

TANGIBLE VISUALIZATION

VIST206

Project 3

Tangible Visualization for Children

- in Education
- In Healthcare
- In Entertainment



Tangible Visualization

On the Body

Around the Body



Tangible Visualization: Soft Circuit

On the Body : Wearables

Around the Body: Responsive Environments



Examples

Wearables

Responsive Environments

Education

- Pop-up book
- Sonic Threads

<http://www.fashioningtech.com/video/sonic-threads>

Play

- Wearable toy piano <http://www.kobakant.at/DIY/?p=1324>
- Sound of Warmth <http://www.bodyinterface.com/2010/08/22/sound-of-warmth/>
- Knit Soft Robot
<http://www.fashioningtech.com/profiles/blogs/crawling-knit-soft-robots>
- Keepon <http://vimeo.com/18429174>
- Sound <http://jkozniewski.com/portfolio/>

Wearables

- Aurelia

<http://www.bodyinterf.com/aurelia-2009/>

- LED shoes

- Smart Mittens

- Keep Calm and Carry
<http://www.fashioningand-carry-leds>



Healthcare

- Autism

- Nature Trail

<http://www.jasonbruges.com/projects/uk-projects/nature-trail>

- Robotic Hands

<http://techcrunch.com/2013/02/04/two-global-makers-come-together-to-make-a-robotic-hand-for-a-boy-in-south-africa/>

- Paro <https://www.youtube.com/watch?v=oJq5PQZHU-I>

-

Nature

- **Fillin**

<http://www.bodyinterface.com/2009/12/20/fillin/>

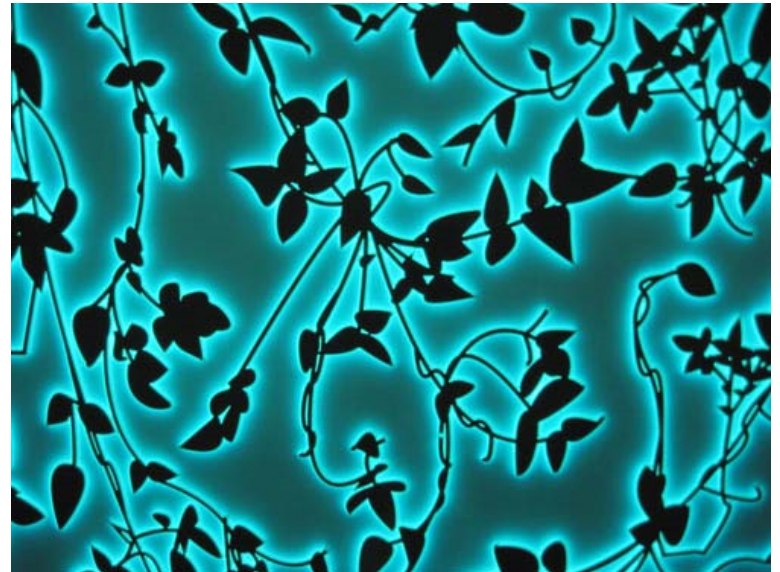
- **Grass** <http://www.embodiedimmersion.com/?p=78>

- <http://www.marilynmonrobot.com/wp-content/uploads/2009/05/1cyberflora.mp4>

Environment

□ DigitalDawn by Loop.ph, 2000

<http://loop.ph/bin/view/Loop/DigitalDawn>



Environment

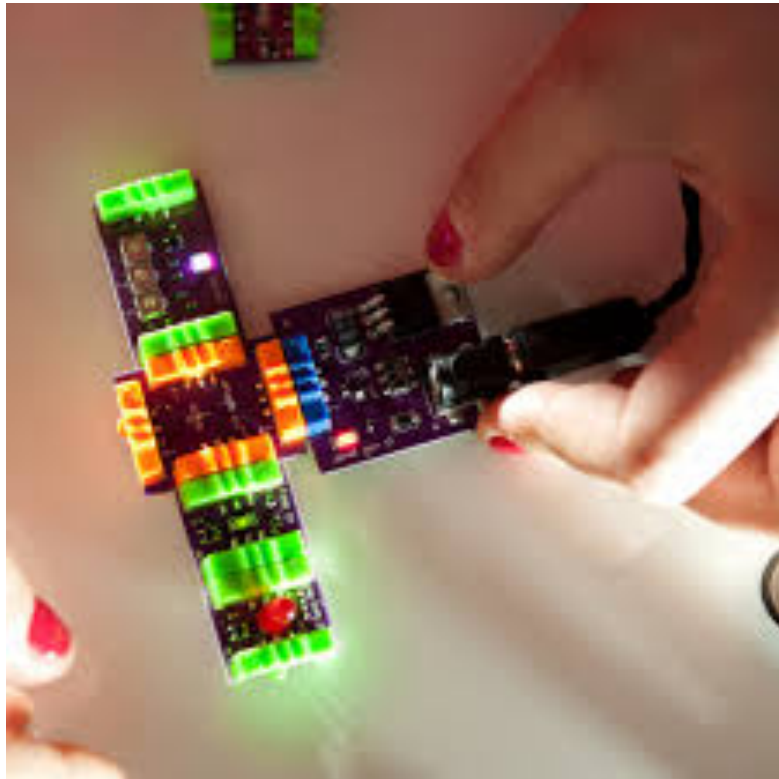
- Shutters by Marcelo Coelho <http://web.media.mit.edu/~marcelo/shutters/index.html>



- Clyde
<http://pinterest.com/pin/122723158568607456/>

Electronics for Kids

- Littlebits <http://littlebits.cc/>
- <https://vimeo.com/littlebits/littlebitsbrandvideo>



Development Environment

- Sensing – Sensors for quality of Touch
- Analysis - Arduino
- Actuate – Light, Movement, Sound, Vibration

Electronics Stores

- Local Stores
 - ▣ Radioshack
- Online Stores
 - ▣ Sparkfun.com
 - ▣ Digikey.com

Assignment

- Project Idea
 - ▣ Concept – text / drawing
 - ▣ Scenario - Please write /draw your project scenario. Be as specific as possible, describing what a person interacting with your project will see / hear / feel, and how they would interact with your project.
 - ▣ Materials
 - ▣ Technical Specification
- Timeline
- Research –find three projects related your idea