

# J A Y S A U L S I L V E R

50 Massachusetts Ave. #105, Cambridge, MA 02139

Phone: unite.as.joy (a.k.a. 864-832-7569)

Email: silver <at> media <dot> mit <dot> edu

Portfolio: [1derful.org](http://1derful.org)

## Mission

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I want to create viscerally human experiences that are deployed to the world. I'm driven by my core value of the human as an adventurer and architect of her own world. I want to spend my time with others tinkering, hacking, designing, and iterating on prototype ideas just to throw them away and start again. I enjoy meta-designing in the post-disciplinary. *Coming Soon to a Workspace Near You - Available Summer 2012*



## Education

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### **M.I.T.**

**PhD** Candidate in Media Arts and Sciences

In the Lifelong Kindergarten Group with Prof. Mitch Resnick at Media Lab

Thesis Title: Maker's Mindset: World as Construction Kit

'08-'12

### **M.I.T.**

**Master's** in Media Technology

In the Lifelong Kindergarten with Prof. Mitch Resnick at Media Lab

Thesis Title: Camera for the Invisible: A Toolkit for Urban Exploration

'06-'08

### **M.I.T.**

**NSF Fellow**, Electrical Engineering and Computer Science

Computer Science and Artificial Intelligence Laboratory

'04-'06

### **University of Cambridge**

**Master's** of Philosophy in Computer Speech and Internet Technology

Thesis Topic: Phoneme Classification with Minimax Probability Machine

'02-'03

### **Georgia Tech**

**Bachelor's** in Electrical and Computer Engineering

Grade Point Average: 3.96/4.00

Specialty: Digital Signal Processing

Minor: Psychology

'98-'02

## Work Experience

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### **Intel Research**

Position: Design Researcher in Genevieve Bell's Interaction Experience Lab

Catalyze Maker Culture in design team and beyond through workshops etc.

Work with clients (VW, Ford, Toyota, etc.) to reinvent the automobile experience

'11-'12

<b>MIT</b> Position: Graduate Resident Tutor under Dean Robert Randolph Manage Undergraduate Dormitory of 120, and Work 1-on-1 with undergrads	'05-'12
<b>Everest University</b> Position: Adjunct Statistics Professor Teach intro. statistics and create pedagogical accessories.	'03-'04
<b>Lincoln Laboratory</b> Position: Computer Vision Graduate Summer Researcher Advanced Electro-Optical Systems Group with Dr. Bill Ross Design Mobile Autonomous Navigation Systems	'02
<b>Georgia Tech</b> Position: Learning Assistant and Tutor Freshman Experience Program	'01-'02
<b>U.C. San Diego</b> Position: Image Processing Consultant Biology Department with Professor Bill Schafer Automated Nematode Phenotyping	'01
<b>Georgia Tech</b> Position: Undergraduate Researcher Center for Signal and Image Processing with Professor Ron Schafer Image Processing and Morphology	'00-'02
<b>Bell South</b> Position: Network Specialist Telecommunications Network Engineer: Copper, Fiber, DSL, etc.	'99-'01

## Awards and Honors

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<b>Time Magazine:</b> "Top 15 Toys for Geniuses" for <i>A Brush with Genius</i>	'11
<b>MacArthur Foundation</b> Digital Media & Learning Competition Best in Class (Design), for <i>Scratch e<sup>3</sup> Share</i>	'10
<b>TEI Conference:</b> Best Madness Presentation for <i>Color Code</i>	'10
<b>Children's Technology Review</b> Editor's Choice for Excellence in Design for <i>Singing Fingers</i>	'10
<b>Prix Ars Electronica</b> Honorable Mention for " <i>Scratch Online Community</i> "	'09
<b>Children's Technology Review</b> Top Kids@Play 2009 in Informal Learning for <i>Scratch V1.4</i>	'09
<b>Center for Future Civic Media</b> Fellow	'07-'09
<b>National Science Foundation</b> Graduate Research Fellowship	'04-'07
<b>Gates Foundation</b> , Gates Cambridge Scholarship	'03-'04
<b>Georgia Tech</b> , Engineer of the Year	'02
<b>International Engineering Consortium</b> Award for Student Excellence	'02
<b>Intel</b> National Undergraduate Research Contest 2nd Place for <i>Automated Nematode Phenotyping</i>	'01
<b>Georgia Tech</b> , The Mechanical Challenge, 1st Place	'01

## Selected Recent Publications (First Author only)

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Sonic Electronic Book (not yet published), <i>Klutz Book / Scholastic</i>	'12
Commissioned Article on Nature as Interface (not yet published) <i>Leonardo, Journal of Arts, Sciences and Technology</i>	'12
Commissioned article on Drawdio (not yet published), <i>Interactions Magazine</i>	'12
World as Construction Kit, <i>Creativity and Cognition</i>	'11
Twinkle: Programming with Color, <i>TEI Conference</i>	'10
Gifts for Intertwining with modern Nature, <i>IDC Conference</i>	'10
Nature as Interface: MacGyver'ing and Martha-Stewart'ing interactivity with trees, pencils, grandpa, even the kitchen sink, <i>Creativity and Cognition Conference</i>	'09
Gifts for Intertwining with Modern Nature, <i>Como for Children Competition, part of IDC Conference</i>	'09
Awakening to Maker Methodology, <i>IDC Conference</i>	'09
Camera for the Invisible, <i>IDC Conference</i>	'08
Camera for the Invisible: Toward a Toolkit for Urban Exploration, Master's Thesis, MIT Media Lab	'08

## Products on the Market

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Paint N' Play/Brush with Genius, <i>Product with Colorforms</i> ~50,000 sold	'11
Singing Fingers HD, <i>Product in Apple Store</i> ~15,000 downloads	'10
Singing Fingers, <i>Product in Apple Store</i> ~30,000 downloads	'10
Drawdio Fun Pack, <i>Product with Adafruit</i> ~ 15,000 sold	'09
Drawdio Kit, <i>Product with Adafruit/Make Magazine</i> ~20,000 sold	'08
Drawdio Circuit Board, <i>Product with Adafruit</i> ~ 4,000 sold	'08

## Invited Talks

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"How to See the Invisible," <b>TEDx</b> Pioneer Valley	'12
"Museum Installations with Diverse Outcomes," <b>The Tech Museum</b> San Jose	'11
"World as Construction Kit," <b>TEDx</b> Santa Cruz	'11
"How to Invent with Synesthesia," <b>Stanford</b> Learning Fabrication Lab	'11
"Trust Children," <b>TEDx</b> Sacramento	'10
"Tools for Urban Exploration," <b>U.C. Santa Cruz</b> Digital Arts and New Media	'10
"When is a Banana also a Paintbrush?" <b>Brimmer and May</b>	'10
"Opening Welcome," <b>Scratch Conference</b> with Karen Brennan	'10
"Maker Mindset," Doctoral Consortium, <b>IDC Conference</b>	'10
"Programming with Color," <b>Tangible &amp; Embedded Interaction Conference</b>	'10
"Twinkle," <b>Crayola</b> Innovation Forum	'09
"Scratch and Creative Technologies." <b>Brimmer and May</b>	'09
"When Trees are Chairs," Flying Tokyo, <b>Rhizomatics</b>	'09

“Summary of my Research,” <b>Taiwan National Museum of Fine Arts</b>	'09
“Tools for Urban Exploration,” <b>MIT Graduate Student Art Forum</b>	'09
“Awareness Mapping,” <b>MIT Communications Forum and Future Civic Media</b>	'09
“How To Make Almost Anything,” <b>HAN Arnhem</b>	'08
“Scratch & Creative Learning,” <b>Omar Dengo Found. &amp; Uni. of Costa Rica</b>	'08

## University Course Teaching Experience

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Head Instructor and course Designer - <b>MIT</b> (in planning phase) “ <b>Maker.</b> ” Mixed Level. How to learn to code, remix, and repurpose Burning Man Art, Body Hacking, Rapid Party-Prototyping, etc.	'12
Head Instructor and Course Designer - <b>MIT</b> “ <b>Radical Design for Learning.</b> ” Graduate Level. Survey Seminar and Action Laboratory about Learning Experiences.	'11
Tutorial Guru (Document and Spread Machine-Specific Knowledge) - <b>MIT</b> “ <b>How To Make Almost Anything.</b> ” Graduate Level. Fabrication Laboratory Class for Inventing “Almost Anything.”	'07
Head Instructor - <b>Everest University</b> “ <b>Introduction to Statistics.</b> ” Undergrad. Level.	'03-'04
Teaching Assistant (Conduct Recitations, Create Quizzes) - <b>Georgia Tech</b> “ <b>Calculus.</b> ” Undergraduate Level.	'00-'01

## Selected Workshops

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Maker Culture, <b>Intel Labs Interaction Experience Research</b>	'11
Creative Insta-Rapid Prototyping, <b>Intel Labs Interaction Experience Research</b>	'11
Body Hacking, <b>Not Back to School Camp</b>	'11
Maker Culture, <b>Not Back to School Camp</b>	'11
World as Musical Instrument, <b>Exploratorium</b>	'10
Rolling Stations Creative Tech. Workshop, Dublin <b>Computer Clubhouse</b>	'10
Glow Doodle, Oakland <b>Computer Clubhouse</b>	'10
Computer Crafting, <b>Computer Clubhouse Coordinators</b> , Boston	'10
Drawdio Invention, <b>National Taiwan Museum of Fine Arts</b>	'09
Maker Culture, <b>Computer Clubhouse Conference</b>	'09
Inventing with Drawdio, <b>MIT Independent Activity Period</b>	'09
Drawdio, <b>Not Back to School Camp</b>	'09
Computer Crafting, <b>Srishti School of Art, Design, and Technology</b>	'09
Intro. to Pico Crickets, <b>Computer Clubhouse Conference</b>	'08
Scratch, <b>O'Reilly Emerging Technology Conference</b>	'08
XPollinate, 3-day Workshop, <b>HAN University</b> , Arnhem	'08
World As Musical Instrument, <b>Shrishti School of Design</b>	'08
Ecological Thinking with Scratch and Pico Crickets, <b>Srishti School of Art, Design, and Technology</b>	'07

Scratch and Pico Crickets at <b>Computer Clubhouses:</b>	
Dublin	'10
Boston, Twice Yearly	'08-'10
Guadalajara	'07
Mexico City	'07
San Juan	'07
Moravia	'07

## Exhibitions

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“Singing Fingers HD,” <b>SESI Art Gallery</b> , São Paulo, Brazil	'11
“Interactive Creativity,” <b>Google</b> , Science Fair Exhibition, Mt. View	'11
“Ok2Touch,” <b>El Futuro de la Moda</b> , Fashion Book by San Martín	'11
“Drawdio Brush,” <b>MIT 150th FAST Festival</b> , Cambridge	'11
“Singing Fingers,” <b>South by Southwest</b> , Austin	'11
“Reality Shelter,” <b>WHIRL</b> , Lilypad, Cambridge	'11
“Drawdio,” <b>Carnival</b> , Cambridge	'11
“Ok2Touch,” <b>Paris Biennale Internationale Design</b>	'10
“Drawdio,” <b>Paris Biennale Internationale Design</b>	'10
“Singing Fingers,” <b>Paris Biennale Internationale Design</b>	'10
“Singing Fingers,” <b>Cosmo Caixa Science Museum</b> of Barcelona	'10
“GlowDoodle,” <b>Creativity and Cognition</b> , Berkeley Art Museum	'10
“Drawdio Brush,” <b>Impetus @ Ars Electronica Festival</b> , Linz	'09
“Ok2Touch,” <b>Boston Museum of Science</b>	'09
“Ok2Touch,” <b>Exploratorium 2nd Skin Fashion Show</b>	'09
“Drawdio Brush,” <b>Freeze @ Taiwan National Museum of Fine Arts</b>	'09
“Ok2Touch,” <b>Freeze @ Taiwan National Museum of Fine Arts</b>	'09
“Ok2Touch,” <b>Seamless: Computational Couture</b> fashion show	'08

## Performances

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Nature as Interface, <b>Creativity and Cognition</b> , Berkeley Museum of Art	'10
Improvised Musical Instrumentation with Singing Fingers, <b>Media Lab</b>	'10
Human Touch as Interface, <b>Freeze @ NTMOFA</b> , Taiwan	'09
Life's Poem, MIT <b>Media Lab</b>	'07

## Advisory Roles

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NonProfit Organization:	
One Day on Earth, Project Advisor, Educational Tech. Specialist	'09-'11
MIT Undergraduate Research Advisor:	
<b>Electrical Engineering</b> - Josh Gordonson, Synesthetic Engineering	'09-'11

<b>Computer Science</b> - Ethan Sherbondy, Pho Glow	'11
<b>Comparative Media Studies</b> - Evan Martinez, Color Code	'11
<b>Computer Science</b> - Tyler Williams, LEGO Programming	'07-'10
<b>Architecture</b> - Melodia Kao, 3D Casings and UI Design	'08-'10
<b>Mechanical Engineering</b> - Paulina Mustafa, Visual Design	'10
<b>Electrical Engineering</b> - Star Simpson, Fuzzy Logic Project	'09
<b>Computer Science</b> - Luke Urban, Analog Circuit Fabrication	'08
<b>Civil and Environ. Engin.</b> - Sam Cohen, Camera for the Invisible	'08

**Olin College Undergraduate Research Advisor:** '08  
**Systems Engineering** - Matthew Ritter, Green Sensors

**High School Summer Intern Research Advisor:** '07  
 Arjuna Hayes, Scratch Remix Visualizations

## Service

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Counselor - Not Back to School Camp of The Teenage Liberation Handbook	'11
Reviewer - Tangible, Embedded, and Embodied Interactions Conference	'10
Studio Track Co-Chair and Designer - Tangible and Embedded Interactions	'10
Reviewer - Interaction Design and Children	'10
Moderator and Coordinator - MIT Graduate Student Art Forum	'10
Reviewer - Interaction Design and Children	'09
Designer/Facilitator - 1 week Drishya Slum School Summer Camp, India	'09
Counselor - Not Back to School Camp of The Teenage Liberation Handbook	'09
Designer/Facilitator - 3 week Drishya Slum School Summer Camp, India	'08
Yoga Teacher - MIT, Health and Wellness Center, Joy Labs	'04-'12
Host - College T.V. Network (Aquired by MTV in 2002) Music Video Show	'00-'02
Counselor - Recreation Center Summer Camp, Cocoa Beach	'98
Soccer Coach - 12 & Under Rec. Soccer League 2 seasons	'97-'98
One on One Tutoring, > 1000 hours - MIT, Georgia Tech, Satellite High	'96-'09

## Companies & Collaborations

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Co-Founder, Beginner's Mind Collective. Founded with E. Rosenbaum at MIT	'10-'12
Interaction Design: Singing Fingers, Glow Doodle, Color Code, etc.	
Co-Founder, Experiendipity. Founded with Seth Raphael in Palo Alto	'08-'12
Creativity Workshops and Mindfulness Apps	
Founder, Joy Labs Company	'08-'12
Electronics for Creativity, Yoga and Laughing Meditation Workshops	

## References

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(Contact Information Available upon Request)

### Managers / Advisors

Professor Mitch Resnick

Relationship to me: Direct Research Advisor, Known for 7 years

Position:

Academic Head, Program in Media Arts and Sciences

Head of the Lifelong Kindergarten group at the MIT Media Laboratory

Co-Director, Center for Future Civic Media

Professor Leah Buechley

Relationship to me: Generals Committee and Prof., Known for 5 years

Position:

Assistant Professor of Media Arts and Sciences

Head of High-Low Tech Group at the MIT Media Laboratory

AT&T Career Development Professor

Dean Robert Randolph

Relationship to me: Direct Advisor as Grad. Resident Tutor for 7 years

Position: Institute Chaplain of MIT, Dean of Student Life for 25 years

### Peers

(I believe it's important for any employer to know my style of collaboration / friendship)

Jeff Lieberman

Relationship to me: Senior Peer at Media Lab, Known for 7 years

Position:

Host "Time Warp" on Discovery Channel, Artist

Seth Raphael

Relationship to me: Collaborator, Known for 6 years

Position: iOS Developer and iPhone Magician at Startup: Bump Technologies

Tammy Stern

Relationship to me: Junior Collaborator at LLK, Known for 7 years

Position: Product Manager, Google

### Advisees

(I believe it's important for any employer to know my style of management / advisorship)

Matthew Ritter

Relationship to me: Advisee, Known for 5 years

Position: Operations Manager, Stever Robbins Inc.

Paulina Mustafa

Relationship to me: Undergraduate Researcher, Known for 2 years

Position: MIT Undergrad, Intern Le Laboratoire de Paris

Tyler Williams

Relationship to me: Undergraduate Researcher, Known for 6 years

Position: Software Developer at Startup: Echo Nest