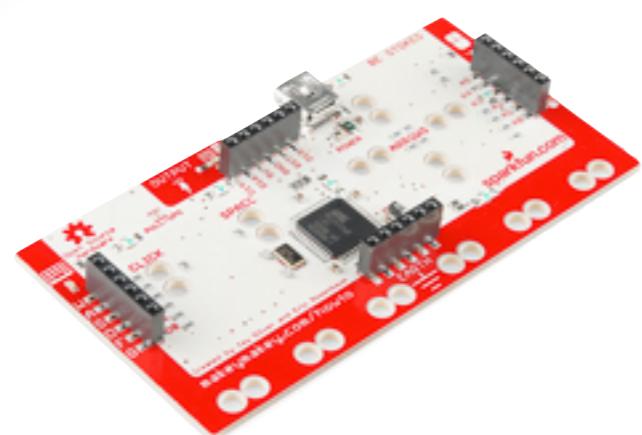
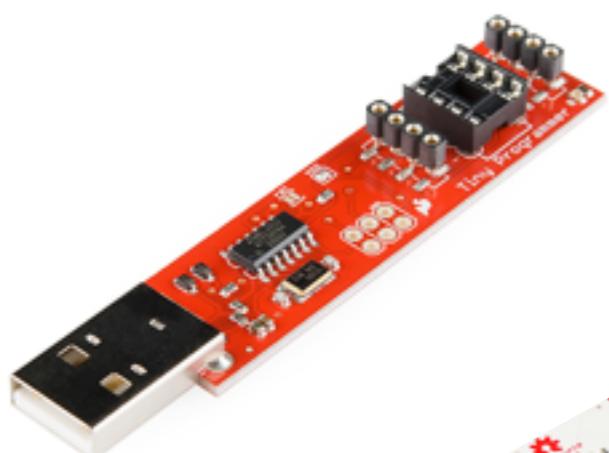
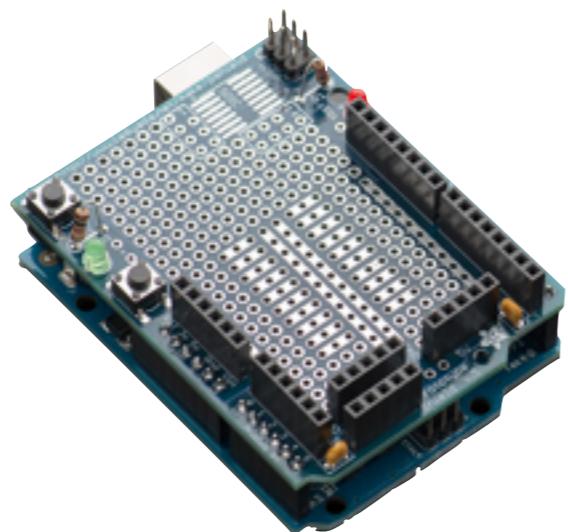


# Four Principles for an Ecosystem of Open-Source Everyday Devices

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David A. Mellis  
MIT Media Lab & Arduino

*Open Hardware Summit*  
September 6, 2013



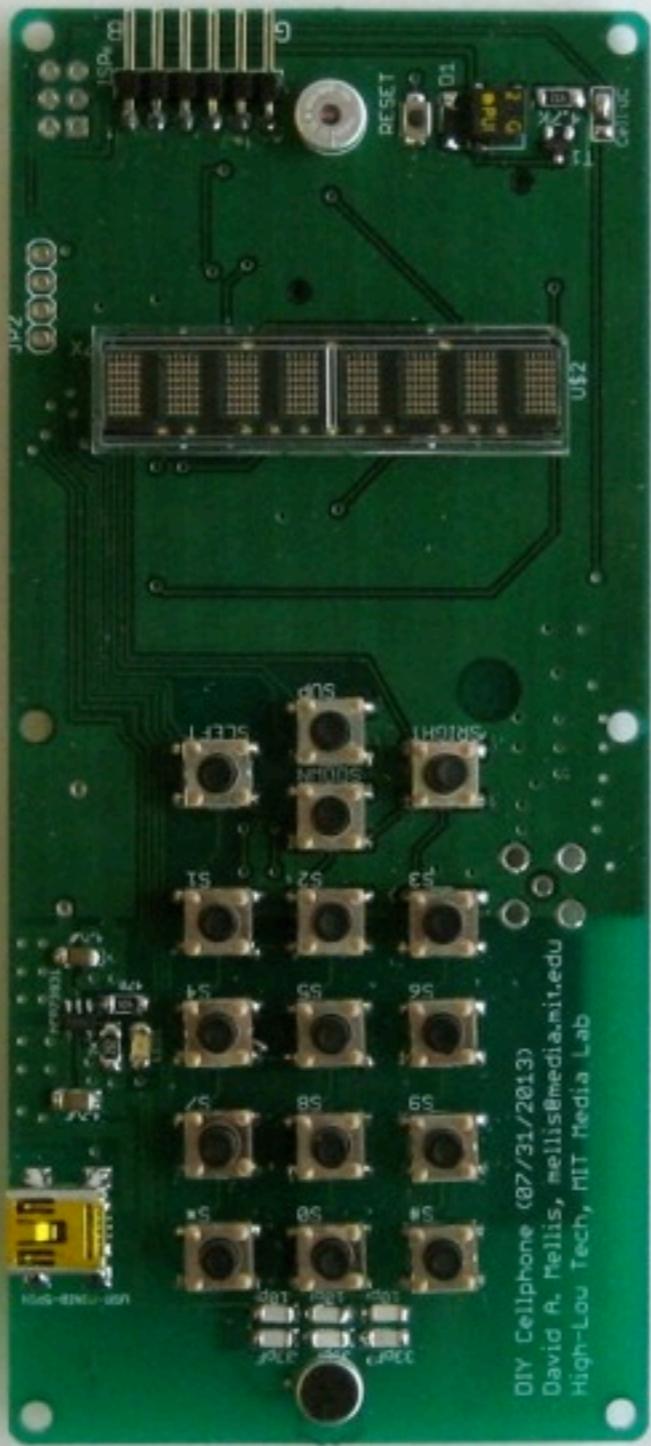


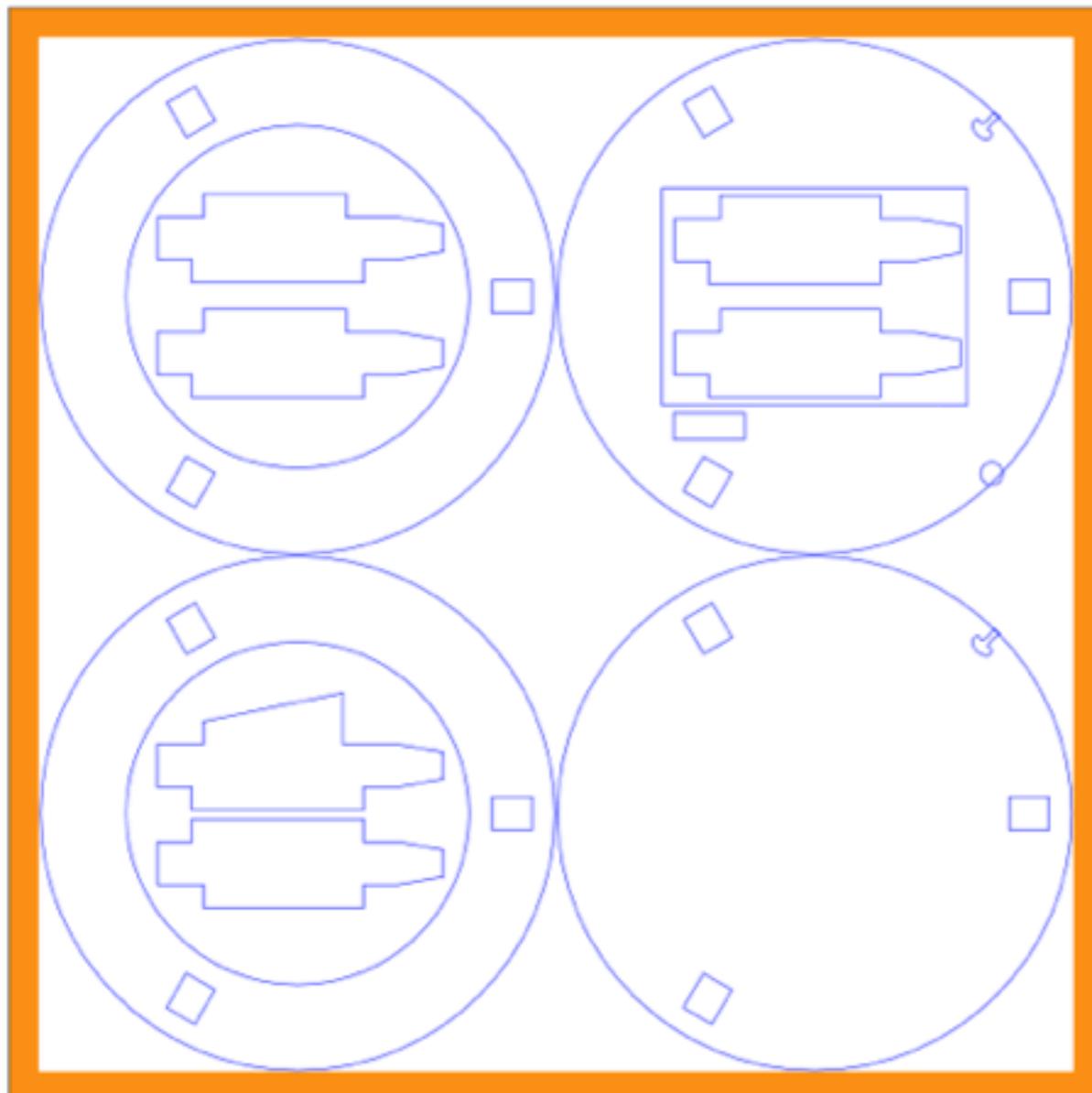
# Four Principles

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1. Design for personal manufacturing.
2. Maximize iteration and prototyping.
3. Explore alternative aesthetics and meanings.
4. Foster new forms of collaboration and community.

1. Design for personal manufacturing.





## Inkscape Design Template - P1

7.1" x 7.1" / 181mm x 181mm

Ensure your entire design fits within the white area inside the orange border

### Cutting lines

R: 0  
G: 0  
B: 255  
A: 255

All lines must have a stroke weight of 0.01mm

### Vector line engraving

Heavy	Medium	Light
R: 255	R: 0	R: 255
G: 0	G: 255	G: 0
B: 0	B: 0	B: 255
A: 255	A: 255	A: 255

### Raster fill engraving

Heavy	Medium	Light
R: 0	R: 128	R: 230
G: 0	G: 128	G: 230
B: 0	B: 128	B: 230
A: 255	A: 255	A: 255

### Using text

All text must be converted to paths via the Object to Path in the Object menu.

### Using images

All inserted non-vector images (such as .jpg) must be converted to vectors using the Path > Trace Bitmap command.

### Removing double lines

Any double lines created by placing two objects directly beside each other must have one line selected and deleted.

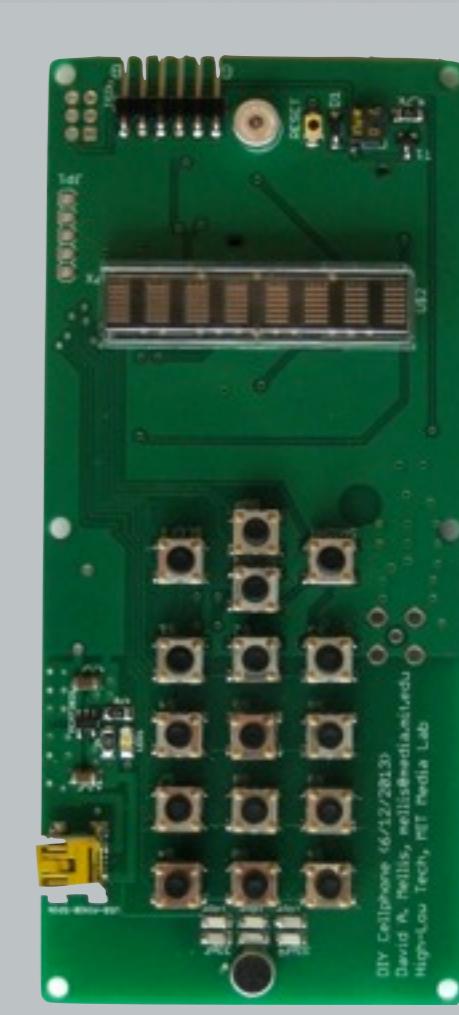
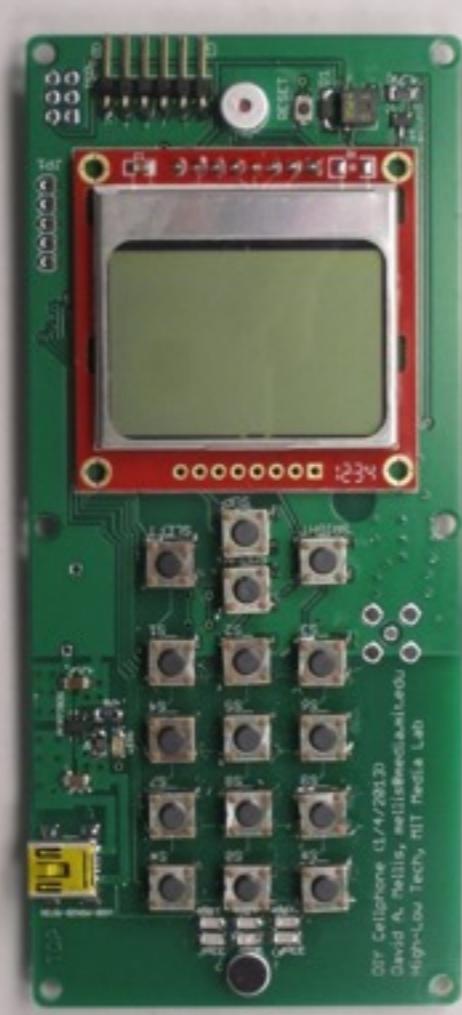
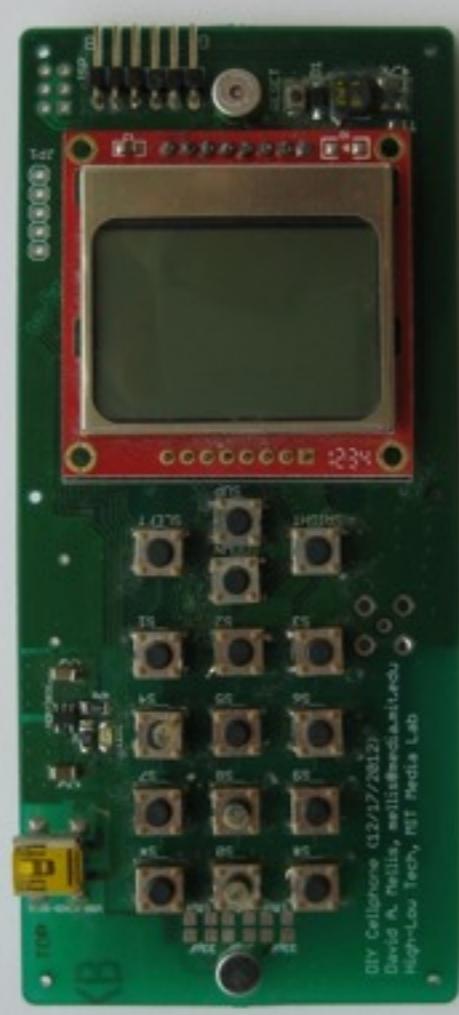
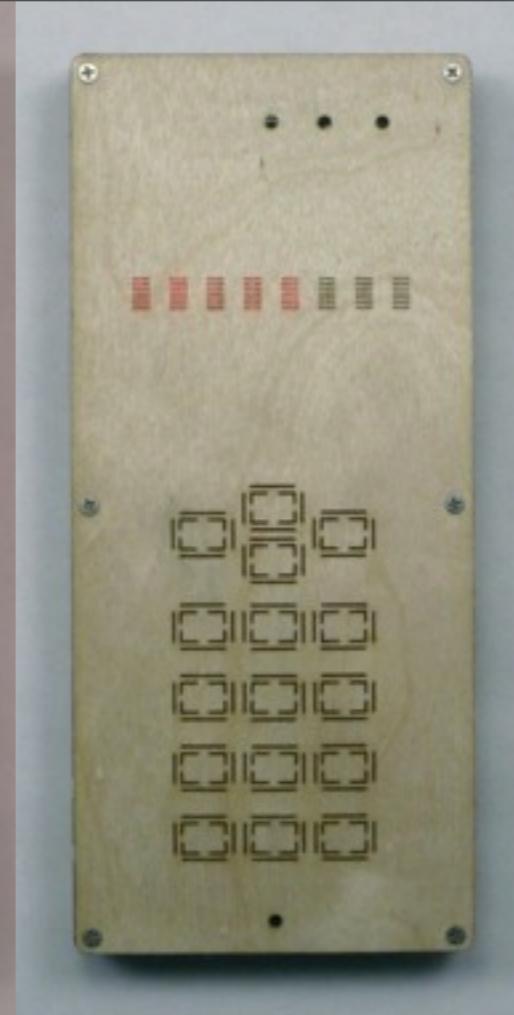
### Exporting your SVG file

Save your file as Inkscape SVG.

Our making system does not register this orange content, so you do not need to delete it.

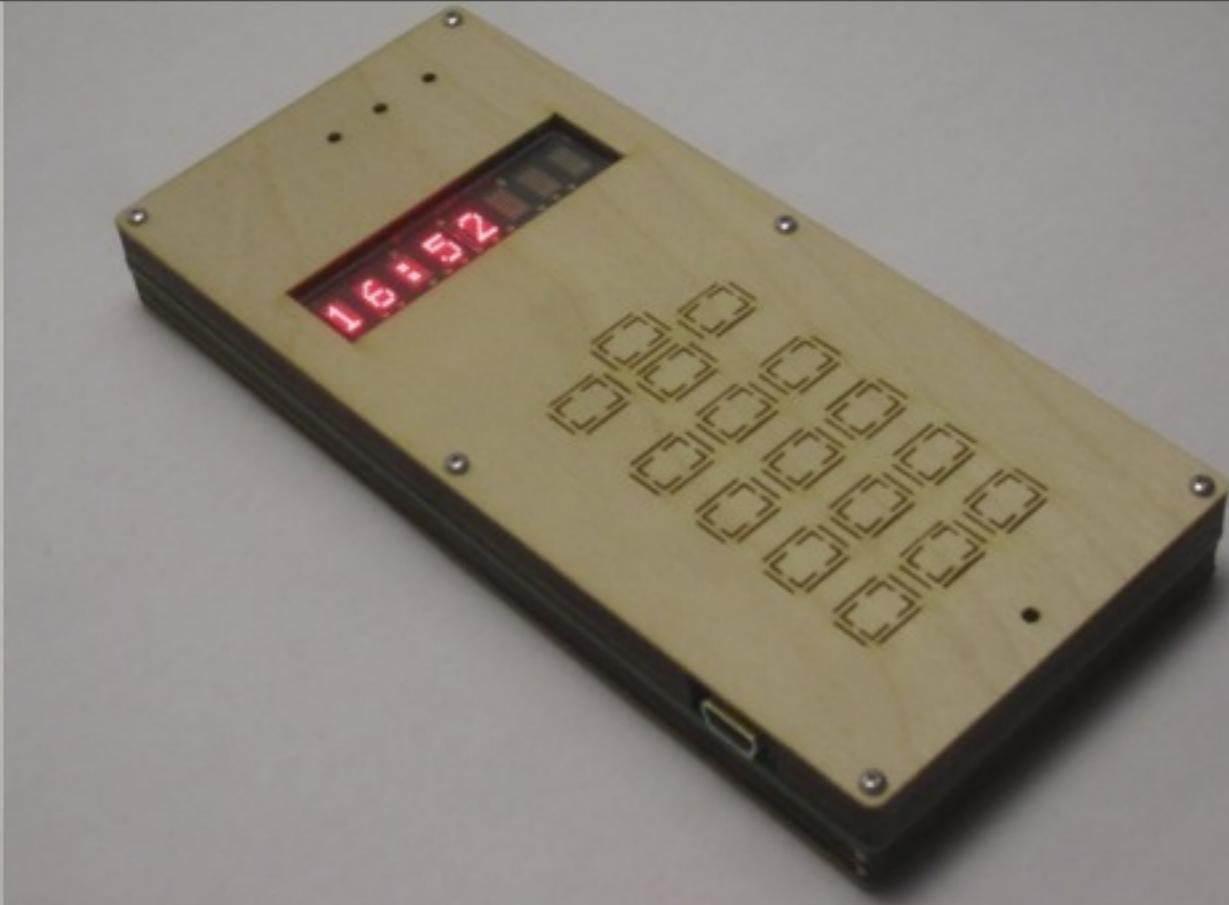
2. Maximize iteration and prototyping.





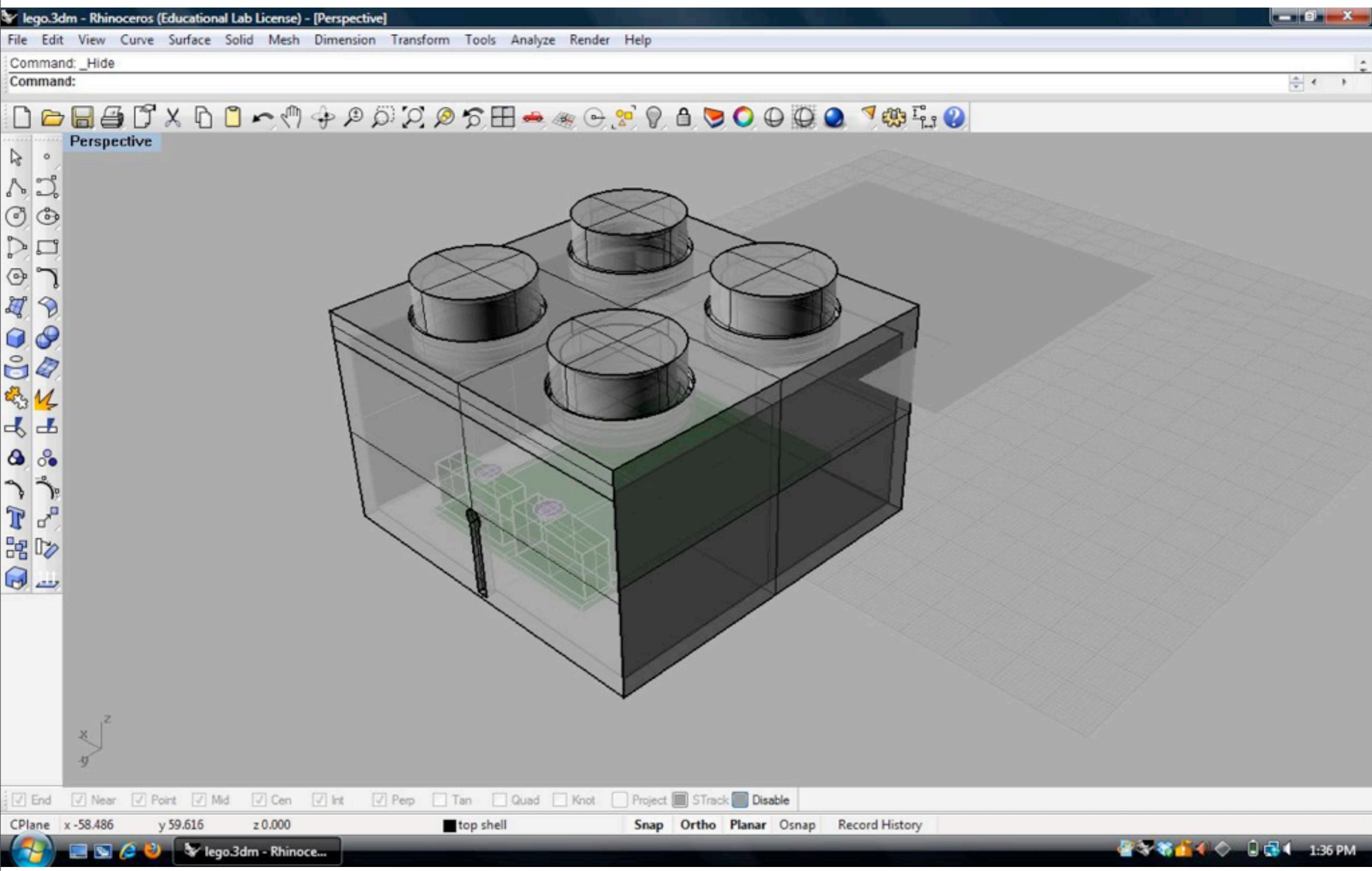
3. Explore alternative aesthetics and meanings.

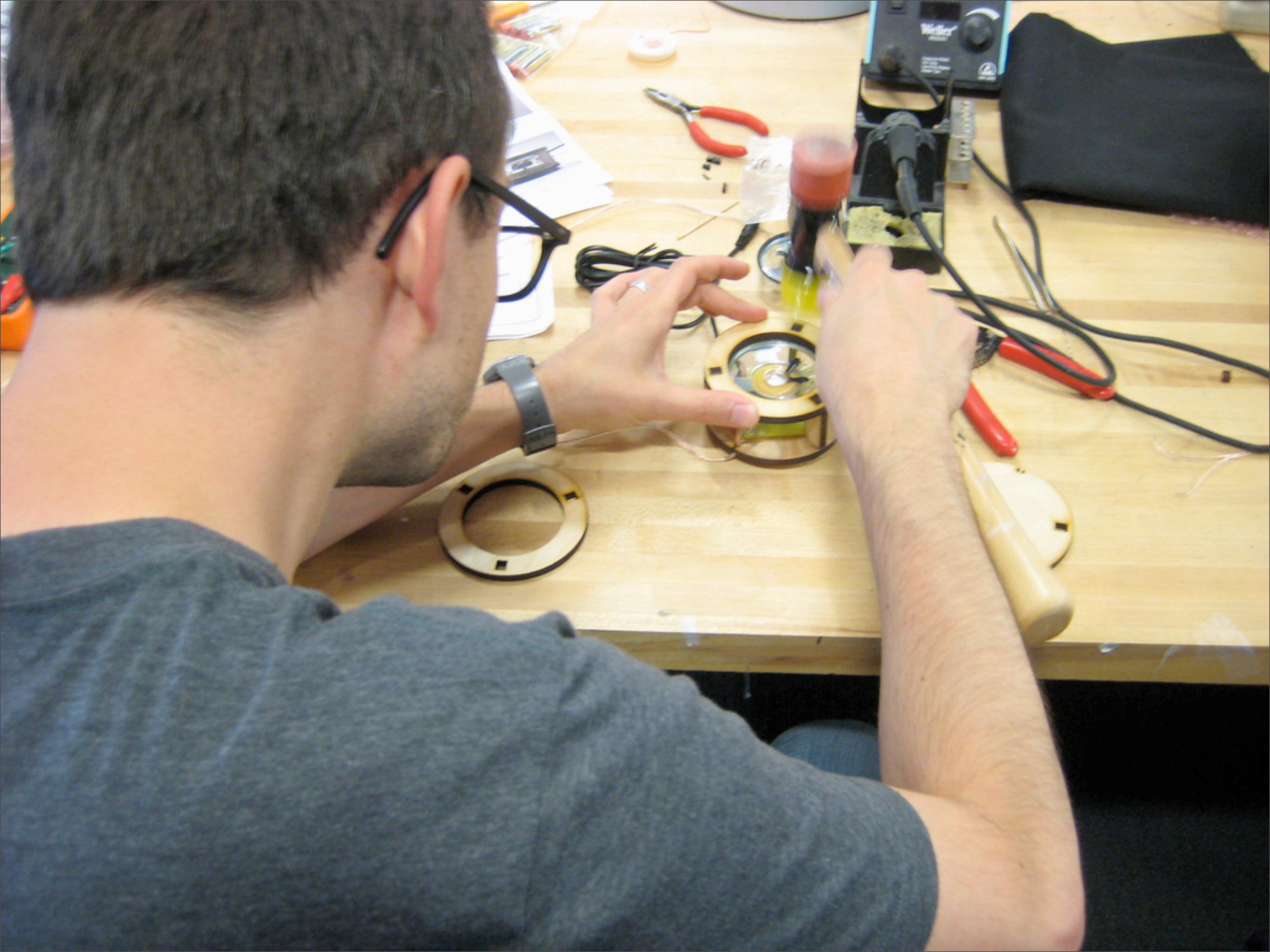






4. Foster new forms of collaboration and community.





GitHub, Inc. [github.com/adafruit/Adafruit-PCD8544-Nokia-5110-LCD-library](https://github.com/adafruit/Adafruit-PCD8544-Nokia-5110-LCD-library) — adafruit/Adafruit-PCD8544-Nokia-5110-LCD-library

This repository  Explore Gist Blog Help damellis

PUBLIC [adafruit / Adafruit-PCD8544-Nokia-5110-LCD-library](#) Watch 22 Star 62 Fork 31

Arduino driver for PC8544, most commonly found in small Nokia 5110's <http://ladyada.net/products/nokia5110/>

21 commits 1 branch 0 releases 4 contributors

branch: master [Adafruit-PCD8544-Nokia-5110-LCD-library](#) /

Fix for recent Adafruit\_GFX change

PaintYourDragon authored 2 months ago	latest commit f3f25e906f
examples	Changed bitmap data for new Adafruit_GFX format
Adafruit_PCD8544.cpp	Fix for recent Adafruit_GFX change
Adafruit_PCD8544.h	Example compiles in both Arduino 0023 and 1.0+
README.txt	updated headers, added readme
license.txt	updated example, all good now

[README.txt](#)

This is a library for our Monochrome Nokia 5110 LCD Displays

Pick one up today in the adafruit shop!  
-----> <http://www.adafruit.com/products/338>

These displays use SPI to communicate, 4 or 5 pins are required to interface

Code

Issues 5

Pull Requests 3

Wiki

Pulse

Graphs

Network

**HTTPS clone URL**  
<https://github.co>

You can clone with HTTPS, SSH, Subversion, and other methods.

Clone in Desktop

Download ZIP

# Thank you!

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[mellis@media.mit.edu](mailto:mellis@media.mit.edu)