

## MFA Design + Technology

The MFA DT program at Parsons examines and extends the intersection of design and technology for practical, playful, theoretical, and artistic impact. Students deepen their practice and theory of design as they critique, leverage, or develop emerging technologies for creative change.

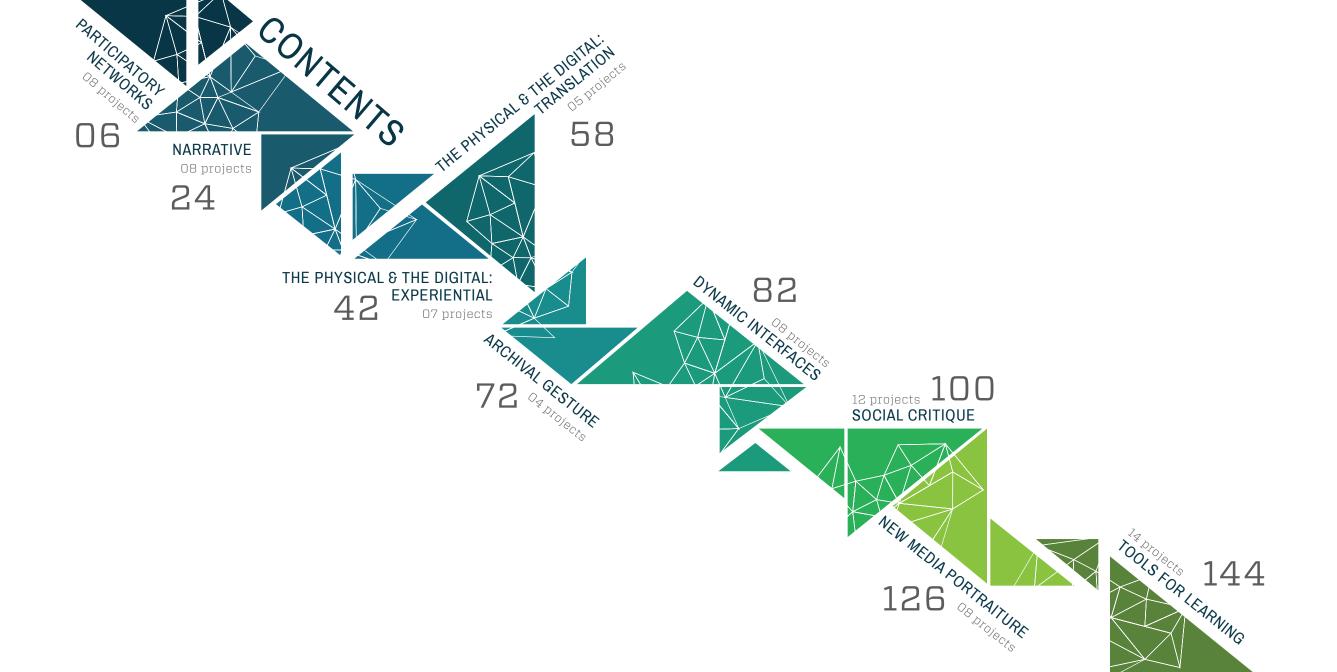


### D+T Thesis

MFA DT students produce a must-see thesis following a year of intensive research, prototypes, and iteration. Each thesis designs new insight and experience that explores the evolving (and at times disruptive) role of technology in our lives.

### D+T Thesis Exhibition

Thesis culminates in a vanguard exhibition, screening, and symposium of these 80+ world-changing projects by emerging artists, designers, coders, makers, hackers, educators, and thinkers.



## PARTICIPATORY NETWORKS



Working within the context of open source and crowd source platforms, these projects build upon those ideologies to open up the way in which people are connected, things are created, and information is accessed and disseminated.



#### John Drew

Thesis Faculty:
Scott Pobiner
Sarah Butler
David Carroll
Christine Prentice-Popken

# filmskipper

ANOTHER FILM DISTRIBUTION SYSTEM IS POSSIBLE.

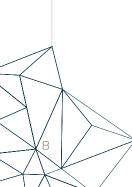
- film
- network theory
- peer production
- HTML5
- Popcorn.js
- Javascript
- social change

Documentaries are profound educational vehicles that deliver timely and pertinent information around civic, environmental, humanitarian and other issues. In the last decade, the proliferation and democratization of digital imaging and editing technology has precipitated an explosion of documentaries alongside an increasing number of international producers and film festivals. However, contemporary distribution channels for documentaries such as film festivals, independent art cinemas and university film libraries have limited capabilities for marketing their catalogs. As a consequence, a vast number of moving and educational documentaries fail to garner large enough audiences to generate the type of awareness impact their subject matter frequently warrants.

Filmskipper is a web-based documentary distribution system that exploits the latest browser technology and other social networking features (commenting, annotating, voting, and sharing) in the service of developing greater and more active audiences for documentary film.

#### filmskipper.com

@surveyeval





#### Ki Won Kwak

Thesis Faculty:

Christopher Romero Ethan Silverman

# Donggrami (A Social Media for Korean Designers)

THIS THESIS IS A PROJECT-ORIENTED COMMUNITY FOR INDEPENDENT KOREAN DESIGNERS

- Talent Donation
- Project-Oriented
- Social Software
- Social Change
- Individual Wellness
- Collaborative
- HTML/CSS
- Javascript
- Objective-C

#### = Donggrami

Donggrami equals togetherness and helps independent Korean designers share their work and personal information by donating their talent through projects. There is a lack of collaboration and recognition between designers in Korea. Because Korean Designers cannot communicate or network with each other, they suffer socially and psychologically. My thesis proposes a solution that implements a creative way to give them support, and also allows them to socialize with other designers so that they feel like they have a community and a feam.

This thesis production creates an online-based community and iPhone app for designers aged 20s to 30s as a social media platform in Korea. The target audience experiences a new user interface of website and mobile usability. This thesis attempts to examine target audience to develop an interest in learning about the relationship between the designers.

#### http://donggramiofdesigners.wordpress.com

MEA DESIGN I TECHNOLOGY

community

talent

projects

sign in





Donggrami a community of designers in Korea. We work at the intersection of **creativity**, **design**, and **technology**.

Donggrami stands for "Togetherness". Donggrami work is crafted in a collaborative environment where designers connect with other designers by giving their talent. Donggrami efforts on building strong and reliable solutions have taken the designers far.



#### creativity

information architecture & hierarchy brand positioning products / campaign ideation digital strategy copywriting video concept / story boarding

#### design

graphic deisgn / illustraion industrial design / interior design jewelry deisgn / motion graphics product design / web design architecture

#### technology

iOS / Mobile app development social API integrations video post-production

#### Mani Nilchiani

Thesis Faculty:

Scott Pobiner Sarah Butler

#### nursee

nursee IS AN IOS APPLICATION THAT ASSISTS NURSE PRACTITIONERS WITH MEDICAL DATA MANAGEMENT AND COMMUNICATING WITH OFF-SITE PHYSICIANS.

Health Care

Telemedicine

Medically Underserved Areas

Outsourcing

Triage

mHealth

• HTML5

JavaScript

PhoneGap

Uneven distribution of physicians in different geographical regions leads to unequal access to health care. While metropolitan and urban areas usually benefit from an abundance of health practitioners, some rural and more distant areas remain underserved.

nursee aims at taking a step forward in solving this issue by putting forth a design solution. Suggesting a mobile web-based platform for Rural Health Centers to connect on-site practitioners in rural areas to remote physicians, nursee makes it possible to outsource medical diagnosis and take advantage of the expertise of off-site volunteering physicians, without the need for their physical presence.

While the medical datapoints for each patient and every visit can amount to a large number, nursee facilitates medical data collection and communication with off-site physician by providing nurse practitioners with an easy-to-use mobile solution that makes triage and data collection fast, efficient and painless.

http://nursee.net

http://maninilchiani.com







#### Amira Pettus

Thesis Faculty:
Colleen Macklin
Barbara Morris
David Carroll
Christine Prentice-Popken

- Mobile Networks
- Information Sharing
- NYC Homelessness
- Twilio
- PHP
- Mongodb
- Apache
- Community Empowerment

### The Homeless Network

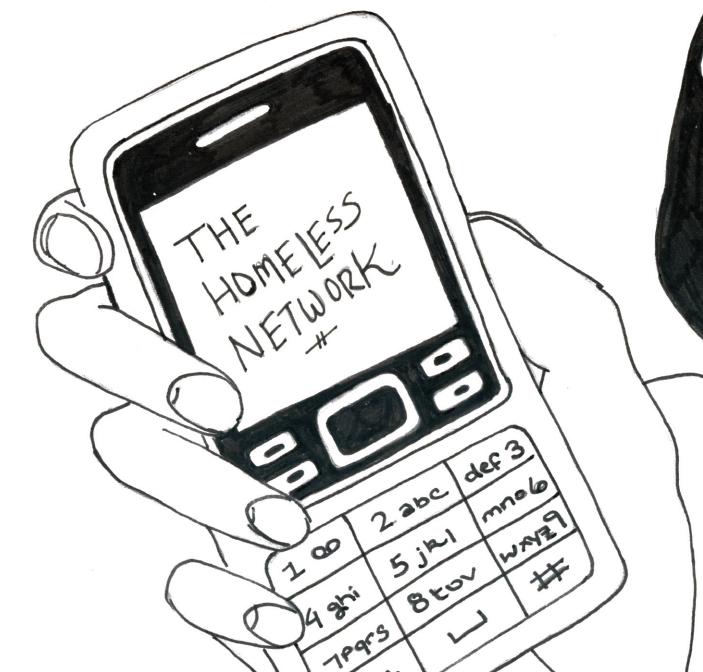
AN SMS BASED NETWORK, THAT CHANGES METHODS IN WHICH THE HOMELESS AND SOCIAL SERVICE INSTITUTIONS PROVIDE AND ACQUIRE INFORMATION ABOUT AVAILABLE INDEPENDENT HOUSING.

While shelters provide a safe, temporary bed for over 50,000 homeless New Yorkers every night, the ultimate goal for many is to find independent housing. Few achieve this goal, however, due to information bottlenecks, complicated application processes and a top-down approach to communication. This inefficient system requires unrealistic expenditures of energy and resources on the part of both the homeless client and the social caseworker.

Acknowledging the rising number of homeless people with mobile phones that keep family, friends, and caseworks close, as well as government initiatives to provide them, The Homeless Network alleviates this stress and optimizes the process of obtaining independent housing. Based in an extensive ethnographic inquiry, this civic technology leverages the increasingly critical role that mobile technology plays as a "virtual home" for homeless people. Populated by hundreds of caseworkers across multiple service organizations, this SMS and voice-based platform facilitates both automated and peer-networked data distribution and communication, empowering the homeless to self-advocate through digital connectivity.

http://thehomelessnetworkdotcom.wordpress.com

http://amirapettus.com



#### Daniel Selden

Thesis Faculty: Katherine Moriwaki Christine Prentice-Popken

### **Patches**

PATCHES IS AN ONLINE HUB THAT FACILITATES PUBLIC PARTICIPATION IN ENVIRONMENTAL SCIENCE RESEARCH.

- Citizen Science
- Web Standards
- Digital Communities
- Wit
- PHP
- Environmental Monitoring
- Environmental Governance
- Lateral Networks

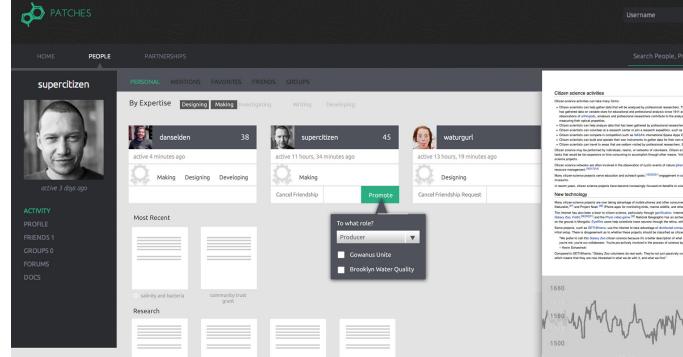
The recent availability of open source hardware and web technologies—specifically tools for data collection and analysis— has created space for new models of collaboration and governance around scientific research. These new practices challenge historical distinctions between credentialed scientists and amateur experts ("citizen scientists"), and increase the tension between these practitioners' expectations and the groups they represent. Partnerships that manage to succeed in this environment often do so by building their own platforms for knowledge transfer and access to technological tools. Unfortunately, these platforms are usually siloed, fragment the community at large and make it difficult to assess scientific outcomes relative to other projects.

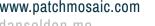
Patches is an online hub for credentialed and non-credentialed researchers, makers, hackers and scientists interested in contributing to environmental science projects . This communal space and its tools facilitates partnership creation, project coordination and discovery within the expanding world of citizen-based science.

www.patchmosaic.com

danselden.me







#### Stephanie Slatt

Thesis Faculty: Christopher Romero Ethan Silverman Anthony Deen Andrew Zornoza

- Teamwork
- Support Systems
- Motivation
- Smartphone App
- Mobile Networks
- Goal Setting
- Goal Achievement
- Lifestyle Change

## ON<sub>3</sub>

A SMARTPHONE APPLICATION LOOKING TO PROVOKE GOAL SETTING AND GOAL ACHIEVEMENT THROUGH AMPLIFYING MOTIVATION AND SUPPORT IN A TEAM ENVIRONMENT.

Whenever anything significant is accomplished, it is because there is a strong team of people supporting the effort. Whether it is losing 10 pounds, kicking a habit, or nailing a huge business proposal; every goal requires support, motivation, and accountability. When we are young, local teams and support systems are plentiful; as we get older and our ambitions increase, often our friends and peers disperse over vast distances. ON3 brings teammates together, leveraging the power of digital networks, to make success a shared enterprise. This is achieved by looking back at my most memorable and influential moments with teammates and exploring what made these interactions truly special and our team successful. These interactions are replicated in the digital space to help teammates support one another and achieve their goals.







#### Joseph Volpe

Thesis Faculty: Katherine Moriwaki Louisa Campbell Colleen Macklin Barbara Morris

#### Skateboard

- Games
- Mobile
- Arduino
- Android Development
- Physical Computing
- Cultural Influence
- Fun
- Sports

## **Pivot**

PIVOT HELPS FREESTYLE SKATEBOARDERS TO COMMUNICATE, PLAY, AND COMPETE ACROSS DISTANCES.

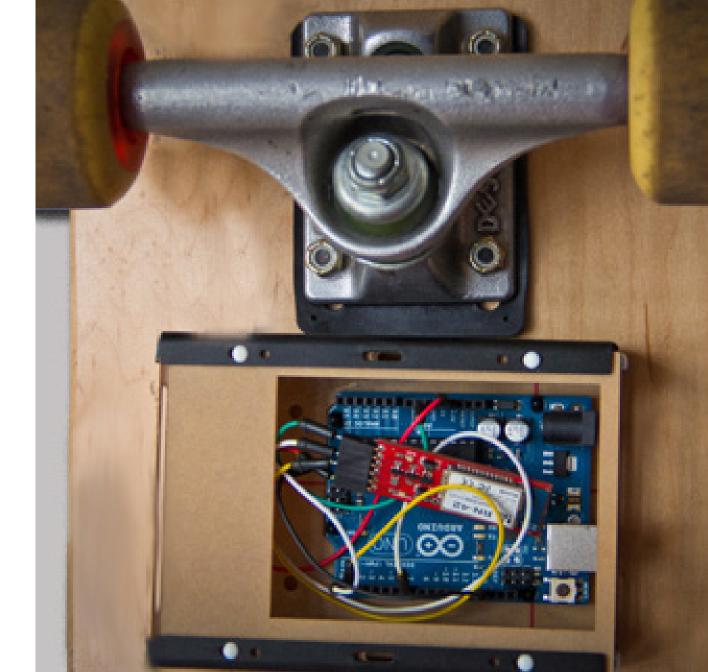
Despite the recent advances within areas of athletic mobile technologies and motion gaming, the extreme sports world is relatively untouched by electronic trends and the

farther-reaching extent of the smart phone. This project is a skateboarding trick tracking application designed and developed in two parts. One part existing in part as physical open sourced hardware attached to a skateboard will act as peripheral interface to accompany the second part, a mobile phone application. The skateboard will track tricks performed by the user and send that information to a game that can be played in real time. With the hope that the skateboarding community will have the ability to build upon this project, this thesis work hopes to help skaters communicate, play, and compete across distances.

http://thesisjoevolpe.wordpress.com

http://stepintospace.com





#### Matthew Willse

Thesis Faculty: Scott Pobiner Sarah Butler Marko Tandefelt Loretta Wolozin

#### Cycling

- Cities
- Peer Networks
- Python
- JavaScript
- Open APIs
- Neighbor Engagement
- The Commons
- Situation-based Networks

# Cyclee & Situation-Based Networks

CYCLEE IS A MOBILE WEB PLATFORM FOR BICYCLISTS THAT CULTIVATES AD HOC COMMUNITIES AMONG OFFLINE NEIGHBORS.

This mobile web platform for bicyclists enables them to connect with other riders in their city. In particular, it fosters community among people who frequent similar paths by making their common but solitary experience more visible. Cyclee users might chat about routes and hazards, partner for a commute, or develop ideas for advocacy and infrastructure. This platform enables users to go beyond existing social ties to make new, targeted connections among neighbors. Rather than broadcasting about an observation to friends or the world at-large, a user's note naturally and effortlessly targets riders who need this information. The platform and community evolve in tandem, an asynchronous critical mass bike ride.

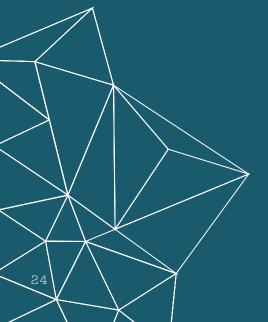
This thesis explores the potential of online platforms to cultivate ad hoc communities among offline neighbors. It proposes that a situation-based network can create responsive and agile relationships deeply rooted in everyday experience. These connections can create feedback loops and resiliency that benefit individuals, communities, and their city.

http://cyclee.org http://twitter.com/mw



# NARRATIVE

Aims to reinvent traditional forms of storytelling.





#### Seo Y Choi

Thesis Faculty: Christopher Romero Ethan Silverman Anthony Deen Andrew Zornoza

#### Technology

- Nostalgia
- Isolation
- 3D
- Maya
- After Effects
- Projection Mapping
- Human Relationship
- Generation Gap

# Nostalgia

HOW CAN TECHNOLOGY AFFECT OUR SENSE OF NOSTALGIA?

Despite the promises of new technology, modern inventions can also create social isolation and feelings of loneliness, especially for older people. 'Nostalgia' explores how antiquated technology can comfort people suffering from information overload.

Using 3D projection mapping techniques coupled with a more traditional diorama setting, 'Nostalgia' is a narrative that highlights human emotions in a landscape full of ubiquitous technology. The video projection with live actors creates an immersive experience.

http://seochoi.tumblr.com







#### Christopher Koelsch

Thesis Faculty: Katherine Moriwaki Louisa Campbell Anthony Deen Andrew Zornoza

- Museum
- Exhibit
- Education
- Jitter
- Arduino
- Digital Audio
- Commentary
- History
- Social Critique

# "The Whisperers"

AN EXPERIENTIAL EXHIBIT USING THE AUDIO OF WHISPERING TO REVEAL AN UNKNOWN SOCIAL COMMENTARY.

Walls can have ears, the vents in your floor can have eyes, and the pipes in your bathroom are dark tunnels snaking through an atmosphere of conspiracy. In a world of collective scrutiny, hushed tones and murmurs are the only communication for survival. Whispering in the home is now the only sound heard in personal life, the hidden expression of knowledge, and dissemination in the dark.

A museum exhibit proposal, "The Whisperers" portrays an era of paranoia where daughters spied upon mothers, neighbors eavesdropped on neighbors, and loved ones quickly betrayed one another. Illustrating the communication of whispering and its effects on familial and neighborly relationships, this interactive experience is about dwellings, shadows, and spaces with compartmentalized narratives crowded with emotion.

http://whisperersinteractive.com/ christopherkoelsch.com







#### Jae Won Lee

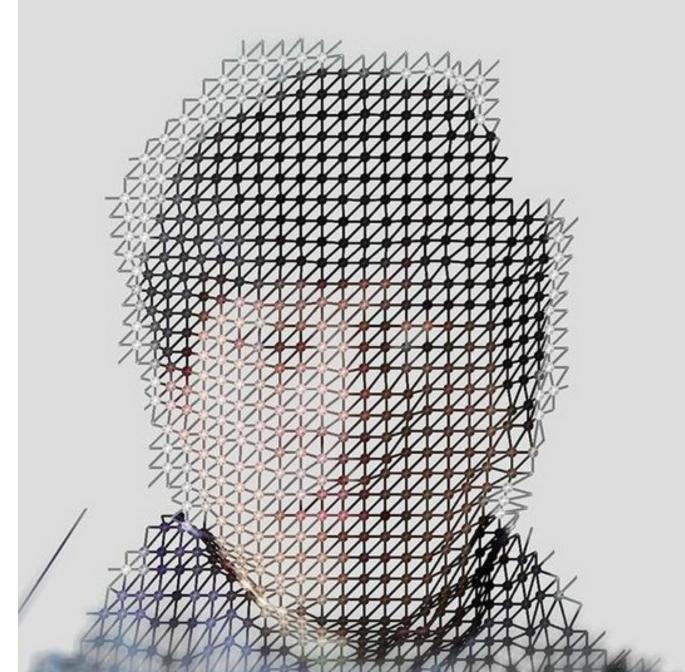
Thesis Faculty:
Christopher Romero
Ethan Silverman

## The Synesthete

- Film
- Motion Graphics
- Synesthesia
- Manifesto
- Depth Sensor
- Image Manipulation
- Metaphorical
- Lyrical
- Poetic

The Synesthete is an experimental film about creativity, inspiration, self-imposed pressure and the vulnerable vision of an artist. The film is an attempt- in the form of personal observation and visual experiments based on digital technology- to understand, articulate, define and control the chaos, obsession and psychological preoccupation of the artist. Is it possible to quantify and synthesize synesthesia? The Synesthete is a journey that captures psychological moments in everyday life in order to visualize the relationship between the artist and the art. The production of the film involves capturing live-action footage with a digital camera and a depth-sensor. The manipulation of the footage is done using After Effects, Premiere and Cinema 4D. This film is synesthetic in both its conception and realization.

leaphighster.tumblr.com



#### Ricardo Munoz

Thesis Faculty: Christopher Romero Ethan Silverman

# 5 Story Building

AN INTERACTIVE NARRATIVE EXPERIENCE FOR DIGITAL TABLETS WITH HINTS OF PLAY AND VOYEURISM.

- Interactive Narrative
- Storytelling
- Digital Tablets
- Character Development
- After Effects
- Digital Painting
- InteractBuilder
- Nonlinearity
- Voyeurism

A mischievous monster, an inexperienced sidekick, ten shallow girls, a retired folk story villain, an apathetic robot, and a megalomaniac from outer space live under one roof in the "5 Story Building". Five simultaneous stories tell the lives of the singular occupants of this confining building. These neighbors carry on with their own ambitions and inherited craziness without realizing that their stories are intertwined in this episodic interactive fiction.

Jean Paul Sartre and "Sleep-No-More" inspire this experience for digital tablets that explores the nuances and opportunities enabled by the introduction of interactivity in storytelling. "5 Story Building" is intentionally crafted to show off things that traditional media cannot.

Multiple readings are necessary and voyeurism is encouraged.

http://5storybuilding.com





#### Adam Sabh

Thesis Faculty: Christopher Romero Ethan Silverman

# The Way We Are Shaped

AN IMPRESSIONISTIC FILM ABOUT A CRIME THAT MUTUALLY MUSICALLY INSPIRES BOTH CHARACTERS INVOLVED.

Music

Film

Narrative

Inspiration

Musicianship

Muse

After Effects

DSLR Cameras

Final Cut Pro

A collision on the cramped sidewalks of New York triggers an eruption of trumpets blaring B flat. A subway arriving in the height of rush hour resembles the bellowing of a thousand floor toms, as a baby's cry for their mother is confused for crashing cymbals. "The Way We're Shaped" is an impressionistic film on the multi-sensory relationship we have with music where our perceptions and everyday interactions regulate our musical expression. Although the processing of visuals and music happen in different places in the brain, enjoyment of them comes from the same source. Music breathes, speeds up, and slows down just as the real world does and our cerebellum finds pleasure in adjusting itself to stay synchronized. In this film we explore the creation of music in reflection of the emotions we conceive from the images we perceive.

swayparade.tumblr.com

www.adamsabh.com







#### Wei Cheng Tu

Thesis Faculty: Christopher Romero Ethan Silverman Anthony Deen Andrew Zornoza

# Join the Journey

DIGITAL STORYTELLING+NON LINEARITY

- Mobile Device
- Interaction
- Narrative
- Nonlinear
- IOS
- Xcode
- Adobe
- Different Reading Experience

Mobile devices expand interaction between people and the stories they read. However, despite the interactivity technology brings, books still rely on linear, non-interactive narratives. The stories haven't changed dramatically: people have simply switched to a new platform for reading them. The goal of this project is to explore and experience the possibilities gained in combining mobile devices and nonlinear digital storytelling. Stories can now effect each other, one story can be hidden from another, actions of the user can lead to stories ending differently. I am using interaction technology to change not only the way we read, but more importantly to change storytelling itself.



#### Tian Xie

Thesis Faculty: Christopher Romero Ethan Silverman Scott Pobiner Sarah Butler

### Multicultural Background

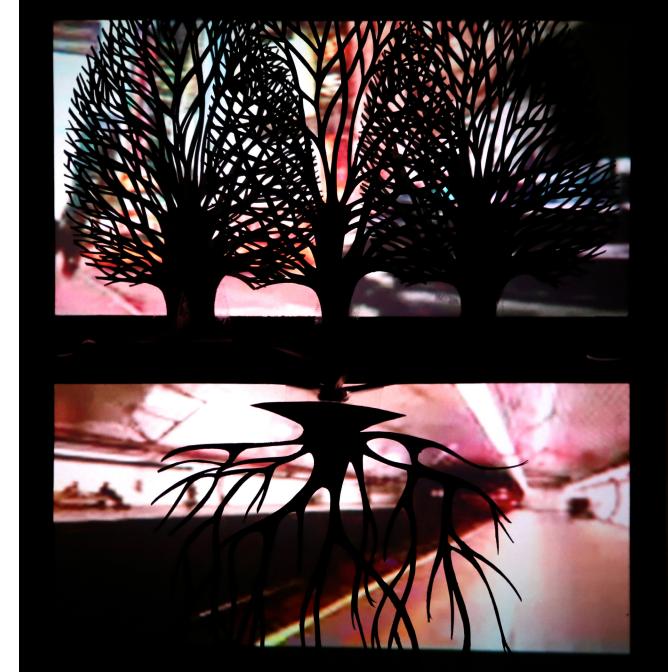
- Immigrant
- Urban Environment
- 3D Mapping
- Final Cut Pro
- Premiere
- After Effects
- Life Experience
- Live-recording

# The City

THE CITY IS PROJECTION MAPPING TALKING
ABOUT THE LIFE EXPERIENCE IN NEW YORK CITY.

The City is a projection mapping video, focusing on New York City. Based on the background of New York City, here comes a comparison: New York City is a forest, buildings are trees, subway lines are roots, and people are nutrients for this city, as they make wealth, and build this city. Through the comparison, I try to present the city system and the humanity, including the relationship and connection between the ground and the underground, and the relationship and connection between a natural and an artificial product. The City is also discussing the urban sociology; data of this city; human psychology; urban environment; projection mapping; editing and post-production; and materials. In this project, the physical part is a book sculpture with a forest shape; and the visual part is a series of New York daily life live recording.

http://tianxiethesis.wordpress.com



#### Alessandra Melo da Silva

Thesis Faculty:

Anthony Deen Andrew Zornoza Scott Pobiner Sarah Butler

Urban Culture

Micropayment

Street Music

UX

Mobile

API

Phonegap

Urban engagement

Artist Support

## Busker

TRACK AND SUPPORT STREET MUSIC FROM A TO Z

"Busker" is a multisided mobile platform that aims to facilitate the connection between audience and Street Musicians selected by the MTA MUNY (Music under New York) project.

The sheer diversity of musicians busking their trade under the streets of New York makes it perhaps one of the most vibrant performance spaces in the country. As they strive to make their music heard over the roar of trains, the exchange between musicians and audience is not always obvious – encounter is always incidental and the connection momentary. Additionally, if listener does not have that dollar in hand to donate, the musician loses the income.

With the "Busker" app, people will be able to search and finding of MTA sponsored musicians, get information about their trade, listen to sample of their music and remotely give money contribution to support their work.

buskers-nyc.com alesmelo.com



# THE PHYSICAL & DIGITAL:

**EXPERIENTIAL** 

Aims to explore and interrogate the rapidly changing digital culture and what this means to physical experience.





#### Aisen Caro Chacin

Thesis Faculty: Marko Tandefelt

- Cross-modal Perception
- Human-Computer Interaction
- Accessibility
- Arduino
- Eagle Cad
- Rapid Prototyping
- Bone Conduction Hearing
- Tactile Displays
- Echolocation

## Sensory Pathways for the Plastic Mind

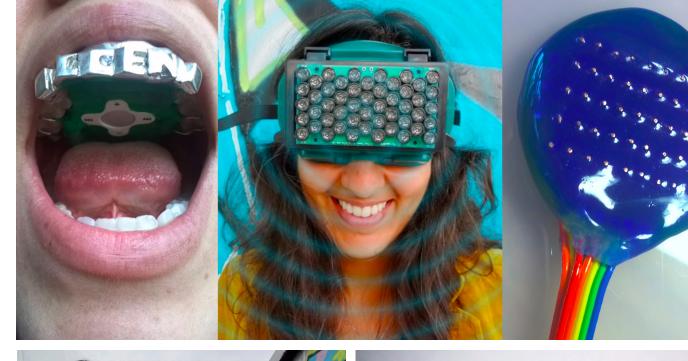
A SERIES OF EXPERIMENTAL. WEARABLE DEVICES THAT EXPAND SENSORY EXPERIENCES THROUGH CROSS-MODAL COMPUTER INTERACTION.

This research explores perceptual interfaces that translate information through crossmodal sensory methods. In four case studies, this thesis appropriates common devices, transforming their sensory functionality:

- 1. Play-a-Grill: bone conduction music player jewelry;
- 2. Echolocation Headphones: seeing space through parametric sound;
- 3. Spoon Matrix: tongue display spoon for tactile sight in gastronomic experiences;
- 4. Scent Rhythm: olfactory mapping to the body's circadian cycle.

These mobile devices test sensory-mixing mechanics to create alternative electronic information displays. This shift of information output tests the potential of further integrating computing applications with our wide physiological sensory array. The familiar cultural identity of these base devices has led to iterations that draw from their core functionality to find alternative perceptive pathways -- to instigate new possibilities: experiences and uses based on mutli-sensory interactions and their delivery on novel interfaces to their participants.

http://aisencaro.com









#### Marisa Glick

Thesis Faculty: Scott Pobiner Sarah Butler

- Augmented Reality Services
- Interaction design
- Luxury Retail Experience
- Aurasma
- Magic Lens
- The Value of AR
- User Experience
- Ubiquitous Computing
- Craftsmanship

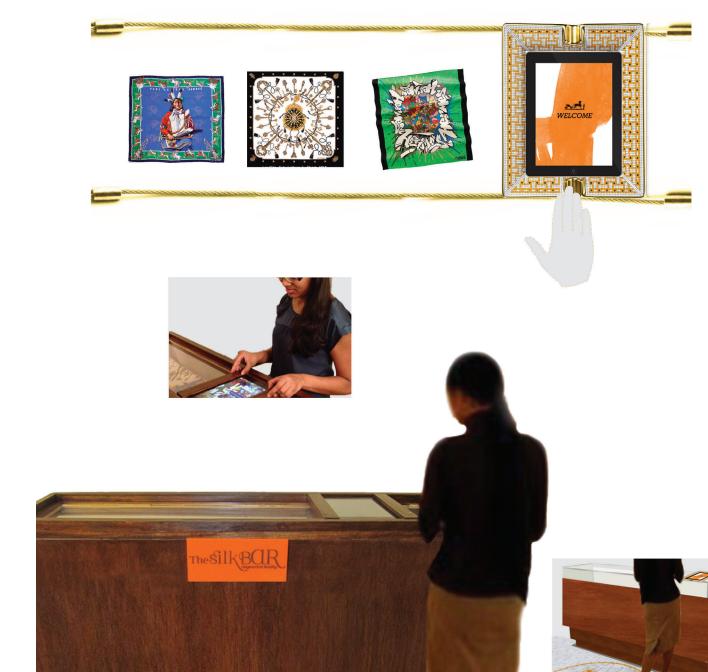
# The Silk B{AR} Augmented Reality

SILK BAR IS AN INITIATIVE TO EXAMINE HOW TO INTEGRATE AUGMENTED REALITY IN STORES THROUGH THE USE OF POWERFUL NARRATIVE THAT SERVES A PURPOSE IN THE LUXURY INDUSTRY.

In a world that is technologically evolving it is comforting to know how to make things. Craft may be thought of as an old term, but the process enriches lives and preserves words, visions, and insights across generations. As our expectations are constantly changing, it is vital to emphasize that craft is just as important today as it was in the medieval era of the Guilds. By partnering with Hermès, a French manufacturer of quality goods (established in 1837), this project integrates augmented reality (AR) into a specific, time-honored brand experience. The company prides itself on heritage, traditions, and history while this project purposes to intertwine these elements through the use of AR and to showcase an unchanging commitment to craftsmanship. Digital layering of content is an avenue for new engagement. There is room for innovation in the retail space using augmented reality. Silk Bar scaffolds an experience where craft is emphasized to change the retail service model.

http://marisaglick.com/blog

http://www.marisaglick.com



#### Samuel Lee Kwon

Thesis Faculty:

Melanie Crean

Barbara Morris

David Carroll

Christine Prentice-Popken

- Browser
- ADHD
- Education
- Plug-in
- Blueprint
- HTML

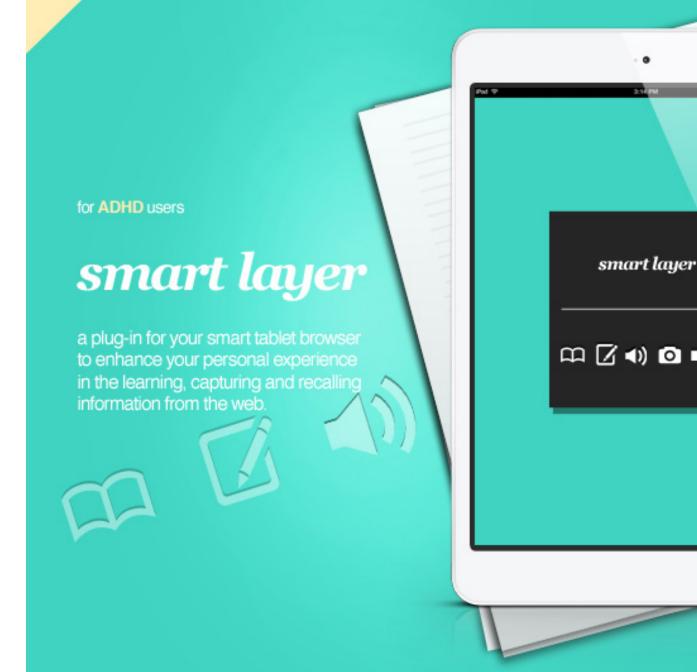
## **Smart Layer**

SMART LAYER PROPOSES A SET OF BROWSER OR PLUG-IN FEATURES THAT CAPTURE WEB-BASED INFORMATION IN AN INTERACTIVE JOURNAL.

Learning from and using content from the Internet is problematic. We request information and get back thousands of results, but we are challenged when it comes to capturing, saving and/or recalling it. Browser platforms generally lack a set of integrated tools that help users process information. Bookmarks only direct you to the information's location (if it hasn't been moved). Ratings have no context. And many advanced features like text-to-speech are hidden or platform-specific. What use is the Internet if we cannot easily employ its contents in another context once we find it?

Smart Layer is a proposal for a set of tablet or PC browser or plug-in features that capture and focus web-based information through an interactive journal. Intended to help the user surmount the often distracting and overwhelming amount of information one finds on the Internet, these features -- bookmark, memo, reader, highlight, record and snapshot - are modeled on studying tools and techniques for students with ADHD.

http://ilovesamdesign2.com http://ilovesamdesign.com



#### I-Shan Lin

Thesis Faculty: Scott Pobiner Sarah Butler

## CollArt

NEW MEDIA APPLYING IN ART THERAPY

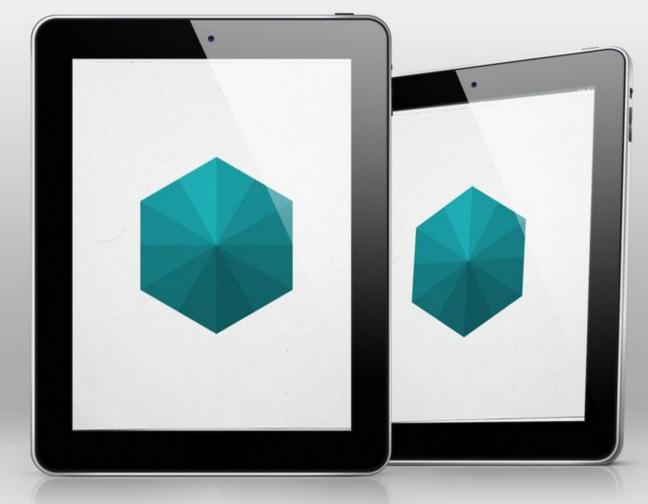
- Mental care
- Therapeutic
- Counseling
- Processing
- Android
- Play
- Communication
- Visual

This is a project studying on how to apply digital media in art therapy. CollArt is designed for communication difficulties and anxiety of speaking. New technology brings more possibility in art therapy. Moveable device brings therapists an option to practice therapy and brings interaction experience that is different from traditional tools. It creates an interaction experience. CollArt is an app like a toolbox in drawing so that users can choose different way to visualize their thought. Through group work practice, user can give meaning, reinterpret their expression, and develop social ability. In the app, users can draw on one virtual canvas simultaneously to interact with each other. With the help of new media, a more close attachment between users can be established regardless of the limit of time and space.

#### http://arttherapy.zzl.org

https://nanonaomi.wordpress.com





#### Musen Lin

Thesis Faculty: Anthony Deen Andrew Zornoza

## **Units Furniture**

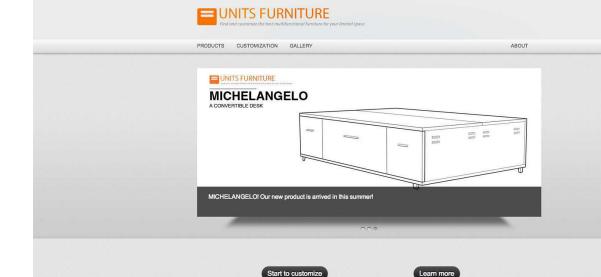
UNITS FURNITURE IS A MASS CUSTOMIZATION SYSTEM FOR FURNITURE MANUFACTURING.

- Mass Customization
- Multifunctional Furniture
- E-business
- Furniture Making
- HTML5
- 3D Modeling
- Space Saving
- Interactive Dialogue

Units Furniture is a new mass customization system to allow customers to customize their unique one-off multifunctional furniture for their limited living space. Saving space, modularity and multifunction have become the dominant features in Units Furniture. Units Furniture is a well-considered solution, ergonomically sound and fully resolved in its form and function. Manufacturing process, materials and finishes will be determined and specified and be especially mindful of how Units Furniture's pieces are assembled. This website is an online buyer-centric platform to assist in explaining Units Furniture's products and our new mass customization furniture system. This website relates to design and fabrication, as well as assembly and distribution.

http://thesismusen2012.wordpress.com

http://unitsfurniture.me.cc





#### Conor Russomanno

Thesis Faculty:
Marko Tandefelt
Loretta Wolozin
Colleen Macklin
Barbara Morris

- Brain-Computer Interfacing
- Interactive Narrative
- Artificial Intelligence
- NeuroSky EEG Headset
- openFrameworks
- Pencil and Paper
- Human-Computer Interfacing
- New Media
- Implications of Technology

## Rob3115 - A Neuro-Immersive Narrative

THIS PIECE EXPLORES THE INTERSECTION OF INTERACTIVE NARRATIVE, VISUAL STORYTELLING, AND BRAIN-COMPUTER INTERFACING.

Rob3115 explores the intersection of interactive narrative, visual storytelling, and brain-computer interfacing. The experience, designed for a single user, is an animated short story that puts the viewer in the shoes of a highly intelligent artificial being that begins to perceive a sense of consciousness and struggles with the dubious existence of his own free will. With the use of a commercial EEG device, the user's brain activity directly affects the internal dialogue of the main character, in turn, dictating the outcome of series of psychosomatic realizations. The system is an evolution of the traditional choose-your-own-adventure narrative structure; instead of actively making decisions at critical points in the narrative, the user passively affects the story with their internal brain state and level of engagement with the piece. This work makes use of new media devices while, at the same time, commenting on the seemingly inevitable implications of their introduction into society.

http://rob3115.wordpress.com



#### Boshan Zhou

Thesis Faculty:
Melanie Crean
Barbara Morris
Marko Tandefelt
Loretta Wolozin

- Human-Computer Interaction
- Natural User Interface
- Brand Experience
- Kinect
- Unity3D
- Autostereoscopy
- Immersive
- Customization
- Engaging

# AAPP (All Around Promotion Platform)

A GLASSES-FREE 3D BASED NUI PLATFORM TO CUSTOMIZE YOUR OWN CAR THROUGH GESTURES ONLY.

My thesis is a gesture based Natural User Interface platform to let people use gestures only to interact with digital content / 3D models without any physical controllers or wearable devices. This platform aims to provide an alternative way of interaction between humans and digital content, rather than traditional mouse or keyboard interaction, increasing the realism and enhancing the user experience. All Around Promotion Platform (AAPP) uses strategies derived from Human-Computer Interaction, brand experience, and Natural User Interface design to create glasses-free 3D display controlled by haptic gestures that can be used to market a range of commercial applications. My thesis project chooses car customization in a car show scenario as the example to show how it would work. This project makes use of product customization strategies already available in online car customization sites such as the BMW online customization website, but presents the information by immersive, dimensional glassesfree 3D display controlled by hand gestures. To manipulate the 3D car model, customers at the show use gestures to rotate, zoom, select and view details of the car, explore inside the car, and customize their own cars such as changing color and accessories and previewing the effect in real-time, interaction and the process of customization can be more immersive and engaging with this gestural platform.

http://demmyboshanzhou.com/2013/02/11/aapp-all-around-promotion-platform

http://demmyboshanzhou.com



# THE PHYSICAL & DIGITAL: TRANSLATION

58

Recognizing the ubiquitous use of technology today, these projects aim to explore what is gained and lost when translating back and forth between the mediums.



#### Elizabeth Clare

Thesis Faculty: Marko Tandefelt Loretta Wolozin

## One With One

IN ONE WITH ONE, PARTICIPANTS TALK TO THEMSELVES, EXPERIENCING A VISUAL RESPONSE IN ITS PRIVATE SPACE.

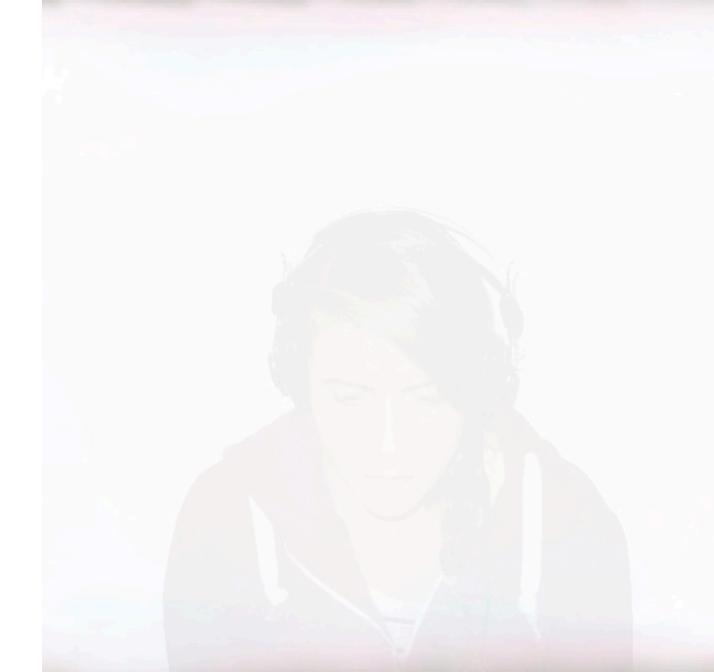
- #verbalcommunication,
- #introspection
- #megenerationforthedigitalage
- Arduino
- MAX/MSP
- Physical Computing
- Immersive Spaces
- Social Behaviors

One With One is a responsive, private space for its participant to talk freely, releasing what it is on his or her mind. Language helps us organize and make sense of personal issues or events. By translating thoughts from our minds into words, we can understand our thoughts with a heightened awareness or with a new perspective (Pennebacker, 529). Though there can be great benefit from conversing and sharing with others for release, support, and feedback, there can also be repercussions. When immersed and talking to oneself in the One With One space, its participant experiences the system's response -- visual metaphors prompted by what the user offers verbally. The system responds to the sounds of language and silence, mimicking stages of conversations and interaction we have with others. One With One offers a safe place to work things out verbally and to get non-obtrusive feedback. By creating a new system for verbal disclosure, there is the potential to offer receptiveness to what a participant chooses to share: a responsivity that is both reacting and mirroring, simultaneously presenting both an objective and subjective interpretation of the participant's expression.



http://elizabethclareworks.com





#### Jennifer Kaye

Thesis Faculty: Anthony Deen Andrew Zornoza Katherine Moriwaki Louisa Campbell

## inventori

ART-MAKING AS PHILOSOPHICAL INQUIRY.

- Personal Artifacts
- Object-Oriented Ontology
- Archival Methodology
- Processing
- Web Cams
- Raspberry Pi
- Point-of-View
- Dematerialization
- Narrative

Whenever I visit my parents' house I browse the objects that I've been saving for the next time I look in my closet: a prom dress, a science fair poster, camp regalia, ticket stubs. I kept these things for their ability to lead me back to myself. They are the breadcrumbs that I use to find my way home.

My project reimagines a typical home inventory record as a more poetic and provocative archive. It's a series of three artworks that blend personal artifacts with technology. The resulting hybrids challenge the viewer to rethink their relationships with and understanding of objects.

In two of the pieces, seemingly-mundane objects become unique signifiers of human experiences. Collections of objects allude to stories that are greater than the sum of their parts. In the third piece, personal artifacts take on a life of their own and transition from objects that are guarded by humans to objects that guard each other.

http://inventori.me http://itsjennkaye.com







#### Thomas Lawrie

Thesis Faculty:

Katherine Moriwaki

Louisa Campbell

## FitHub

FITHUB IS A TANGIBLE INTERFACE FOR FITNESS TRACKING DATA,
VISUALLY REVEALING PROGRESS TO HELP COMPLETE WEEKLY GOALS.

- Fitness Tracking
- Pervasive Display
- Calm Technology
- Web API
- Arduino
- LED Matrix
- Quantified Self
- Internet of Things

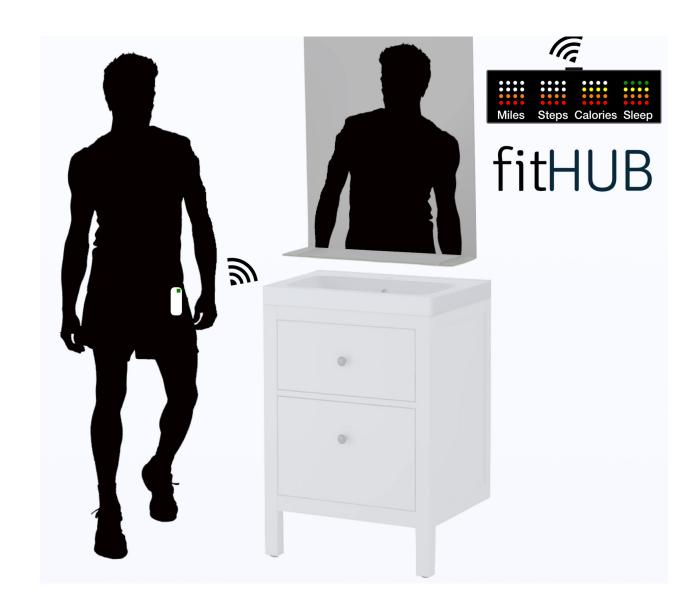
Ubiquitous computing has made it possible to track many aspects of our lives including our physical well being. Through the use of various sensor platforms, from sleep tracking apps to wearable fitness tracking devices, we are generating a mountain of personal data about our bodies. However, much of this data remains hidden from our daily life experience. The challenge in making this data useful is bringing collected information into a physical space where it can help us interpret progress towards fitness goals.

FitHub is a tangible and configurable interface located in the home that displays real-time fitness tracking data from the various sensor platforms that someone might use. A progress bar acts as a visual guide to show how close someone is to completing weekly goals. By providing users with immediate insight into their fitness progress across multiple sensor platforms without having to touch their computers, FitHub closes the feedback loop and makes it easier to work towards a goal.

#### http://thomaslawrie.com/FitHub

http://thomaslawrie.com/parsonsmfadt





#### Shankari Murali

Thesis Faculty: Scott Pobiner Sarah Butler

### You are Not here

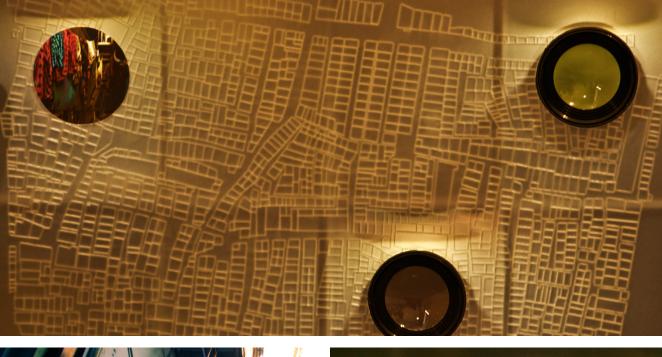
A SPACE SEEN THROUGH THE LENS OF A SUBJECT, A SPECTACLE AND AN IMAGINARY

- Space
- Representation
- Contested Urbanism
- Informal Cities
- Spatial Trialectics
- Soft Circuits
- Physical Computing
- Social Dialogue
- Rethinking Urbanism

"You are Not here" is an interactive design exhibit that seeks to represent urban spaces through a spectrum of lenses. Focussing on Dharavi, an informal township in Mumbai, it analyses the different spatial phenomena and practices associated with the space. Inspired by Henri Lefebvre's lived-perceived-conceived triad, the lenses chosen to represent Dharavi are: the everyday, the spectacle and the imaginary.

The everyday represents the space of the subject seen through the lens of a postman who has to tactically deal with the labyrinthine nature of the informal city to deliver letters to its inhabitants. The spectacle represents the objectification of the subject, seen and sold to the slum-tourist. The imaginary represents the objectification of the space, divided and distributed to architects and planners who conceive new visions for the space.









#### Nathan Rudolph

Thesis Faculty: Colleen Macklin Barbara Morris Katherine Moriwaki Louisa Campbell

# Toys of the Apocalypse

A CONSTRUCTION SET FOR THE IMPENDING APOCALYPSE.

Attiny

Micro-controller

Tactile

Interface

Toy

Kids

Education

Polygamers

Gak

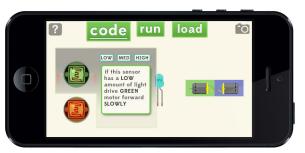
The focus of this research comes from a desire to help shape the way in which our culture sees growth in the realm of interfaces. When we are content to be amazed by increasingly higher definition in simple touch screens we lock ourselves into a world in which the computers we are working with only know us through a handful of X and Y coordinates on a flat, frictionless surface. My aim is to create the tools needed to inspire projects that take advantage of the powerful feedback and natural responses of our hands. The platform for this feedback is based around the use of polymers that have different properties that interact with the digital world. Using these polymers as a building material with the combination of programmable micro-controllers allows for the creation of unique, dynamic, and potentially bizarre interfaces.

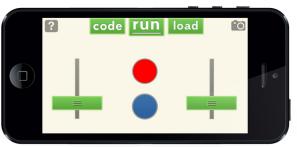
http://toysoftheapocalypse.com

http://naterudolph.com











#### Lauren Slowik

Thesis Faculty: Colleen Macklin Barbara Morris

## 3DIY: Printable Furniture

A KIT THAT GIVES CITIZEN DESIGNERS THE ABILITY TO PHYSICALLY HACK IKEA FURNITURE WITH CUSTOM 3D PRINTED PARTS.

DIY

Lifehacking

Furniture

Desktop 3D Printing

Rhinocerous for Mac

Creative Commons

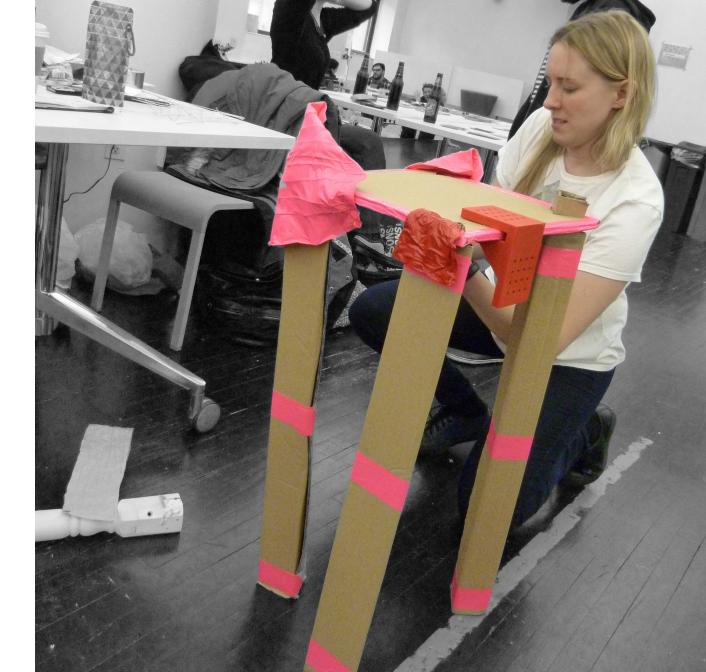
DIY Culture

Subversion

Meaning Not Function

3DIY is an exploration into the range of functions that a consumer 3D printer can perform. It takes shape as an Ikea furniture hacking kit. A DIY system in a sense, the Ikea build-it-yourself environment is the perfect opportunity to introduce a functional scenario to the consumer 3D printer repertoire. 3DIY will be distributed as a 3D model plugin download. Not unlike how home sewers learn to sew from patterns, plugins will introduce the user to 3D hacking with projects that are easy, medium, and difficult to make. Rapid customization is what makes 3D printers subvert their own purpose amid a world of exactitude and replication. When a consumer 3D printer is employed at the DIY design level, the machine rejects its built-in implication of efficiency and replicability in favor of the idiosyncratic and personal.





## ARCHIVAL GESTURE



Using the archive as a point of reference these projects span across histories, mythologies, and digital space to both question and create remembrance as recorded, and to reexamine pre-history in a contemporary context.



#### Noa Dolberg

Thesis Faculty:
Anthony Deen
Andrew Zornoza
Marko Tandefelt
Loretta Wolozin

- Early Technology
- The History of Tools
- Gadgets
- Arduino
- openFrameworks
- Phenomenology
- Nature

## Gadgets for the Caveman

ANCIENT-CONTEMPORARY GADGETS THAT COMBINE TODAY'S TECHNOLOGY, WITH ELEMENTS TAKEN FROM THE LOGIC AND MATERIALITY OF THE NATURAL ANCIENT WORLD.

Gadgets for the Caveman is an installation consisting of four gadgets created while envisioning an encounter of an early human with the world in its current cultural, environmental, and technological state. Each gadget rethinks an element or a concept from everyday life - a switch, a night lamp, the idea of time or communication from a distance - and illustrates it for the caveman. To assist the Caveman in making connections between today's tools and his ancient ones, the gadgets are ancient-contemporary, meaning, they use the advantages of today's technology, combined with elements taken from the logic and materiality of the natural world that dominated human existence for so long.









#### Brian McFadden

Thesis Faculty: Katherine Moriwaki Louisa Campbell Marko Tandefelt Loretta Wolozin

#### Animated GIF's

Visual Culture

Raspberry PI

PHP

AJAX

jQuery

Open Source

Visual Content

Internet Culture

## gifpow.tv

GIFPOW.TV CREATES A NEW ENTERTAINMENT PLATFORM BY
TRANSPOSING ANIMATED GIFS FROM INTERNET TO LIVING ROOM.

GIFPOW.TV engages the user in the transposition of GIF animations from the Internet to a live, customizable narrative direct from a user's television. By rethinking how GIF media is presented and consumed, GIFPOW.TV creates an entertainment platform that explores the moving image format and GIF culture from a different perspective. GIFPOW directs an open stream of GIF animations, meant to be seen full screen from one's own television, and its customizable archive feature allows the user to tap into the rich, yet unfiltered online GIF culture to create a personalized narrative. Using a smart device as a remote to curate and archive, users have the choice to be in control or be in the passenger seat and watch the Internet of GIFs.

The open hardware Raspberry PI powers GIFPOW.TV, and is an inexpensive and accessible means by which the users connect Internet GIF culture to their ubiquitous living room fixture of their television.

http://gifpow.tv http://t-wreks.com/thes



#### Vanessa Roa

Thesis Faculty:
Christopher Romero
Ethan Silverman

## The Deuce Bible

A PUBLICATION ABOUT PRE-DISNEYFIED TIMES SQUARE, EXAMINED THROUGH THE HISTORY OF ITS EXPLOITATION CINEMA.

Zine

Grindhouse

Exploitation

Cinema History Disneyfication

Android

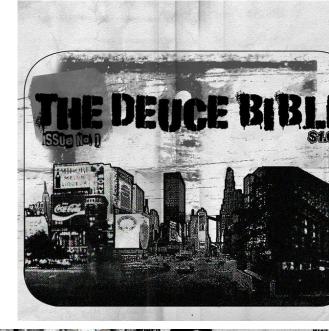
Cordova

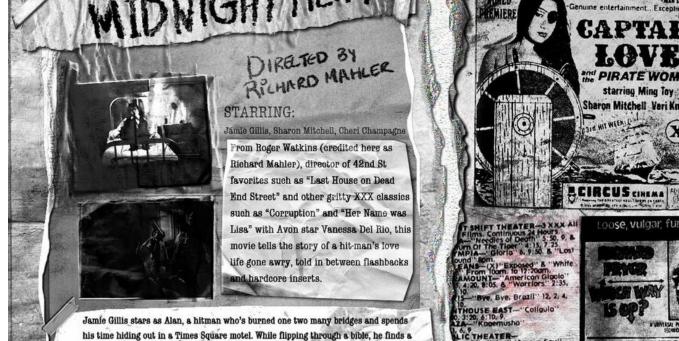
Non-linear Publication

Tourist Guide

Take a walk on the wild side and venture into Times Square when it was a no man's land with "The Deuce Bible", a single layout mobile e-zine that transports you back to pre-Disneyfied Times Square during the 80s. "The Deuce Bible" is your guide to the sleazy cinema history of "The Deuce"-aka- 42nd St, a place where going to the movies meant gambling with your life. Read personal accounts from the people who lived it themselves and view photos and trailers for films that could have only been made for the Deuce; where sex, drugs, and violence permeated from the silver screens and onto the sidewalks of 42nd St. Experience the craziest sights and sounds to ever come out of cinema with "The Deuce Bible", an 80s themed time capsule of Times Square's exploitation cinema.







#### Jane (Lola) Ye

Thesis Faculty: Melanie Crean Barbara Morris Katherine Moriwaki Louisa Campbell

- Sound Sculpture
- Obsolescence
- Performance
- Communication Technologies
- Physical Computing
- Mechanics
- Re-interpretation
- Critique
- Re-performance

# The Crooked Beak of Heaven

A MULTIPLE COMPONENT INSTALLATION THAT SEEKS TO INCORPORATE A WEARABLE SOUND SCULPTURE TO FORMALLY AND ACOUSTICALLY REPRESENT AND REANIMATE THE DODO BIRD.

Cinematic Anthropology seeks to artificially resurrect extinct species, namely the dodo bird, whilst drawing metaphoric parallels to extinct forms of technologies through sound and form. It is to be realized in a combination of interactive costume and performance because I am interested in exploring the nostalgia for things that are extinct, as mixed with our fascination and fear of obsolescence.

http://lolaye.com/thesis



## DYNAMIC INTERFACES



Experimental interfaces that offer new approaches to engaging with content, including multi-touch and gestural controls. These projects also aim to explore and open up new approaches to system and platform design.



## Tharit Firm Tothong + Peng Cheng

Thesis Faculty: Colleen Macklin Barbara Morris

## that they

DANCE AROUND THE IPAD TOGETHER WITH YOUR PARTNER TO UNFOLD FORGOTTEN MEMORIES OF TWO PROTAGONISTS.

Local Multiplayer

Interactive Narrative

Gestural Interaction

openFrameworks

iPad

iOS

Social Sculpture

Relational Object

• Fun

Originating as an investigation of the relationships between participation and spectatorship, ThatThey explores how two players' negotiations emerge when the game requires them to interface through the same device and when the choices they make in the game affect each other's narrative direction.

The goals of this thesis investigation are to:

- Use available technology in a tablet device to reveal alternative interactions between two players and spectators using a touch screen, accelerometer, microphone, and AirPlay streaming.
- Provide an interaction that allows players to negotiate and propose multiple strategies that would lead to different narrative outcomes.
- Encourage participation, start a discussion, and allow players to express themselves.

http://thesis2013.tothong.com

http://firmread.tothong.com, http://ooxxv5.com



#### Jeremy Peterson

Thesis Faculty:

Marko Tandefelt

Loretta Wolozin

## **FORMulator**

FORMULATOR IS AN ERGONOMIC LIVE PERFORMANCE TOOL FOR VISUAL ARTISTS ENABLING GESTURAL CONTROL OF GENERATIVE, AUDIO-REACTIVE MUSIC VISUALIZATIONS.

FORMulator is a hardware+software platform for generating and performing with live audio-reactive music visualizations. As a tool for visual artists working with live bands, it enables its user to create and control generative visuals synced to music using the medium of a live audio signal the way a painter uses a brush to apply the medium of paint to a canvas. The system includes an iPad mini dock that is ergonomically designed for performance, handheld and coupled with a sensor, enabling gestural control of its emergent visuals. By contrast to the most widely used hardware controllers, it facilitates intuitive gestural manipulation of generative rather than loop based elements. The goal of this thesis is to develop a stand alone system with a minimal interface that enables its user to get out from behind the laptop, slider, or knob and into a freely flowing music visualization performance.

#### Interface

Visualization

Performance

openFrameworks

MAX/MSP

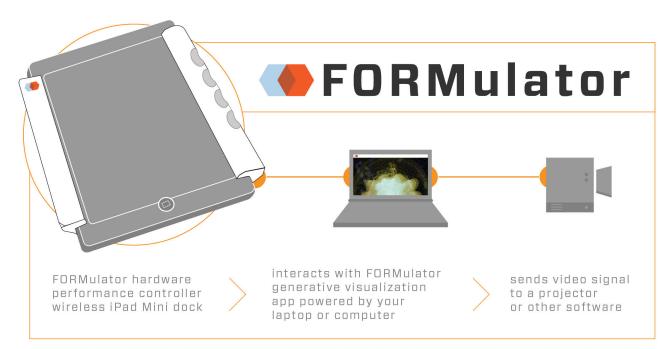
OSC

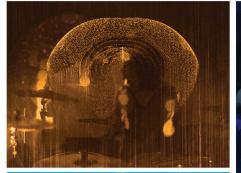
Generative

Ergonomic

System

http://thesis.jeremyryanpeterson.com http://jeremyryanpeterson.com









#### Hsin Ying Chiu

Thesis Faculty:
Katherine Moriwaki
Louisa Campbell
Colleen Macklin
Barbara Morris

#### • Тоу

Open-ended

Mobile Text

Creative Fun

Minimalism

Mobile Drawing Tool

Geometric Art

Personalized

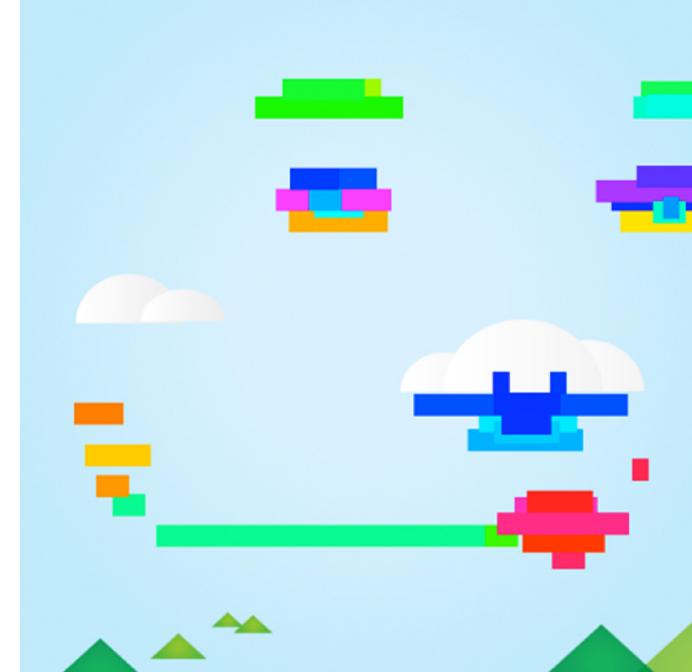
Emotion

## GraphoTalk

A MOBILE APP THAT ADDS COLORFUL CREATIVE FUN TO TEXT MESSAGES.

Because of globalization, long distance relationships are more common nowadays, although they face many challenges. GraphoTalk is a social network game that provides a new way for couples to interact and play together over distance and time. In GraphoTalk, couples can feel emotionally close to each other, fulfill a task together even though they are separated by thousands of miles.

GraphoTalk is an asynchronous online game that allows players to interact at different times. It is a story puzzle game in which one person chooses a story and starts the puzzle game. Every story contains 4 to 8 pages puzzles; when one person solves the first puzzle then the other one can start to solve the second puzzle. The story can be completed solved when couples solve pages back and forth.





#### Norman Diaz

Thesis Faculty:
Marko Tandefelt
Loretta Wolozin
David Carroll
Christine Prentice-Popken

## Techno-Formatura

DATA WILL MEET THE DIGITAL AND THE PHYSICAL WORLDS

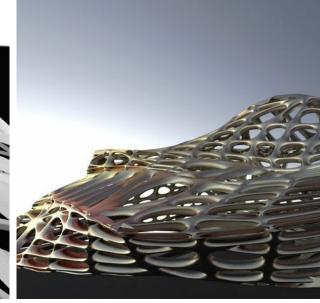
- Interaction
- 3D Object
- 3D Printing
- Rhino
- Grasshopper
- Firefly
- Architecture
- Industrial Design

Recent advancements in creative technologies allow architects, designers and inventors to develop and print almost any shape and many types of products. Unfortunately, only people who are deeply trained in 3D modeling software have the ability to work in this way. While the implication for the future is that the average person may be able to "print" a toaster for themselves, this won't be the case tomorrow. Until then, designers still bridge object and consumer. That said, currently there are opportunities for designer and end user to collaborate in a digital environment.

Techno-Formatura combines software and hardware platforms to integrate consumers/users into the product design process in a concrete and creative way. Using a simple gesture-based interface, laypeople are able to manipulate, reshape and print a digital 3D, parametrically designed object without any knowledge of industrial design or design software. The platform's interface relies on 3D Max Studio, Maya, Rhino, Grasshoper, Firefly, Arduino and a Kinect sensor.









#### Rachel Law

Thesis Faculty:
Scott Pobiner
Sarah Butler
David Carroll
Christine Prentice-Popke

## Vortex

VORTEX IS A GAME THAT EMPOWERS YOU TO CHANGE HOW YOU ARE IDENTIFIED BY NETWORKS.

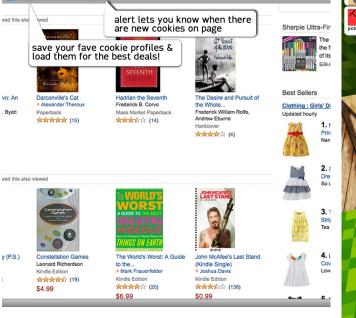
The 'Internet' does not exist. Originally conceived as a shared collective experience of 'inter-networks', today it is a mass of overlapping filter bubbles. These bubbles curate us into data-objects to be consumed and purchased by advertisers. Browsing is determined by your consumer profile. Media-mining companies exploit invasive technologies such as IP tracking, geo-locating and cookies to create specific advertisements targeted to individuals. What you see, hear and the feeds you receive are gathered from your friends list, emails, online purchases, etc. Content presented to you is neither freely chosen nor objectively shown.

Vortex is a data management game that allows players to swap cookies, change IPs and disguise their locations. Through play, individuals experience how their browser changes in real time when different cookies are equipped. Vortex is a proof of concept that illustrates how network collisions in gameplay expose contours of a network determined by consumer behavior.

http://milkred.net/vortex http://strawberrymillefuille.wordpress.com

## Christine Prentice-Popken

- Data Management
- Network Identity
- Media Traces
- WebGL
- JavaScript
- Django
- Social Awareness
- Play
- Big Data









#### Xiaoye Lin

Thesis Faculty: Melanie Crean Barbara Morris Scott Pobiner Sarah Butler

#### Gameplay

UX

Narrative

StrategyInstallation

openFrameworks

Mindwave EGG Sensor

Storytelling

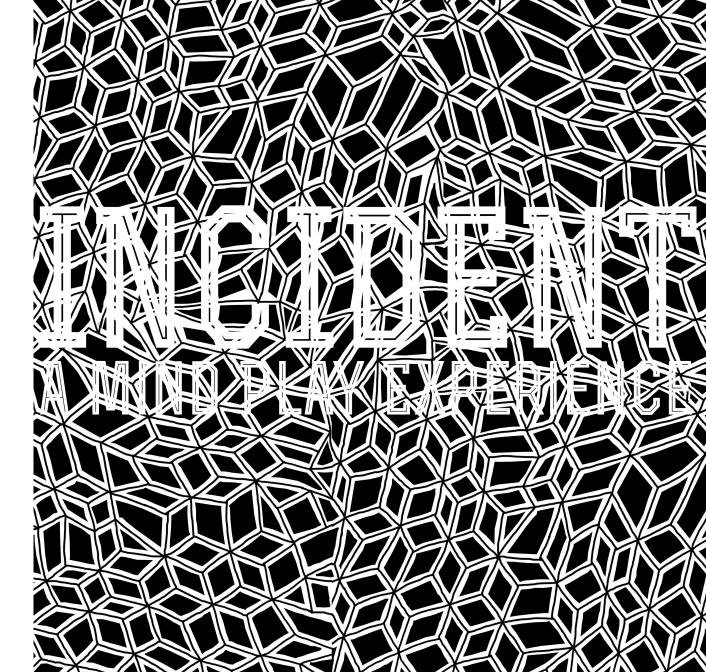
Animation

## **INCIDENT**

INCIDENT IS A PROJECT THAT EMPHASIZES ON PRACTICING FOCUS AND CONCENTRATION SKILLS BY INVOLVING IN PLAY EXPERIENCES.

Incident is a mind – practice video game that played by mindwave mobile. The brain, as an organ, has been introduced to the gameplay and it is the brain to directly talk to the game instead of using controllers. Transparent interactivity is one aspect, for pursuing a better experience in playing a mind game, the research is also going into the direction of what narrative visually or audibly affects the player's brain activities by studying cinematic narrative, for instance, some strategies that movie distracts to its audience.

http://linx108.net/thesis http://ailain.net



#### **Anthony Terruso**

Thesis Faculty: Colleen Macklin Barbara Morris Scott Pobiner Sarah Butler

#### Natural Language Processing

Affective Computing,

Infosynaesthetics

WebGL

Node.js

## MEM

MEM IS AN ENVIRONMENT FOR WRITING THAT USES LANGUAGE ANALYSIS TECHNOLOGY TO GRAPHICALLY REPRESENT THE EMOTIONAL TONE OF WRITTEN TEXT IN REAL-TIME.

Internet devices have altered our use of language and how we communicate. Conversations have simplified from verbal exchanges complete with greeting habits and formalities to curt text messages, usually pertaining to imminent or directly pertinent news. From these emails, tweets, and texts we extract the core idea of a message, but the emotion behind the message is lost.

Mem is an environment for writing that uses Language Analysis technology to graphically represent the emotional tone of written text in real-time. Several writing modes and customizable options can be adjusted to ensure the environment suits its user. The purpose of this project is twofold: to explore the use of Language Analysis technologies in the dynamic generation of media and also to increase awareness to language being used during the act of writing.

#### http://anthony-terruso.com/thesis



a dynamic tool for writing

#### Weijing Xu

Thesis Faculty: Scott Pobiner Sarah Butler

## **Living Devices**

AN EXPLORATION IN CREATING LIVING, HYBRID DEVICES THAT MERGE ELECTRONICS WITH BACTERIAL SYSTEMS.

Electronics

Systems Biology

Bacteriology

Electric Stimulation

Bio Lab Protocols

Biohacking

Living Devices

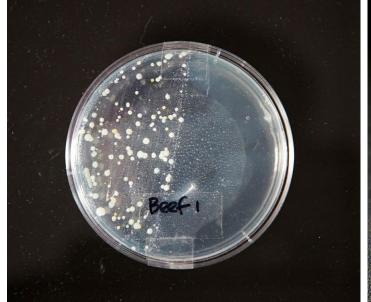
Alternative Computing

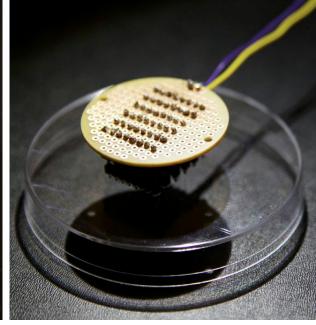
Hybrid Systems

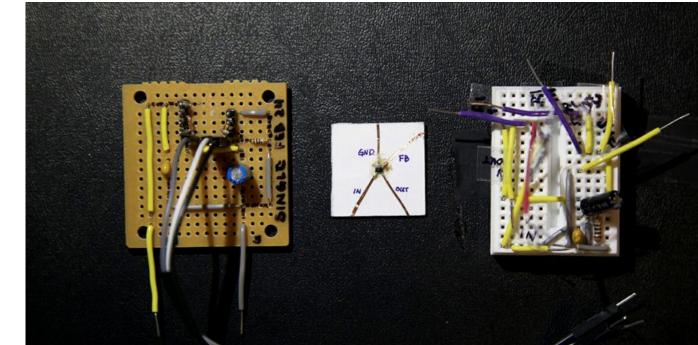
This thesis explores the crossover between organic and artificial systems where a hybrid unity may be possible. More precisely, an interest lies in creating a series of living devices that combine electronic control systems with live bacterial systems. The main research aims to investigate possible variations of negotiation at the intersection between bio and technical realities. Stimulation experimentation with different bacterial organisms will aid in identifying suitable electric ranges that may create interesting growth results. A series of electrode configurations are being created where the voltage rate of each single electrode will be adjustable to generate non-unified, diverse and possibly dynamic electric field environments for testing. The current case study utilizes the JM109 strain of E. coli to develop methodology and obtain initial knowledge of bacterial response.

http://vivianxuprojects.com/05\_thesis.html

https://vimeo.com/62822389







## SOCIAL CRITIQUE



Manifesting in many forms from critical design to game design, these projects both question, destabilize, work within, and envision new ways to address contemporary social practices and issues.

12
projects

#### Daniel Albuquerque + Arshaan Sarang

Thesis Faculty: Colleen Macklin Barbara Morris

## Hidden

A FIRST PERSON SHOOTER WITH A SURPRISING GAME MECHANIC.

- Game Design
- Multiplayer First Person Shooter
- Camouflage
- Unity 3D
- Autodesk Maya
- Photoshop
- Re-design
- Revolutionize Strategies
- Rethink Game Styles

Hidden is a multiplayer first person shooter (FPS) game in which opponents must fight against each other in different maps. The game uses camping, a technique used in FPS games that is looked at negatively, as its main mechanic. By coloring walls, the players can camouflage themselves from their opponents and choose to stay hidden or close in for the kill.



http://danielalbuquerque.com, http://lookingforshaan.com



#### Youmna Aoukar + Daniela Gill

Thesis Faculty: Katherine Moriwaki Louisa Campbell

Critical Design

Play

Narrative

Max MSP

Jitter

Arduino

Satire Humor

Fantasy

## Cu-rio

CU-RIO IS AN IMMERSIVE, FANTASTICAL, OFFICE CUBICLE BELONGING TO A DREAMY COPYWRITER NAMED LOLA.

The Cu-rio experience is narrated by the fictional Lola, an advertising copywriter, who faces and solves some unique personal and professional challenges. The immersive art installation comments critically on the everyday life, or lack of the same, endured by millions in office cubicles worldwide. The piece surrounds the participant with surreal interactive artifacts that,

experience?

when engaged, reveal bits and pieces of Lola's story.

As visitors transport themselves into this innovative tale, they will begin to question which carries more truth, the material culture of Lola's imagination or the workplaces of their own

http://cu-rio.com http://umna.net, http://danielagill.com







## Jane Friedhoff + Ramiro Corbetta

Thesis Faculty: Colleen Macklin Barbara Morris

#### Digital Games

Spectatorship

Live Game Design

openFrameworks

Twitch.tv

IRC

Arcade Experience

Subjunctive Mood

Festive Atmosphere

## Vici

A LIVE-STREAMED GAME THAT USES SPECTATOR INPUT FROM ITS CHATROOM TO AFFECT THE GAME ITSELF.

The growth of the videogame industry, along with advances in Internet connectivity and video-streaming technology, has led to videogames becoming a new spectator sport. The convenience of online viewership, however, comes at the cost of the player- spectator relationship. Subtle interactions that occur in localized play -- the energy in the physical space, the shouts of the viewers -- affect the players and the way they play their game. Online play removes this dimension, making the interaction largely a oneway street.

Our thesis explores how digital games can use spectation as a game mechanic that gives spectators presence and agency. The game is, on its face, a straightforward player- versus-player game, streamed to videogame viewing site Twitch.tv. However, the game also constantly reads from its own Twitch.tv chatroom, using spectator input to affect the game itself. By blurring the lines between player, spectator, and developer, we hope to bring some of the excitement, unpredictability, and communal experience of local gameplay to the online world.

http://vicigame.com



#### Catalina Cortazar

Thesis Faculty: Scott Pobiner Sarah Butler Marko Tandefelt

## **SEARCH**

IN SEARCH, TWO COMPUTER MONITORS HAVE A TEXT-BASED CONVERSATION ABOUT THEIR ON-LINE SEARCH RESULTS.

Search Engines

Information

openFrameworks

Critical Design

Interactive Installation

Today, we have access to information delivered over the Internet from the most remote parts of the world. We are becoming informed, constructing meaning, and understanding the world based on the results retrieved by search engines. Because of this, I believe it is important to question their objectivity, and to think deeply about how search engines' algorithms are selecting the results retrieved to us. SEARCH is an interactive installation, which invites the visitor to do an on-line search. Instead of showing its results on the computer screen, two computer monitors start a text-based conversation about their results. The conversation reveals how search engine's criteria have replaced the physical boundaries with digital boundaries -- ones we don't often recognize; ones we don't often know exist. SEARCH invites its participants to become aware that search engines' algorithms are curating our results and by doing so shaping our perception of reality.

http://catalinacortazar.com/thesis

http://catalinacortazar.com

# SEARCH BEHIND THE SCENES



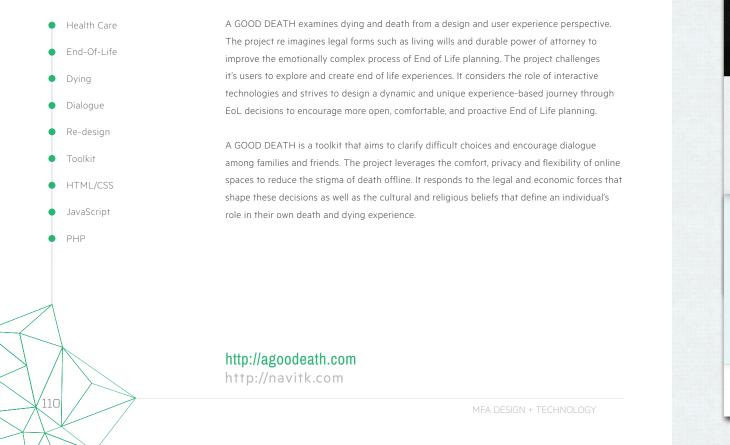


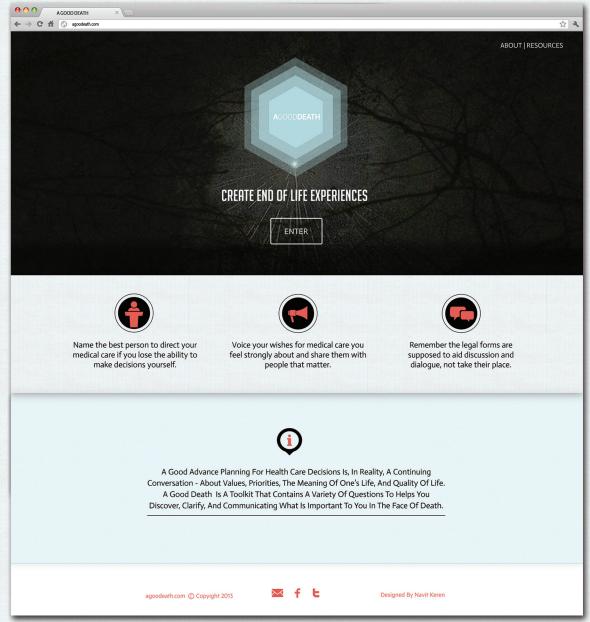
#### Navit Keren

Thesis Faculty: Scott Pobiner Sarah Butler

### A GOOD DEATH

A GOOD DEATH IS AN INTERACTIVE, EXPERIENCE-BASED DIGITAL TOOLKIT THAT EXPLORES THE END OF LIFE DECISION MAKING, THROUGH LEGAL FORMS.





#### WenChing Li

Thesis Faculty:
Melanie Crean
Barbara Morris
David Carroll
Christine Prentice-Popken

## **Human Spectrum Project**

"SURGERY WAS (AND STILL IS) POSITIONED AS A ROUTE TO GENDERED HARMONY." - SALLY HINES & TAM SANGER

Sexual Reassignment Surgery

Kinect

Speech Recognition

openFrameworks

Interactive Cinema

Co-author

Enhance Perception

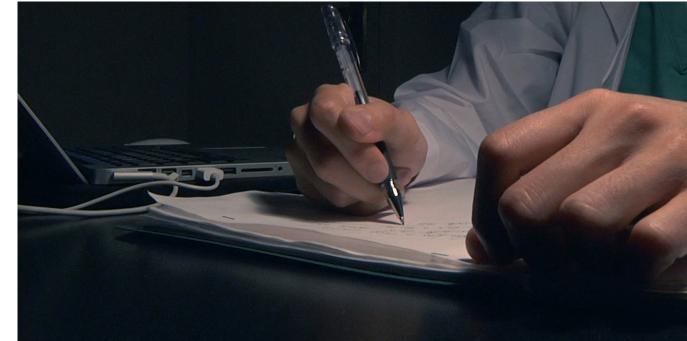
In many countries, gender reassignment (commonly referred to as having a "sex change operation") is regulated by the government. Patients must apply for approval to undergo gender reassignment surgery, which includes making a case for this choice. If the patient's rationale for surgery is not convincing or clear, they risk being denied the opportunity to change genders. What are the psychological, physical and ethical ramifications of government involvement in this -- and other -- personal choices?

Human Spectrum Project is a mixed-media, interactive installation that addresses the social and legal complexity of this process. This simulated experience is based on real medical and governmental guidelines and interview questions. Participants in the installation assume the role of a psychologist conducting a mandatory counseling session with a person who is hoping and applying to undergo gender reassignment surgery. Through participation, the audience becomes temporarily complicit in this power relationship and can begin understand and question its significance in a deeper way.









#### Ceyda Onal

Thesis Faculty: Christopher Romero Ethan Silverman Anthony Deen Andrew Zornoza

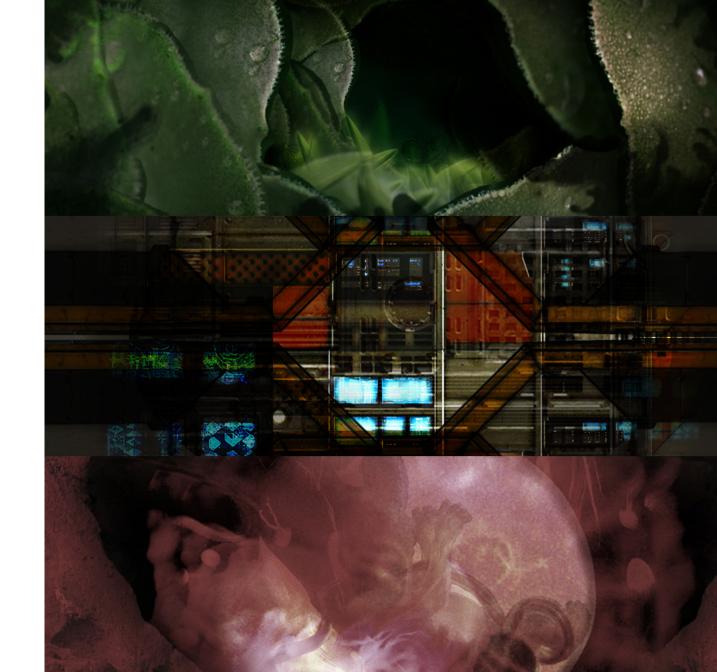
- Animation
- Sonic Video
- Sound Design
- After Effects
- Protools
- Maya
- White Noise
- Sound Pollution
- Biophonic Sounds

## **Acoustics of Technology**

A SONIC VIDEO-ART EXPERIENCE DRAMATIZING THE PHENOMENON OF THE WHITE NOISE CREATED BY MECHANICAL DEVICES.

"Acoustics of Technologies" is a sonic conceptual video piece, dramatizes the phenomenon of the white noise created by today's ever-present electrical devices. It is a revelatory project, indicates how people are bonded to the sounds of technology and drawn away from the sounds of nature. It explores the way we have become dependent on the convenience of electricity and electronic devices, and yet we have no other choice than to live with the white noise. It explores how machinery sounds have an impact on our minds because of our adaption to white noise; we might become strangers to the organic sounds of nature within this environment where sounds of electricity dominate.

http://www.ceydaonal.com/Thesis-Acoustics-of-Tech



#### Santiago Peraza

Thesis Faculty: Christopher Romero Ethan Silverman Anthony Deen Andrew Zornoza

## **Omnia Vanitas**

EXPLORING THE RELATIONSHIP BETWEEN MAN AND HIS IMAGE IN OUR NARCISSISTIC ERA.

- Interactive Video Installation
- Identity
- Narcissism
- Technology

Portraying the intimate conversations that take place when we encounter ourselves, OMNIA VANITAS is an interactive video installation that attempts to immerse the viewer in a digital reconstructed experience that examines the relationship between a subject and his image. The installation explores the conflict between reality and illusion now blurred by technology and comments on a generational reality where image is all, and where a depiction becomes more important than the subject itself.

The piece explores how technology and contemporary media have catapulted a narcissistic pandemic in allowing us to manipulate and amplify--physically or digitally--our image to satisfy our vanity. The cumulative effect of our digital manipulation results in a substantial distortion of our image and thus a significant loss of identity. Though aesthetically rooted in the digital era, the themes of this piece highlight larger truths about our culture's infatuation with perfection, beauty, and success.

http://omniavanitas2013.wordpress.com





#### Michael Susol

Thesis Faculty: Scott Pobiner Sarah Butler

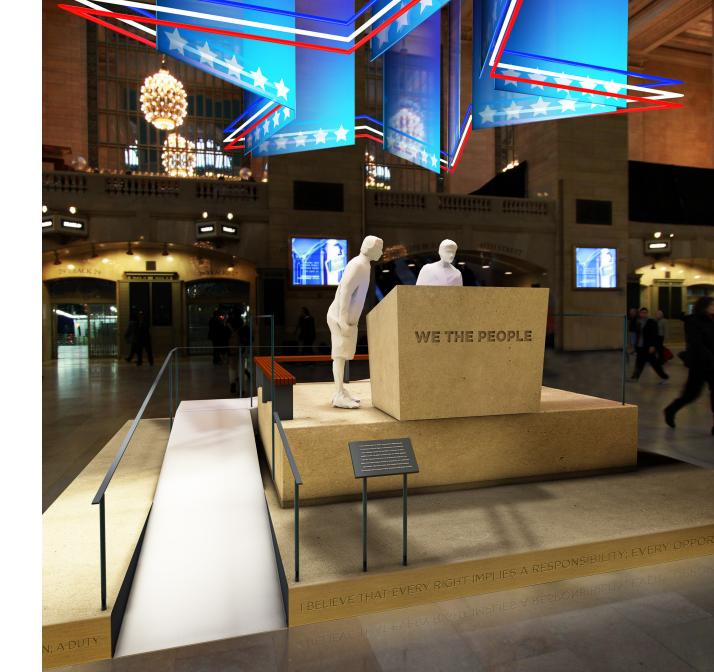
## American Value(\$)

AN INTERACTIVE MULTI-TOUCH EXHIBIT THAT EXPLORES THE SPACE BETWEEN PATRIOTISM AND ENGAGED CITIZENSHIP.

- Education
- Civics
- Governance
- Processing
- Multitouch
- TUIO
- Social Change
- Critical Design
- Consumer Awareness

My interactive multitouch exhibit is situated at the intersection of self-awareness, engagement and personal responsibility. It offers a unique opportunity for willing participants to literally "step up" to the challenge of taking the U.S. citizenship test in a public space. By exploiting the desire to compete, consequences are connected with reality as you're invited to "wager" in the form of a donation to a worthy cause. If you win, your donation will be matched and if you lose, you are presented with a new suggested donation amount. The notional and derivative values of citizenship collide as participants struggle to rationalize their test results against their assumed civic identity.

http://iamnotarobot.com/thesis http://iamnotarobot.com



#### Elizabeth Tolson

Thesis Faculty:

Anthony Deen

Andrew Zornoza

## Vessel

A SERIES OF DRESSES THAT ARE VIEWING THE FEMALE BODY AS OBJECTS.

Reproduction Laws

Feminism

Female Sexuality

Arduino

Soft Circuits

The desire to control women has been a subversive part of human culture for centuries. Be it a law passed, a vow forced, or "acceptable" women's fashion, all undermine how a woman portrays her sexuality and purpose. The dynamic and institution that requires these things allow women to be simultaneously ridiculed for being too sexual and too modest. Forcing women to walk a very fine line between the two, when every misstep could lead to being labeled the Madonna or the Whore.

Reproduction laws are being pushed every day, and the same beliefs behind these laws are influencing everything from sexual education in schools to rape cases. Vessel is a series of dresses that open up a conversation about this situation, questioning the objectification of a women's body as the sole indicator of her morality.











#### Terese Villia

Thesis Faculty: Colleen Macklin Barbara Morris

## Grit Talk: Bushwick

COMEDIC SKETCH CHARACTERS EXPLAIN THE HISTORY AND CULTURE OF BUSHWICK, BROOKLYN AMIDST SOCIAL AND ECONOMIC CHANGES.

• Grit

Changing Communities

Local Narrative

Satire

Sketch Comedy

Performance

Storytelling

Community Grit

Relationship Building

The dynamics of a neighborhood reflect changes in a larger system of political, economic and social tides. Bushwick, Brooklyn, for example, transformed itself many times and maintained considerable wealth before falling into disrepair in the 1970s. In the mid-2000s, a redevelopment initiative attracted new businesses, residents and attitudes. Bushwick has harbored many demographic shifts, but today's changes are more subtle. There is a polite, but separate, coexistence where there was once family. This unintentional division could be bridged by a better understanding of what was.

"Grit Talk: Bushwick" is a video series reflecting on the current changes in the neighborhood through the voice of longtime residents. Videos will run on tv screens mounted in neighborhood businesses (bodegas, pharmacies, etc.) where locals tend to stop and chat. Grit Talk addresses recent demographic and economic changes in the neighborhood using comedy to initiate dialogue between longtime and newer residents about the design -- future and past -- of their shared community.



#### Maya Weinstein

Thesis Faculty: Anthony Deen Andrew Zornoza Katherine Moriwaki Louisa Campbell

- Critical Design
- Food
- Open Source
- DIY
- Health
- Nutrition
- Video
- Product Design
- Bio-art

## **Open Source Food**

DIY PROCESSED FOODS, FOR THE INDUSTRIALIZED HOMEMAKER IN ALL OF US, NO FACTORY NEEDED.

The DIY High Fructose Corn Syrup Kit is a participatory piece of critical design. The Lunchbox comes packed with all of the necessary ingredients to make your very own homemade high fructose corn syrup, instructional video and recipe is included. Make HFCS at home to include in some of your favorite foods such as soda, cereal, ketchup and yogurt. Impress your friends with freshly baked cookies using your very own homemade HFCS. Making HFCS at home is both fun and educational; learn first hand how to mix acid, bacteria, glucose and corn to create a highly processed sweetener. With the ease and convenience of a DIY kit, HFCS can be made anywhere with access to a stovetop and large pot. Warning may cause diabetes, high blood pressure or stroke if consumed in large quantities.

http://luckypapayasthesis.tumblr.com http://mayaweinstein.com



## NEW MEDIA PORTRAITURE



What can we learn about contemporary identity and the collective culture at large? Through a self reflexive lens, drawing from troupes of conceptual art practice, these projects speak to the collective by first addressing the individual



#### Cem Kocyildirim + Kristian Melow

Thesis Faculty: Anthony Deen Andrew Zornoza

## For My Future Biographer

ANYTHING CAN BE A NOTE FOR MY FUTURE BIOGRAPHER; THIS IS MY LIFE AS I WANT TO SHOW.

Dealing with Struggle

For My Future Biography

Biography

Art

Social Media

Arduino

Artistic Change

The book about the famous artist Cem's early struggles in the art world is on shelves now.

The name of the book is For My Future Biographer as he twitted exactly 20 years ago, in 2012.

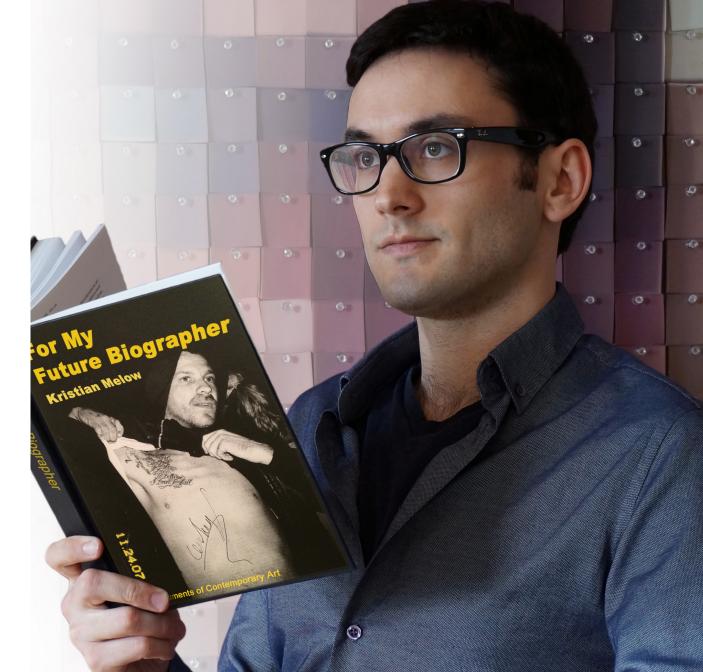
It's based on the notes Cem took with the hashtag #ForMyFutureBiographer.

First publication of the book coincides with his first retrospect. Therefore, some critics see it as a biography where others see it as a catalogue of his work. Either way, if you are interested in his life and works, this is a must-read book.

In his book "Metaphors of Self: The Meaning of Autobiography" James

Olney explains Cem's case as "And there lies the Joker: Cem and his future biographer were
identical. The future biographer could become an I, an audience, a healer, a sufferer, an artist,
a gallerist, a documentarian, a fact- checker and someone to blame if needed: everything Cem
needed to get out of his struggle as a young artist."

http://www.formyfuturebiographer.com



#### Zi Wei Liu

Thesis Faculty: Melanie Crean Barbara Morris Katherine Moriwaki Louisa Campbell

- Expatriate Artists
- Migration
- Expanded Cinema
- Arduino
- Motors
- Projection
- Physical Computing
- Narrative
- Opensource

## Circular Voyage

A CINEMATIC DEVICE THAT REPRESENTS THE EXPERIENCE OF CHINESE ARTISTS IMMIGRATING FORM CHINA TO NEW YORK AND BACK AGAIN, 1985 TO THE PRESENT.

Circular Voyage is a mixed media installation that utilizes an expanded cinematic device to explore how the concept of national identity evolved throughout the life and experiences of a group of expatriate Chinese artists.

The project grew from interviews with these artists on their self exile to New York in the 1980s and 90s, to seek freedom and greater creative inspiration and possibility. The harsh reality of supporting their families in the U.S. sent the artists full-circle, to return to China in the oughts, with new blended, global ideas of self

http://ivysdesign.com/thesis02 http://ivysdesign.com





#### Jennifer Matsumoto

Thesis Faculty:

Katherine Moriwaki

Louisa Campbell

## Heritage

PRESERVING THE PAST IN THE PRESENT THROUGH A MOBILE FAMILY DINNER EXPERIENCE.

Culture

Interaction

Communication

Mobility

Low-Tech

Traditions

Rituals

Values

Memories

Mobility. Adaptation. Preservation. These are the themes embodied in "Heritage", a traveling dinner experience that pays tribute to the artist's family and home. Drawing from Japanese-American and Hawaiian culture, family memories, both spoken and not, the piece explores ways to recapture a sense of home in the absence of family. "Heritage" is a series of technology free "family dinners". The mobile dinner kit was built with Japanese and Hawaiian materials and recycled family artifacts. It allows the artist to stage dinners that connect the present to her past and to establish a new ritual that recognizes friends as family. "Heritage" is a unique dinner experience that reflects the artist's own ability to be mobile, adapt, and preserve.

http://matsumotothesis.wordpress.com jenmatsumoto@gmail.com





#### C. Jason Moran

Thesis Faculty: Anthony Deen Andrew Zornoza

- Portraiture
- Masculinity
- Gender
- Video
- Animation
- Printmaking
- Identity Narrative
- Desires and Ideals
- Masculine Drag

## **Masculine Electric**

A VIDEO INSTALLATION, "MASCULINE ELECTRIC" REPRESENTS AN ACCUMULATION OF MASCULINE IDEALS AND DESIRES, PRACTICED AND ENACTED, REALIZED AND UNREALIZED.

Born out of an intimate preoccupation with my own masculinity and a desire to interrogate my evolving interpretation of the masculine ideal, "Masculine Electric" narrates my subservience to and exclusion from that ideal. Deflating the understanding of masculinity as ideology, the video and sculptural installation reifies the concept of masculinity as contingent, discursive practice. It is this notion, that masculinities are participatory and actively sought after by men (and thus created by them) that anchors the thrust of my work. In fashioning a "passable" masculine self, men seek to perform "successfully" the discourses of masculinity, navigating the space between their perceived masculine ideal and their actual pattern of masculine practice. In that vein, "Masculine Electric" nomadically courses between a nostalgia for a time when "men were men" and the warped state of contemporary, appearance-driven masculinities.

http://cargocollective.com/cjmoran



#### Sable Eylse Smith

Thesis Faculty:

Anthony Deen

Andrew Zornoza

Art

History

Performance

Archival

Film

Printmaking

Conceptual art

Trauma

Video

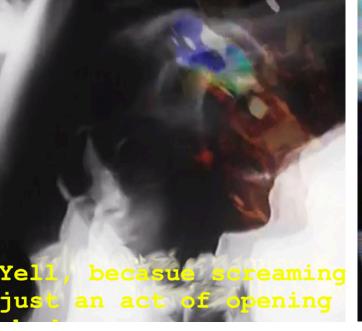
## Excerpts from the R&RDM Institute

THE AUTHORSHIP OF HISTORY SHOULD BE QUESTIONED. THE VALIDITY OF ITS CREATION PROBLEMATIZED. THERE IS ALWAYS A SILENT NARRATIVE.

"I find the daunting task of erecting a memorial to those un-locatable silences just fulfilling, just affective enough that the things which were never meant to be said, the things which some refuse to say, and everything which has been otherwise destroyed or tampered with is allowed space to resonate. So that the traces of them may linger just long enough to challenge some institutional construction of history, similar to Dierrad's gazelle footprints in the sand. Can we only experience truth through some small evidential trace? This is the history of those trained to be silent. An unearthing of their archive, existing solely as the traces, marks, wounds left and impressed upon the body. The body is an archive."

Taking the traumatic as a starting point this work will examine the space for alternative entries into the archives. To do so new and current records will be translated into the language of affect and presented as fact.

http://sableelysesmith.com http://sablelysesmith.com







#### Dena Soukieh

Thesis Faculty: Melanie Crean Barbara Morris Katherine Moriwaki Louisa Campbell

- Typography
- Semiotics
- Cultural Identity
- openFrameworks
- Arduino
- Die-cut
- Conceptual Art
- Collective Culture
- Notions of Self

## Populating the In-Betweeen

AN ATTEMPT TO VISUALIZE AND IMPART THE EXPERIENCE OF THE CULTURAL HYBRID.

Populating the In-Between attempts to visualize the experience of the cultural hybrid through the rendering of mixed language and typographic forms, realized as a dynamically shifting poem driven by various API news sources. The series strives to illuminate the feeling of existing or existence between two different cultural subjectivities.

The project explores language as a modality which both defines the boundaries of culture and carries notions of self. Drawing from my own personal cultural frictions to give viewers a way to connect to a larger cultural friction of current events. Participants are asked to connect and see more directly how discrepancies in translation between different languages, such as Arabic and English, might create cultural misconceptions of the other as well as illuminate cultural norms of each.

http://denasoukiehthesis.tumblr.com http://denabydesign.com



#### Elizabeth Umbrino

Thesis Faculty:

Anthony Deen

Andrew Zornoza

## Family Heirlooms

DIGITAL STORAGE IS MORE TENUOUS THAN PHYSICAL DOCUMENTATION.

Social Media

History

Family Heirlooms is a series of artworks that link together digital content and physical form. The works were made to address what my generation will pass down to the next generation. It does not serve up an answer to this question but is purely an observation of the dilemma. There is a reflection of the slight tension I feel towards our digital lives. When my father died, he left books, photographs, records and CDs behind. When I die, I will leave my laptop, smartphone, and external hard drive.





#### Kasia Witek

Thesis Faculty:

Anthony Deen

Andrew Zornoza

## I AM MY HOME. MY HOME IS MYSELF.

THINGS ARE BETTER THAN PEOPLE.

Human

Artificial

Connectivity

Potentiality

Arduino

openFrameworks

People leave people. Objects sometimes break but are fixable. Spaces don't abandon us.

My project investigates the human/artificial relationship. It puts demand on the artifacts we choose to surround ourselves with. It looks
at home as an active participant in our lives.

I am discovering new potentiality and connectivity with my things. I want to challenge the way we inhabit our spaces. I am creating a chance for people to connect with the artificial.

This project, however, isn't only for lonely people or people living alone. It is for anyone who's willing to look at "things" as coexisting partners. It is for anyone open to improve the relationship with his/her own home.

http://thereisaidit.me http://kasiawitek.wordpress.com





# TOOLS FOR LEARNING



Encompassing DIY culture, university curriculum, game design, and workshops, these projects both expand traditional modes of teaching/learning and question them. A core element of these projects is creative engagement and innovative thinking.

14 projects

#### Hazel Marie Bala

Thesis Faculty: Anthony Deen Andrew Zornoza Colleen Macklin Barbara Morris

History Museum

U.S. History

Augmented Reality

Mobile Devices

Digital Narrative

Historical Accounts

Layar

ios sdk

After Effects

# Rediscovering U.S. History

CREATING A CUTTING-EDGE METHOD TO ENGAGE WITH HISTORY USING AUGMENTED REALITY WITH MOBILE DEVICES IN A MUSEUM. THIS WILL BE A PROPOSAL FOR THE SMITHSONIAN AND NEW YORK HISTORICAL SOCIETY MUSEUM UPON COMPLETION.

To understand history, one must understand the people who lived it.

In the U.S., most see history as an unexciting subject composed of endless memorization of dates and names. This method devalues the wisdom and meaning of history, not to mention encouraging a disinterest in the subject.

Rediscovering U.S. History: The Great Depression (U.S. History AR App) is an interactive system designed to inspire interest in the American public to learn U.S. history. Set in a history museum, using augmented reality (AR) with a mobile device is a novel technique to engage with history. No longer is the visitor just a spectator gazing at a museum exhibit, but rather, a participant going through a journey. This approach combines AR, mobile devices, and a strong narrative. AR will enhance the stories from the past and give a deeper meaning to the artifacts, creating an emotional connection, while the device is a convenient tool to interact with the exhibit. Using this app allows participants to be transported back in time, challenging them to experience the Great Depression through the eyes of those who survived that era. This participatory set-up with the incorporation of AR will spark interest and generate curiosity about a seemingly insipid subject like history.

http://historyamericana.net





#### Kierstie KJ Barr

Thesis Faculty: Melanie Crean Barbara Morris Katherine Moriwaki Louisa Campbell

- Game Design
- Conflict Resolution
- Game Design
- Tools for Learning
- Social Change
- Re-Design of Student Enrichment
- Time

# **Resolution Quest**

RESOLUTION QUEST, A GAME DEVELOPMENT CURRICULUM THAT TEACHES ELEMENTS OF CONFLICT RESOLUTION THROUGH GAME DESIGN TO MIDDLE SCHOOL STUDENTS.

Resolution Quest, a game development curriculum, teaches elements of conflict resolution to middle school students. The curriculum informs students of the five conflict styles (avoidance, accommodation, competition, compromise, and collaboration), so that they might identify their own strategies. Recognizing behavioral modes in antagonistic situations is an important tool for children as they transition into adolescence. The product's secondary goal, in addition to increasing understanding of conflict, is to introduce students to the fundamentals of game design. Resolution Quest encourages creativity through exploring design techniques, promotes self – control when resolving conflict, and increases awareness about conflict mediation and resolution.

http://kjthesis.tumblr.com http://kierstiebarr.com



#### Nicole Del Senno

Thesis Faculty: Colleen Macklin Barbara Morris Anthony Deen Andrew Zornoza

# Forgotten City

AN INTERACTIVE VISUAL HISTORY OF NEW YORK CITY AND ITS FORGOTTEN STORIES.

Education

History

Multi-Dimensional Narrative

iOS Web App

♦ HTML5

jQuery Mobile

Information Visualization

Mapping

New York City

Forgotten City is an interactive iPad app that aims to transform the way in which American history is typically presented and perceived by layering and visualizing information through time and place. Using New York City as a case study, I aim to build a multi-dimensional narrative of the city through interactive visualizations which not only show the progression of the landscape at a glance, but which are also embedded with smaller, lesser known stories of people and places. These stories act as a pathway for understanding larger moments in American history, and they are all interconnected to present the history as a whole. Visuals and mapping serve as the basis for layering information, showcasing the history of New York City in a unique way. By tying together chronology, cartography, information visualization, narrative, and history, I hope to intrigue, educate, and empower the user through an experiential journey that changes the way we look at the subject of history.

http://thesis.nicoledelsenno.com http://nicoledelsenno.com



#### Michael Gonzalez

Thesis Faculty:

Marko Tandefelt

Loretta Wolozin

# Moodal

A DIGITAL INSTRUMENT THAT PROVIDES A SUPPORTIVE, EXPERIENTIAL IMPROVISATIONAL APPROACH TO LEARN MUSIC THEORY.

Improvisation

openFrameworks

• iOS App

Music

Experiential Improvisation

Learning

Moodal is a digital instrument that provides an environment for novice musicians to grasp basic music theory through improvisation. This learning-instrument uses a supportive, experiential, and improvisational approach to understanding the structures behind music. The multi-touch interface is loaded with popular musical pieces, allowing the user to visualize the musical logic/structure of each piece. By interacting with the visualizations, the user can explore and improvise between different songs. Through the construction of gestural movement connected with the help of visual pattern mapped to pitches, the user begins to define their own style while building a memory bank of sound "ideas". Moodal is an interactive, pattern based notation instrument that creates an environment for a constant creative flow, allowing novice musicians to continuously experiment, improvise, and find their own style in an improvisational context.



http://gonzalezdesign.net



music exploration tool



#### Joann Huang

Thesis Faculty:
Anthony Deen
Andrew Zornoza
Colleen Macklin
Barbara Morris

# Peep!

A TABLE-TOP GAME THAT IS AN HOMAGE TO ALFRED HITCHCOCK.

Analog Game

Films

Digital Fabrication

Game Design

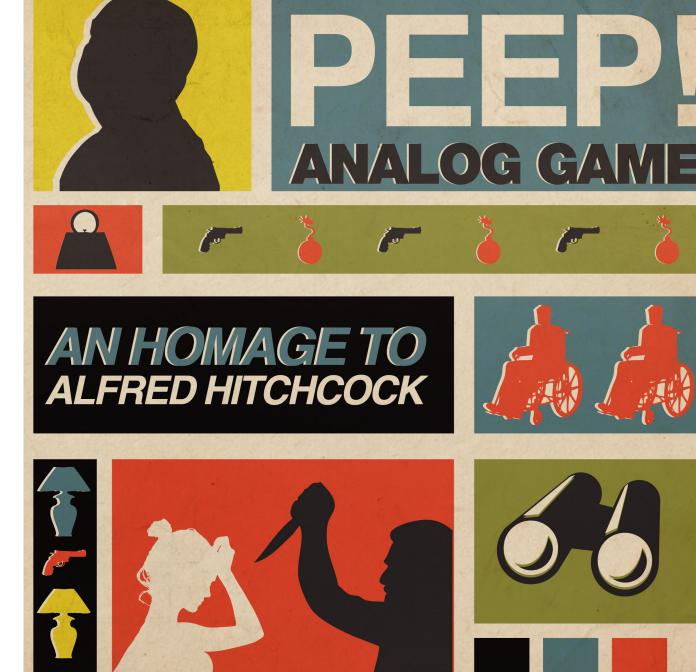
Social Interaction

Play

Fun

Peep! is an homage to Alfred Hitchcock's film, Rear Window (1954). This card game experiments with Hitchcock's style of suspense by using voyeurism as a narrative theme, which will pique players' natural curiosity. Peep! Is aimed at young people between 14 to 25, people who like classic films and those who enjoy board games.

http://thepeepgame.com



#### Jun Sik Kim

Thesis Faculty: Katherine Moriwaki Louisa Campbell

# Plus Minus

MULTIFUNCTIONAL DIY LIGHTING KIT WITH UNIQUE AFFORDANCES OF FORM, COLOR, CONDUCTIVITY, AND MAGNETISM.

Plus Minus is a DIY (do-it-yourself) lighting kit that is not only fully functional as a light source, but also passively educates about basic electronic circuitry. Through unique affordances of form, color, conductivity, and magnetism, consumers of all ages are empowered to create, customize, and personalize their own multipurpose light source (spotlight, nightlight, decoration light, etc.). Through the process of assembling their lights, consumers are led to understand the flow of direct current. Goals of Plus Minus are to educate outside of school environments, where people spend the majority of their time, and

to integrate do-it-yourself and maker culture into ordinary homes.

http://plusminus.jasonkim.me http://jasonkim.me/





#### Isaac Malca

Thesis Faculty: Scott Pobiner Sarah Butler

# elixir

LET THE WAR AGAINST DISPOSABLES BEGIN.

• Ecological conservation

Behavioral change

Reward system

Waste management

Product design

3D Printing

Thermochromic Ink

PhoneGap (iOS mobile app)

New York City generates about 40 million pounds of garbage every day. Of these 40 million pounds, 35% are recycled, 12% are incinerated, and 53% are buried in a landfill.

A landfill is a deep hole in the ground where garbage is stored until it decomposes into organic matter. Decomposition times vary from a few years, to millions of years, depending on the material in question. Most plastics, for example, take about 400 years to decompose.

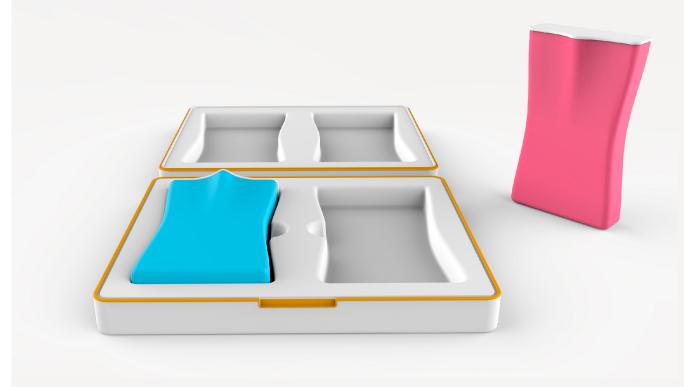
Elixir is designed to eradicate the use of disposables in New York City's everyday consumption of beverages. Two reusable drinking vessels, one for hot and one for cold, sit side by side in a sleek and portable shell. Elixir's mobile app rewards users with free beverages at nearby establishments.

Elixir provides New Yorkers with tangible, quantifiable, and perceivable benefits for taking part in a system that results in ecological conservation.

http://thesis.isaacmalca.com

http://isaacmalca.com

# elivir o



#### Ashley Muller

Thesis Faculty: Colleen Macklin Barbara Morris

# Rice Bowl

WHAT DO YOU KNOW ABOUT THE GRAINS OF RICE THAT SITS IN YOUR PLATE? PLAY RICE BOWL TO EXPERIENCE THE INTRICACIES OF WHAT IT MEANS TO BE A TRADITIONAL RICE FARMER IN CHANGING TIMES.

Rice Bowl is a tabletop game about the economic and political consequences that affect Thai rice farmers. The game aims to create a co-operative, competitive dynamic, whereby players have to work together in order to win the game and overcome the challenges facing rice farmers. The game will be distributed to the Asia Rice Foundation summer camps for Thai children to support their learning about the importance of rice farming in Thailand's economic system, as well as the coming challenges of a disappearing key labor force. Rice Bowl looks to teach what it means to be a farmer in a new system of labor.

Serious Games

Labor

Politics

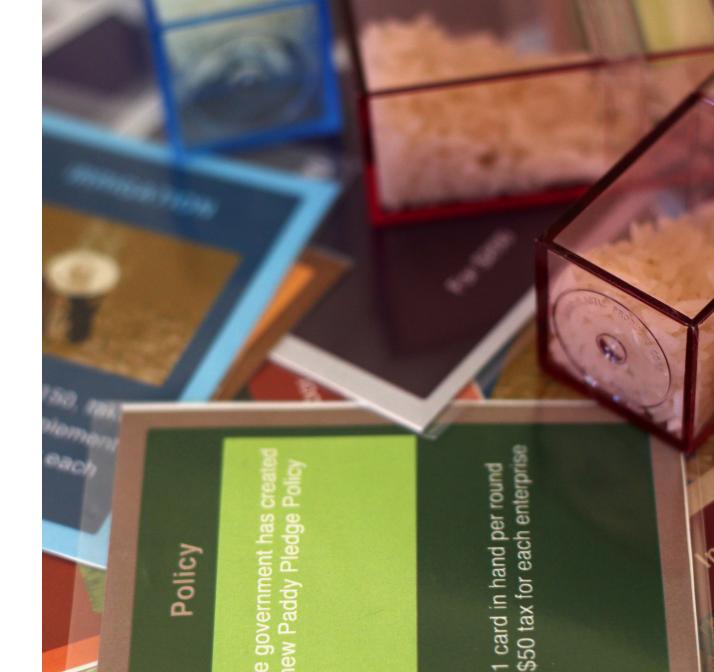
Deck Building

Competitive Co-operation Games

Table-top Games

Digital Fabrication





#### Juan Patino

Thesis Faculty: Marko Tandefelt Loretta Wolozin

Health Innovation

Mobile Application

Physical Computing

Alternative Therapy

Hacking

• ios

Arduino

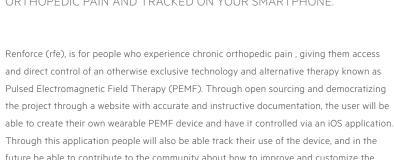
Opensource Social Change

# (renforce)

PERSONALIZED HOME THERAPY CREATED BY YOU TO RELIEVE ORTHOPEDIC PAIN AND TRACKED ON YOUR SMARTPHONE.

the project through a website with accurate and instructive documentation, the user will be future be able to contribute to the community about how to improve and customize the device based on each user.

http://thesis.juanpablopatino.com http://juanpablopatino.com











#### Paweena Prachanronarong

Thesis Faculty: Katherine Moriwaki Louisa Campbell

Systems

Play

Circuitry

Soft Circuits

Toys

Cause and Effect

Construction

# Blockuits: Innovating Building Blocks

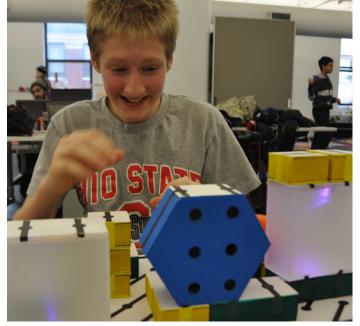
THIS THESIS IS AN EXPLORATION IN DESIGNING ELECTRONIC, 3D CONSTRUCTION SETS FOR 21ST CENTURY CHILDREN.

This thesis is an exploration in the design of construction sets for children, resulting in three prototypes. All prototypes have simple interfaces, interactions and electronic outputs. These interactive toys foster creativity and artistic expression while introducing children to very basic principles of circuitry, and cause and effect.

The first prototype is a wooden block set that incorporates buzzers, LEDs and vibration boards, built upon a power base using magnets for modularity and fastening. Each block has embedded magnets painted over with conductive paint, completing the circuit. The second prototype is a set of monster plush toys that are modular, allowing children to snap different heads onto the body, which is the power source. The heads either light up, vibrate or buzz. The third prototype is a large, foam block set with electronic outputs, allowing children to build and manipulate spaces. Instead of being 100% screen based, all three toys provide a tactile, three-dimensional experience, as well as an electronic one.



http://lovepaweena.com







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Health Care

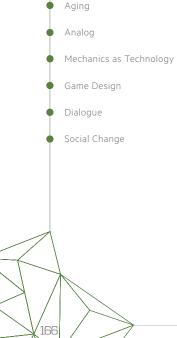
Caregiving

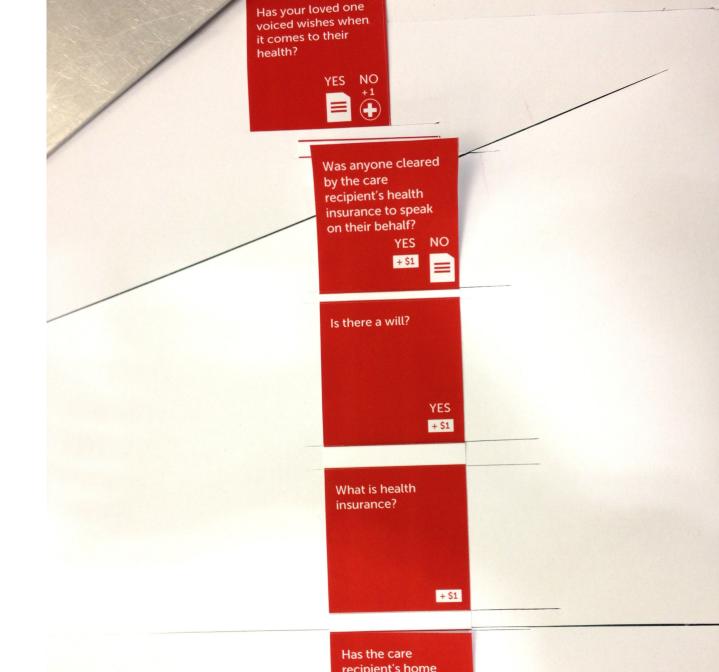
### **Forward Care**

FORWARD CARE© IS A COOPERATIVE BOARD GAME THAT PREPARES FAMILIES FOR THE RESPONSIBILITIES OF CAREGIVING.

Forward Care© is a cooperative, role-playing board game that facilitates conversations about caregiving before a health crisis occurs. Forward Care©'s mechanics help groups consider and make decisions around the medical, legal and financial aspects of caring for people losing their independence due to aging or a serious medical condition. Ideally, players build confidence around caretaking, establish a "team" mindset and minimize future stress.

The United States' healthcare system exploits its constituents through an increasing focus on "cure", rather than "care". This -- combined with the industry's inability to accommodate the growing population of elders living to extreme old age -- pushes the responsibility for long-term care on families and friends. Often, the stressors of this situation put both the caregiver's and the caregivee's emotional and physical well-being at risk. While there is no universal prescription for coping with life changes like these, gradual acquaintance with the issues that surround the situation can alleviate harmful emotions when the scenario actually arises.





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# My Very First Cyber War Kit: Cyber War In a Box

CYBER WAR IN A BOX.

Cyber War

Espionage

Hacking

Metasploit

Malware

Web Application Hacking

Cyber war has become a fact of contemporary life. For example, the Syrian Revolution points to a future where cyber war tools are accessible by everyone. Actors in this conflict frequently use hacking software downloaded from the Internet, behavior exhibited by beginner hackers. Future cyber war conflicts will follow this model, creating a type of war that engages everyday citizens. Everyone will have access to the means.

My Very First Cyber War Kit presents the potential of this reality (formerly: "all these arguments") in a single object, which contains all the tutorials and software necessary for anybody to engage in simple cyber conflicts. The project is a single instantiation of the concept and it will not be mass-produced. My Very First Cyber War Kit demonstrates the idea that 20th century notions of geo-political power are quickly being disrupted by the exploitation of cyber vulnerability in an increasingly networked culture.

http://myveryfirstcyberwarkit.com

http://samsniderheld.com



#### Alex Owen Staudt

Thesis Faculty: Marko Tandefelt Loretta Wolozin

DIY

PHP

JQuery

MySQL

Teensy

HTML/CSS

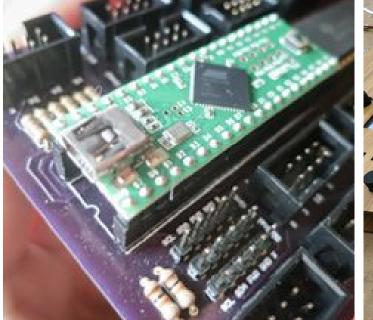
Controllers

# **DIY Controllers**

A TECHNOLOGY FRAMEWORK THAT SUPPORTS THE CREATION OF PERSONALIZED CONTROL SURFACES.

http://fuzzywobble.com/thesis http://fuzzywobble.com

My thesis is focused on developing a technology framework that enables others to design and build custom hardware controllers. These controllers are suited for multimedia software, installations, games, or any other scenario where the user may desire a unique and customized hardware interface. This technology framework includes a web-app that allows its user to design his or her custom interface, along with circuit boards and pre-written code that help deploy a plug-and-play solution. Customization has a great deal of value in the controller market; however, commercial products must adhere to the conventions of assembly line mass production and consequently have been unable to offer customized controller solutions. The technology framework designed for this thesis reduces the barrier of entry, making custom controllers accessible to anyone, even those with little technical experience







#### Chih han (Sylvia) Yang

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# The Adventure of Greg

I FOCUS ON NARRATIVE, INTERACTIVE ANIMATED
INSTALLATION THAT PRESENTS MARINE ECOSYSTEM.

Interactive AnimationEducational Design

openFrameWorks

Ocean Health

After Effects

Arduino

Motion Graphics

Game

The poor health of the world's oceans is a problem that is increasing at an alarming rate. Unhealthy ocean environment is mainly caused by human activities and pollution. Though everyone needs to know more about this problem, I would like to focus my design intervention on YOUNG people, who are still in the process of forming their behavior patterns and their relationship to the ocean. My thesis research focuses on how theories of environmental science and sustainability, particularly in the areas of oceanography and marine health, are being taught to primary school children, and how these methods might be improved through participatory design.

For my project, I would like to create an interactive installation that explores the relationship between ocean health and human intervention. I would like to experiment to see if the impact that people's choices have in a branching narrative structure can be leveraged to help them understand the impact they have on the ocean environment.

http://sylvia-yang.com/2013-Sylvia-is-working-on-thesis http://sylvia-yang.com







### **ACKNOWLEDGEMENTS**

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