Michael Shiloh

Curriculum Vitae

New York University Abu Dhabi
mshiloh@nyu.edu

Areas of Art, Research, and Teaching

Education – Hands on, maker movement, DIY, tinkering, disassembly, self reliance, pedagogy

Art – Machine art, conceptual art, electronic sound

Research - Telepresence, inflatable robotics, toolkit for constructing physical computing devices

Design – Industrial design, interaction design, machine design for architecture

Maker Identification – Inclusiveness, exclusiveness, personal identification

Open Source culture – History, ethos, motivation, idealism, legality, collaboration

Maker Culture – Hacker spaces, fab labs, individual practice, online communities, place in popular culture

Technology – Electronics, software, microcontrollers, sensors, actuators, digital fabrication

Academic Appointments

New York University Abu Dhabi, United Arab Emirates
Associate Professor of Practice of Interactive Media, 2017~

University of California, Berkeley
Lecturer, College of Engineering, 2015 - 2017

California College of the Arts
Critical Studies: Associate Professor, 2014 - 2017; Senior Lecturer, 2006; 2011 - 2014

San Francisco Art Institute
Design and Technology, Visiting Faculty, 2012 - 2014

San Francisco State University
Fine Art: Conceptual and Information Art, Visiting Faculty, 2010-2011

Art Institute of California, San Francisco
Audio Production, Part Time Faculty, 2010-2011

The Crucible, Oakland, CA

Kinetics and Electronics: Lecturer, 2007-2008; Department Head, 2008 – 2011

Maker Media, Sebastopol, CA
Make Mobile Education Outreach, 2008

Linux Certified, Mountain View, CA
Lecturer, 2002-2005

Laney College, Oakland, CA
Lecturer, 1996-1997

Professional Experience

Arduino LLC, USA and Italy
Educator Liaison, Public Speaker, Workshop Presenter, 2012~

The Exploratorium, San Francisco
Tinkerer in Residence, Consultant 2011~

Teach Me To Make, San Francisco
Co-founder, principle 2005 - 2017

Survival Research Labs, San Francisco
Engineer, crew, technical consultant, designer, fabricator, and performer, 1995~

OpenMoko, Taipei, Taiwan
Developer Relations Head, University Program Manager, 2007 – 2008

Checkpoint Software, San Francisco
Senior Software Engineer, 2006 – 2007

Cradle Technologies, Mountain View
Senior Embedded Engineer, 2005 – 2006

MakingThings LLC, San Francisco
Co-Founder and VP Engineering, 2002 - 2005

Mediabolic, Inc, San Francisco
Senior Engineer and Hardware Architect, 2000 – 2002

Wind River Systems, Alameda
Senior Development Engineer, 1996 - 2000

Education

M.F.A. in Fine Art (coursework only), San Francisco State University, 2012 - 2013
Concentration in Conceptual and Information Art

B.S. in Electrical Engineering and Computer Science, University of California, Berkeley, 1982
Concentrations in Analog Electronics and Computer Architecture
Member, National Engineering Honor Society
Member, National Electrical Engineering Honor Society

Publications

Books Co-authored

Getting Started with Arduino, 3rd Edition. Sebastopol, CA: Make:Books, 2014.
Translated into Chinese, French, German, Italian, Japanese, Korean, Portuguese, Spanish, and Turkish
Included in *Make: Getting Started with Arduino* kit

Books Co-edited

Arduino Projects Book. Torino, Italy: Arduino, 2012.

Articles (as contributor)

"A RISCy Approach to VLSI" in VLSI Design, 1981, pgs. 14-20.
http://ai.eecs.umich.edu/people/conway/VLSI/ClassicDesigns/RISC/RISC.VD4Q81.pdf

Articles (as subject)

Michael Molitch-Hou, 3D Printing Industry, "Geoweaver Roaming 3D Printer Walks the Walk and Caulks the Caulk", January 2014
http://3dprintingindustry.com/2014/01/06/geoweaver-roaming-3d-printer-walks-walk-caulks-caulk/
(with Creative Architecture Machines studio)

Aaron Betsky, Architect Magazine, "What 3D-Printing Robots Could Mean for the Future of Architecture", January 2014
http://www.architectmagazine.com/d-technology/walking-3d-printers-and-other-creative-architecture-machines_o.aspx?dfpzone=culture
(with Creative Architecture Machines studio)

Adam Fabio, Hack A Day, "Roving Hexapod Poops Out 3D Prints", December 2013
http://hackaday.com/2013/12/30/geoweaver-rise-of-the-monster-3d-printing-hexapods/
(with Creative Architecture Machines studio)

Laura Casey, Contra Costa Times, "Making movable art and robotics a little easier with Arduino", October 2011
Reprinted in San Jose Mercury News http://www.mercurynews.com/ci_19056738
Scanned with picture
http://teachmetomake.files.wordpress.com/2009/05/contracostatimes_2011_10_07_page1.pdf

Mathilde Berchon, Making Society, "Michael Shiloh, DIY workshops and how to get adults involved", April 2011
http://makingsociety.com/2011/04/michael-shiloh-diy-workshops-and-how-to-get-adults-involved/

Ulrich Bantle, Linux Magazin [sic] (Germany), "Web Wonder: Control a Linux robot from the Web", March 2006
http://www.linux-magazin.de/Ausgaben/2006/03/Mr.-Roboto
English translation
http://nnc3.com/LinuxMag/Magazine/Archive/2006/65/094-095_robot/article.html

Interviews (as subject)

Business With Passion, "Maker Faire", May 2009
http://www.manygoodideas.com/2009/06/19/business-with-passion-maker-faire/
(5:05 – 11:47)

Geek Entertainment TV, "Michael Shiloh and the land of Linux robots", 2008
https://www.youtube.com/watch?v=4NsXOQDSLGE

Geek Entertainment TV, "A Day at the Maker Faire: Michael Shiloh", May 2007
http://blip.tv/getv/maker-faire-michael-shiloh-full-interview-242910

2008 Southern California Linux Expo, "Interview with Michael Shiloh of OpenMoko", 2008
https://web.archive.org/web/20080723130933/http://www.socallinuxexpo.org/blog/2008/02/03/interview-with-michael-shiloh-of-openmoko/

LunchMeet, "Could OpenMoko be the Open iPhone Killer?", LinuxWorld, San Francisco, 2007
http://www.podtech.net/home/search/Michael+Shiloh

Von ThomasS, Pro-Linux.de, "Interview with Michael Shiloh of Linux Robots", March 2006
http://www.pro-linux.de/artikel/2/309/interview-with-michael-shiloh-of-linuxrobots.html

Workshops

Invited

"How to get people to try learning something at which they fear they may fail"
Education Foo Camp, Google headquarters, Mountain View, California, February 19-21, 2016

"Arduino Hands-on Workshop", Lawrence Berkeley National Laboratories, Berkeley, multiple introductory and advanced workshops, 2012, 2013, 2014, 2015
Content: http://teachmetomake.com/wordpress/arduino-at-lbl

"Arduino Robotics" workshop for children, Imperial College London, London, UK, August 14, 2014

"Inventors Workshop" one of 3 co-teachers, Summer Arts program, Cal State Monterey Bay, June 30 to July 13, 2014
http://blogs.calstate.edu/summerarts/index.php/courses/inventors-workshop-sound-sculpture/

"Hands-on Introduction to the Arduino Electronic Prototyping Platform" for Educause Learning Initiative annual meeting, New Orleans, February 4, 2014.

"Arduino Robotics Workshop", Spokane Community College, Spokane, Washington, November 2013.

Various Arduino workshops for Workshop Weekend: Arduino at Tech Liminal, Oakland, July 2013 (part of a team of 5 teachers)

"Arduino Robotic Workshop" Jerusalem Mini Maker Faire, Jerusalem, Israel, March 2013.

"Robotic Prototypes Workshop" Acadia 2012, California College of the Arts, San Francisco, October 2012.
Content: http://teachmetomake.com/wordpress/arduino-for-robotic-prototypes-acadia-2012

"Arduino Robotics Workshop" Lifelong Learning, The Exploratorium, San Francisco, September 2012 and April 2012.

"Introduction to Arduino + Electronics 101" Formations 2012, California College of the Arts, San Francisco, February 2012. (with Rip DeLeon and Jason Johnson)

"Sound Workshop for Tinkering Studio" Open Make, The Exploratorium, San Francisco, March 2011.

Series of 6 workshops on Arduino, The Exploratorium, San Francisco, 2010-2012. (multiple series)
Content: http://teachmetomake.com/wordpress/arduino-exploratorium

"ElectroMechanical Contraption Building Workshop" Lift 10 conference, Geneva, Switzerland, 2010.

"Make Play Day" tinkering workshop, Maker Faire San Mateo, San Mateo, multiple 2006 – 2010.

Accepted

"The Interaction Engine: Tools for Prototyping Connected Devices" The ACM

(Association for Computing Machinery) International conference on Tangible, Embedded and Embodied Interaction (TEI), Eindhoven, The Netherlands, February 13, 2016
http://www.tei-conf.org/16/SW2.html

"The Body Electric", a panel at AICAD2015 Symposium, San Francisco, CA, November 6 2015 (moderator).

"Creative Architecture Machines" (Co-presented with Jason Kelly Johnson). Presentation as part of "Machine Crafted", a panel at AICAD2015 Symposium, San Francisco, CA, November 6 2015

"Arduino Yun for Intermediate Arduino Users: Using the Onboard Linux Computer to Communicate with Other Computers and the Internet" O'Reilly Open Source Convention (OSCON), Portland, Oregon, July 20, 2014
http://www.oscon.com/oscon2014/public/schedule/detail/34650

"Arduino for Educators Hands-on Workshop" World Maker Faire, New York Hall of Science, New York City, September 19, 2013.
https://www.eventbrite.com/e/world-maker-faire-ny-educator-meetup-and-arduino-workshops-tickets-8040769157

"Arduino for Educators Hands-on Workshop" Maker Faire San Mateo, 2013, San Mateo.

"Arduino for Educators Hands-on Workshop" Maker Faire San Mateo, 2012, San Mateo.

"Tinkering and Chain Reaction" LIFT with FING conference, Marseille, France, 2009.

Presentations

Invited

"Tools to Assist Students Constructing Physical Computing Devices", Sketching in Hardware Conference, Detroit, Michigan, July 2018

"Radical Hardware", Round Robin Panel, Sketching in Hardware Conference, Detroit, Michigan, July 2017

"Creative Architecture Machines", Sketching in Hardware Conference, Biosphere 2, Tuscon, August 2015
Slides
Program: http://sketching-in-hardware.com/

"Arduino", Indie Memphis Film Festival, Memphis, November 2013
Slides:
http://www.slideshare.net/michaelshiloh/arduino-at-indie-memphis-2013
Program:

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http://indiememphis.festivalgenius.com/2013/films/arduino_indiememphis2013_indiememphis2013

"Further Explorations in Simplifying Electronics for Education", Sketching in Hardware Conference, Portland, 2012
http://www.slideshare.net/michaelshiloh/teach-me-to-make-sketching-2012

"The Case for Open APIs" Sketching in Hardware conference, Los Angeles, 2011
http://teachmetomake.wordpress.com/sketching-in-hardware-2011/

"Highly Learnable Open Hardware" Open Hardware Summit 2010, New York Hall of Science, New York City, September 2010.
http://www.slideshare.net/michaelshiloh/highly-learnable-open-hardware-open-hardware-summit-2010

"Changing Things: Fab Labs, Decentralized Design, and Production of Material Products" Lift+fing conference, Marseille, France, 2009
http://www.slideshare.net/michaelshiloh/lift-fing09-michaelshilohpresentation
Video: http://www.dailymotion.com/video/xbwgph_michael-shiloh-changing-things-lift_tech
Conference overview. I'm #25: http://www.slideshare.net/slidesharefing/synthese-lift-with-fing-2009

"Large Scale Art in the San Francisco Bay Area: Survival Research Labs and Flaming Lotus Girls" DLD (Digital-Life-Design) conference , Munich, Germany, 2009

Profile: http://dld-conference.com/users/michael-shiloh

Current conference: http://dld-conference.com/

Slides: http://www.slideshare.net/michaelshiloh/dld2009-chairmans-dinnermichaelshilohpresentation

"OpenMoko: Completely Open Mobile Computing Software Platform" Emerging Communication Conference, Mountain View, 2008
http://www.slideshare.net/eComm2008/michael-shilohs-presentation-at-ecomm-2008
Speakers: http://america.ecomm.ec/2008/speakers/
Session: http://america.ecomm.ec/2008/openmoko-open-mobile-computing.php

"OpenMoko and Ubiquitous Computing" Emerging Technology Conference, San Diego, March 2008.
http://cdn.oreillystatic.com/en/assets/1/event/8/OpenMoko%20and%20Ubiquitous%20Computing%20Presentation.pdf
Program:
http://en.oreilly.com/et2008/public/schedule/detail/3330

"The OpenMoko Open Source Cellphone Project" Openmind conference, Tampere, Finland, 2007.

Panels

As Panel Moderator

"Love and Make", panel on couples who make, Maker Faire San Mateo, 2016
"The Body Electric", panel on how technology transforms our conceptions of the human body, AICAD Symposium, 2015

As Panel Member

"Machine Crafted", panel on how technology transforms the way we teach, learn, and design, AICAD Symposium, 2015

"The Role of Technology in the Design School Curriculum", Interaction15 Education Summit, San Francisco, February 2015

"Education: Making new Scientists" The Hackers Conference, California, November 2014

"Open Source Hardware and the Classroom" Electrical and Computer Engineering Department Heads Association (ECEDHA) annual conference, Napa, CA, March 2014
http://ecedha.org/conferences/2014-ecedha-annual-conference-and-ecexpo/2014-

conference/2014-schedule/open-source

"Teaching and Inspiring New Makers" Maker Faire San Mateo, San Mateo, CA, May 2012

"Opportunities Presented the OpenMoko Open Source Cellphone Project" for Future Trends Forum "Open Mobile Devices: New Opportunities from Outside Telecom" panel, Madrid, Spain, June 2008
http://www.fundacionbankinter.org/system/documents/5851/original/10_mobiletechnologies_EN.pdf

Guest Lectures

"Introduction to Arduino", lecture and demonstration to Manus Et Machina, New York University Abu Dhabi, Abu Dhabi, Fall 2018

"Introduction to Arduino", lecture and demonstration to CS 10: The Beauty and Joy of Computing, University of California, Berkeley, Spring 2016

"Introduction to Arduino", lecture and workshop for ME 360 , Stanford University, Fall 2011 (invited by Amy Franceschini)

"Teleo: Rapid Prototyping Toolkit", Human-Computer Interaction program, Stanford University, 2004
http://hci.stanford.edu/courses/cs547/abstracts/04-05/041112-shiloh.html

"Teleo: Rapid Prototyping Toolkit", Conceptual and Information Art, San Francisco State University, 2004

Class Visits

"Hands-on Electronics", Feedback Physics, CCA (Fall 2011; Fall 2012)

"Introduction to Arduino", Introduction to Interaction Design, CCA (Spring 2011)

"Basic Electronics", Recombinant Media, CCA (Fall 2002)
http://www.ultrafuzz.net/MakingThings-Electronics.pdf

Exhibitions

Exhibitions Curated or Directed

"Interface Show" California College of the Arts, Oakland, 2011-2016. (with Barney Haynes and Don Day)

"End of Semester Show" Conceptual and Information Art, San Francisco State University, San Francisco, 2011.

"Dammit: A New Media Experience" Martin Wong Gallery, San Francisco State University, San Francisco, 2011. (with Matthew Dalton and Jake Rogers)

"Knowledge Hacking Art: Energy Harvesting as Public Art" Worth Ryder Gallery, University of California, Berkeley, September 2010. (with Stephen Wilson)"

Exhibitions Invited

"The Brain on Energy" by Judy Castro at TV Of Tomorrow, Yerba Buena Center for the Arts, San Francisco, 2011. (technical consultant)

"Automatic: Robotic Art", lowerdeck Gallery, San Francisco, November 2009. (group show)
http://www.robots-dreams.com/2009/11/automatic-robotic-art-show-coming-up-in-san-francisco.html

"Frankenstein Theory and Robotics: A survey of Frankensteinian Robotics, Kinetic and New Media art", Boca gallery, San Francisco, 2006. (group show)
https://web.archive.org/web/20060713070158/http://www.sfboca.com/exh/frank_pr.html
http://sf.metblogs.com/2006/06/12/frankenstein-robotics-opening/

"Caution -- broken glass", TRW NAS Division, Oakland, January 1993. (solo installation)

"I Guess A Blowtorch is Out of the Question", TRW, Berkeley November 1991. (solo installation)

"Office Extraterrestrial Bolted Insect Landscape", Teknekron Financial, Berkeley, January 1990. (solo installation)

"Ashes to Ashes; Rust to Rust " TFS, Berkeley, May 1991. (solo installation)

Exhibitions Accepted

"Writing Room Only" Levi Strauss & Co., San Francisco, June 1994. (group show)

"Reading Room Only", San Francisco Fair, San Francisco, September 1992. (group show)

Performances

Survival Research Labs "Film Shoot", San Francisco, May 2016. (With SRL crew)
http://srl.org/shows/sf2016/

"Survival Research Labs: A Complete Mastery of Sinister Forces: Employed with Callous Disregard to Produce Catastrophic Changes in the Natural Order of Events" Robodock Art Festival, Amsterdam, September 2007. (With SRL crew)
https://www.youtube.com/watch?v=nnSewOFNjf4&list=UUu_DWeoc3nzLecCgfr6sXOA

"Survival Research Labs: GHOSTLY SCENES of INFERNAL DESECRATION: An SRL End of Days Production" In conjunction with ZeroOne/ISEA's Global Festival of Art on the Edge & the 13th International Symposium of Electronic Art, San Jose, August 2006. (With SRL crew)

"Survival Research Labs: The Fish Boy's Dream" at Fringe Exhibitions, Los Angeles, January 2006. (With SRL crew)

"Survival Research Labs: Berkeley Art Museum Show" UC Berkeley Art Museum, Berkeley, November 2003. (With SRL crew)

"Survival Research Labs: Benefit for Tim North", SOMARTS gallery, San Francisco, March 2003. (With SRL crew)

"Survival Research Labs: The Amy Show" SOMARTS gallery, San Francisco, January

2002. (With SRL crew)

"Survival Research Labs: Live at the Webby Awards" The Sound Factory, San Francisco, 2002. (With SRL crew)
https://www.youtube.com/watch?v=3ZRz8QCmvk0&list=PLbd3_B4veJVJhxsZX0xd_UnKpjQ-EzHDJ

"Survival Research Labs: Berkeley Show", The Shipyard, Berkeley, December 2001. (With SRL crew)
https://www.youtube.com/watch?v=U6IXU-nGtPI&list=PLbd3_B4veJVJhxsZX0xd_UnKpjQ-EzHDJ
https://www.youtube.com/watch?v=gE8LxPqvnhU&list=PLbd3_B4veJVJhxsZX0xd_UnKpjQ-EzHDJ

"Survival Research Labs: Hovercraft Debut Run ", undisclosed location, Oakland, April 2001. (With SRL crew)

"Survival Research Labs: SRL Thoughtfully Regards: The Arbitrary Calculation of Pathological Amusements" NTT-ICC sponsored event, Tokyo, Japan, December 1999. (With SRL crew)
http://www.srl.org/shows/ntt/

"Survival Research Labs: What Is Real" undisclosed location, San Francisco, June 1998. (With SRL crew)

"Survival Research Labs: The Unexpected Destruction of Elaborately Engineered Artifacts: A Misguided Adventure in Risk Eradication, Happening Without Known Cause, in Connection with Events that are Not Necessarily Related", Longhorn Speedway, Austin, TexasMarch, 1997. (With SRL crew)
https://www.youtube.com/watch?v=WUslrdEn2cg&list=PLbd3_B4veJVLe5mpFpcWE4MSrEZf1aYTQ

"Survival Research Labs: Wired 1996 Macworld party", undisclosed location, San Francisco, 1995. (With SRL crew)
https://www.youtube.com/watch?v=XjRq9-oQKmc&list=PLbd3_B4veJVLe5mpFpcWE4MSrEZf1aYTQ

"Survival Research Labs: Crimewave", undisclosed location, San Francisco, 1995. (With SRL crew)
https://www.youtube.com/watch?v=PpPggo4eWxk&list=PLbd3_B4veJVLe5mpFpcWE4MSrEZf1aYTQ

"Survival Research Labs: A Calculated Forecast of Ultimate Doom: Sickening Episodes of Widespread Devastation Accompanied by Sensations of Pleasurable Excitement", undisclosed location, San Francisco, May 1994. (With SRL crew)