

Libraries as Makerspaces



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University of Michigan School of Information
ALA Presidential Advisory Committee, 12/13/2012

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A makerspace is ...

- A workspace with tools and equipment that people can use to stitch, sew, saw, solder, code, mold, cook, laser cut, stitch, etc.
- Similar to: quilt guilds, sewing circles, knitting clubs, hobby groups, etc.
- A way for multiple generations to learn with and from one another
- Low-competition, low-hierarchy

"Ron's Wooden Gear" by Pete Prodoehl on Flickr.
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<http://www.flickr.com/photos/35237092540@N01/6128718951>

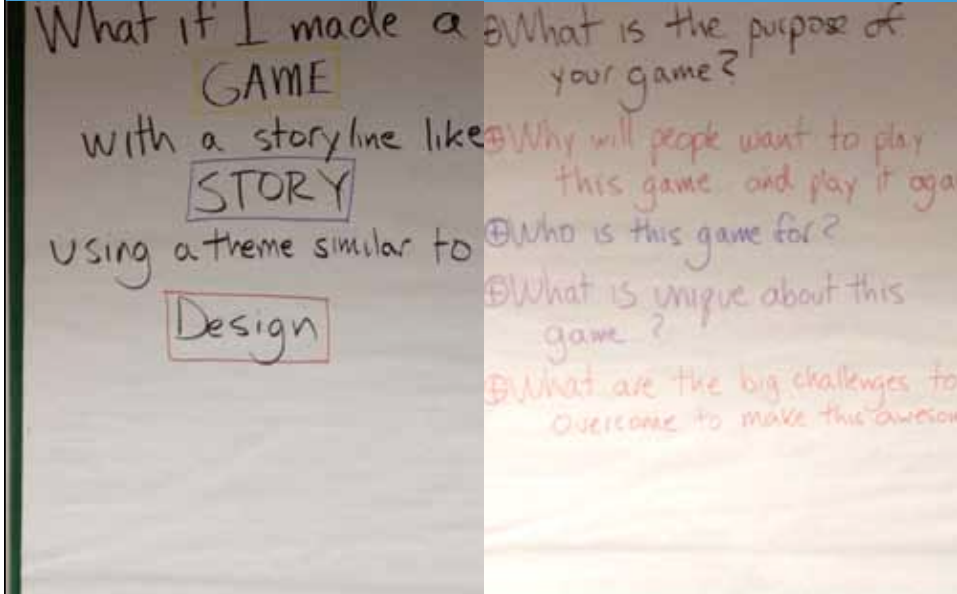


MICHIGAN MAKERS Squishy Circuits

(A.M. Thomas, U. of St. Thomas)



MICHIGAN MAKERS Game Design



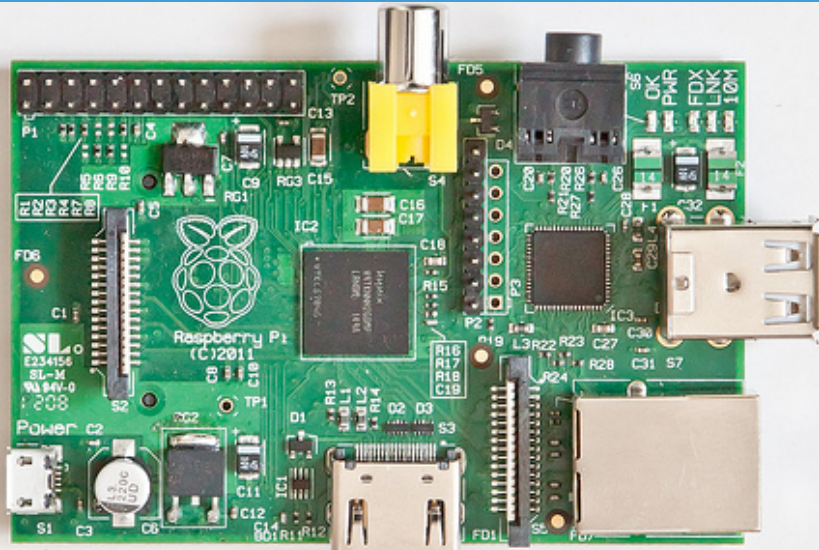
MICHIGANMAKERS

**\$25 Arduino
Microcontrollers**



MICHIGANMAKERS



**\$35 Raspberry Pi
Minicomputer**



"Front of Raspberry Pi" by Maikaat on Flickr.
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<http://www.flickr.com/photos/76862456@N07/7046412191>

MICHIGAN MAKERS \$600 Makerbot 3D Printer

“MakerBot #1136 - State of the Bot July 2010” by Jabella on Flickr.
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<http://flickr.com/photos/jabella/9783437492/>



3D Printed Heart Gears by Jabella on Flickr.
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<http://flickr.com/photos/jabella/5507229677/>



Read Keychain

Created by [ZeeMan](#)
Created on Aug 4, 2012
[Fashion > Keychains](#)

My local library recently got it's first 3D printer: the Replicator with dual extrusion! We needed something to demo to people who are interested in it and for our classes on using it. So this is what I made. It's a keychain!

[Tweet](#) 3 [Like](#) 0 [Pin it](#) [submit](#)

Downloads

Sort By	↑	↓	Popular	File Type
	Date			
	READ keychain.stl	94 kb / 56 downloads / 4 months ago		
	READ keychain.skp	74 kb / 52 downloads / 4 months ago		

Instructions
Play with the size!
Also there is the .skp file for those of you who would like to add more - and please do! :)

You must be [logged in](#) to post a comment.




Latest The Thing The Blog

Thingiverse.com
Upload your design
(or find one to use)
and pay them to
print and ship

shapeways* Create Discover Community Go

Discover 3D Printed Products [Create your own >](#)

Art

		
Gyroid by Bathsheba Sculpture LLC	Crania Anatomica Filigre.. by shhark	Spiral Cage by Yanying Designs
(182) ★★★★★ From: \$16.99	(85) ★★★★★ From: \$95.00	(56) ★★★★★ From: \$7.48

MICHIGAN MAKERS Free: Scratch



http://1.bp.blogspot.com/-4MNM9EFC_VU/Tgs02DUUy/AAAAAAAAACc/rX2uTmUWuA/51600/scratch1.png

MICHIGAN MAKERS Free: PicMonkey + Creative Commons



The image shows a screenshot of the PicMonkey online photo editor. The interface is divided into a left sidebar and a main workspace. The sidebar, titled 'Basic Edits', contains several tool options: 'Auto adjust', 'Crop', 'Rotate', 'Exposure', 'Colors', 'Sharpen', and 'Resize'. Each option is accompanied by a small thumbnail image demonstrating the effect. The main workspace features a dark background with a white rectangular area containing a black silhouette of a person. At the top right of the workspace, there are three buttons: 'Upload', 'Save', and 'Share'. The overall layout is clean and user-friendly.

MICHIGAN MAKERS Free: Python



The image depicts a computer lab or classroom setting. In the foreground, a student wearing a light-colored hoodie is seated at a desk, working on a computer. The desk is equipped with a monitor, keyboard, and mouse. In the background, several other students are visible, also working at their respective computer workstations. The room is well-lit, and the desks are arranged in rows, creating a structured learning environment.



MICHIGAN MAKERS Free: HTML

mozilla Thimble mozilla

Editor Preview for Your Awesome Webpage Publish

```
1 <!doctype html>
2 <html>
3 <head>
4 <title>Your Awesome Webpage</title>
5 </head>
6 <body>
7 <p>Make something amazing with the web</p>
8 </body>
9 </html>
```

Make something amazing with the web

http://
thimble.webmarker.org



MICHIGAN MAKERS Support

MICHIGAN MAKERS Designing Badges & Issuing Badge Challenges

badg.us | Badges | Awards | FAQ | Suggestions | michigan makers | Welcome back, Admin [at] USAG [dot] IL, Sign Out

Welcome to badg.us!

This is an experimental service for badges, powered by Open Source. Check the [FAQ!](#) Submit suggestions!

Have a claim code?
Type it here to claim your badge:

Have an idea for a badge?
Click here to start:

[View your profile](#) [Create a new badge](#)
[Claim award from code](#)

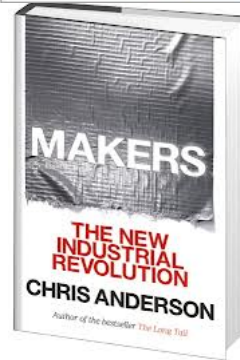
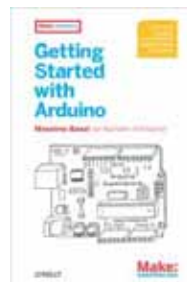
MICHIGAN MAKERS Kinds of Badges

-  Welcome/
Orientation
-  Positive Behavior
-  New Skills



Recommended Reading

- Michiganmakers.weebly.com
Our makerspace journey
- Makeread.org
The Maker Education Initiative
- Raspberrypi.org
Cool stuff to make with Raspberry Pi



Our Michigan Makers Team

Faculty/Staff

- Kristin Fontichiaro, UMSI faculty *
- Rachel Goldberg, East Middle School librarian
- Greg Austic, Austic Labs, Guest Teacher for Game Design *

Additional Makers Series Authors (others noted above with *)

- Chuck Severance, UMSI faculty
- Emily Puckett Rodgers, Open Michigan
- Josh Williams, All Hands Active
- Jan Chernin, Greenhills School

UMSI Student Mentors

- Sharona Ginsberg
- Ellen Gustafson
- Caitlin Holman
- Victoria Lungu
- Terence O'Neill *
- Shauna Masura *
- Rachel Moir
- Caroline Mossing
- Samantha Roslund *
- Jessica Schmidt

40 middle schoolers!



Questions?
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@activelearning

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<http://bit.ly/fontblog>.