones

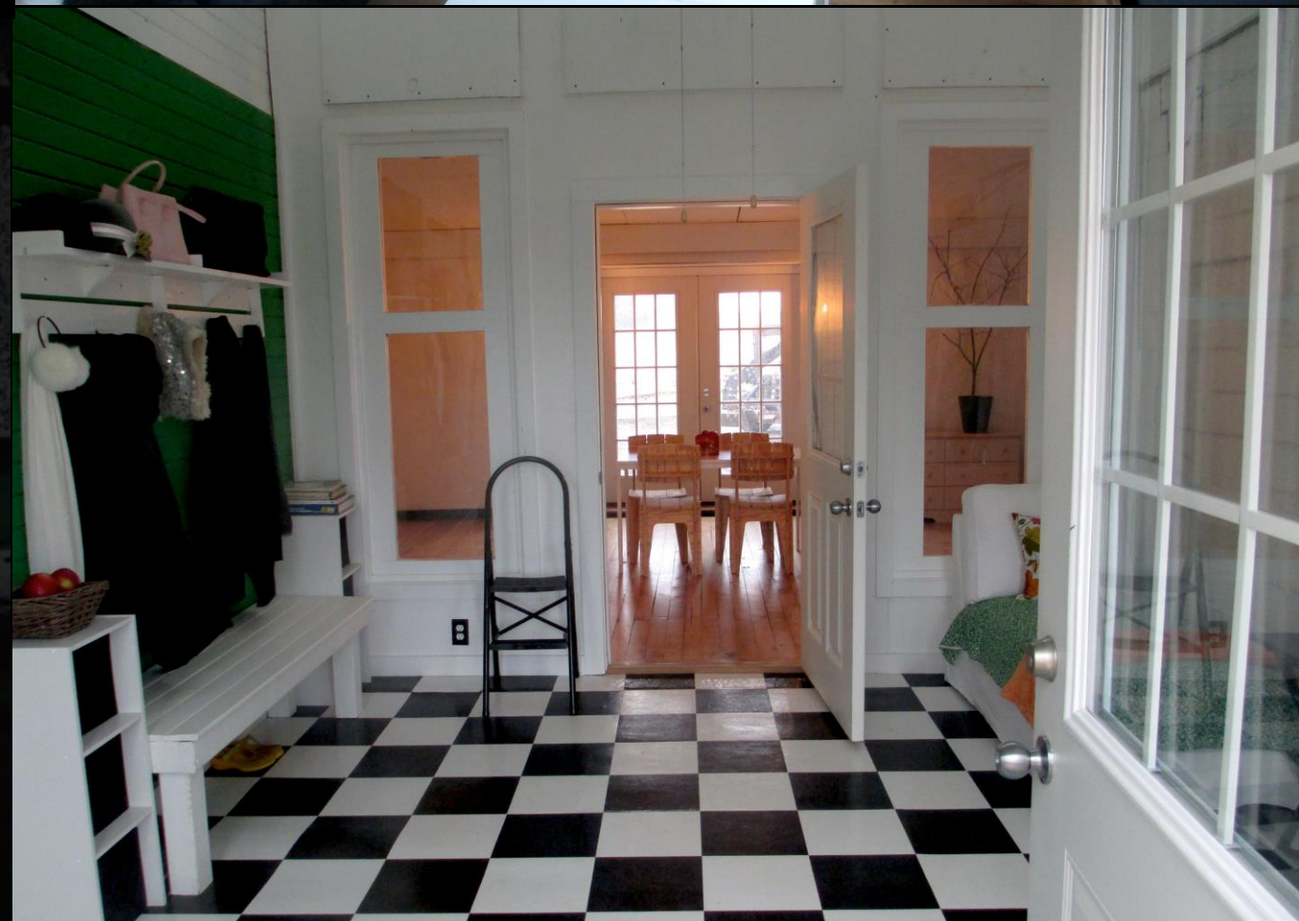
DIY Hardware



Data Collection Tools & Scientific Instruments

Agriculture & Industrial Machines

Houses



Who is involved?

Hobbyists and Crafters

Engineers and Scientists

Artists and Scholars

Entrepreneurs and Investors

Teachers and Students

Parents and Children

Activists and Environmentalists

Farmers and Architects

…

Maker Community

Hackerspaces Community

Open Source Hardware Community

Companies and Non-Profits

Governments, Schools, Museums, Libraries

How does it work?

What is Open Source Hardware?

Open source hardware is hardware whose design is made publicly available so that anyone can study, modify, distribute, make, and sell the design or hardware based on that design.

What is Open Source Hardware?

- The hardware must be released with documentation including design files, and must allow modification and distribution of the design files.
- The license shall allow modifications and derived works
- The license shall not restrict any party from selling or giving away the project documentation.
- The license must not restrict anyone from making use of the work (including manufactured hardware) in a specific field of endeavor.

OPEN
FOR BUSINESS

Give away the bits,
sell the atoms.

Why?

Because we can!

“Somehow, watching television became a part-time job for every citizen in the developed world.”

–Clay Shirky, 2010

The Perfect Storm

Communities

Internet

Tools

“Because copying hardware is so hard, the question of whether we're allowed to do it is not vitally important.”

–Richard Stallman, 1999

Full Printed by Nueve Ojos

Digital Fabrication Tools

Public Factories

Ad Hoc Self-organization

Access to Traditional Factories

Why should I care?

Machines are not apolitical.

What is efficiency?

What is efficiency?

The affordances of technologies define realms of possibilities.

Television vs. Internet

“Broadcast” Approach

- Professional producers design, consumers buy and use
- Designed for ease of fabrication and use
- Not meant to be repaired, transformed, adapted or appropriated

Distributed Approach

- Users are co-producers
- Designed to enable individual and collective shaping
- Meant to be repaired, transformed, adapted, appropriated

“More than consumers of technology, we are makers, adapting technology to our needs and integrating it into our lives.”

–Dale Dougherty, 2005