

## Curriculum Vitae

**Work Address:** Rue du Jura 11  
1004 Lausanne  
Switzerland

**Nationality:** United States

## Education

**PhD / Docteur ès Sciences (15.04.2015)**

École Polytechnique Fédérale de Lausanne  
Department of Architecture (EDAR)  
Thesis title: *Computational Shifts in Theatrical Space*

**MS, Media Arts and Science (17.08.2003)**

Massachusetts Institute of Technology Media Lab  
Grassroots Invention Group  
Thesis title: *Just Making Faces? Animatronics, Children and Computation*

**BFA, Visual Communication / Art and Technology (19.05.2001)**

School of the Art Institute of Chicago  
Thesis title: *Typography and Murder: Jan Tschichold and the Fascist Aesthetic*

**High School**

Phillips Academy, Andover (02.06.1996)

## Employment

**Current**

**Senior User Experience Designer**

Food52.com  
*Commercial user-experience work and product strategy for a NY based media and e-commerce company.*

**2012-2015**

Lausanne CH

**Doctoral Assistant**

École Polytechnique Fédérale de Lausanne

**Researcher**

Haute Ecole de Théâtre de Suisse Romande  
SINLAB

*While conducting my PhD research at EPFL I worked primarily at the theatre school HETSR on projects related to the Swiss NSF funded SINLAB (sinlab.ch), a Sinergia grant project working at the intersection of performance, technology and philosophy. This role included guiding the design, development and deployment of novel technologies (software and hardware) for projects conceived by myself, visiting artists and graduate students. I worked with both undergraduate and graduate students directly in*

*their roles as performers and directors to assist them in integrating new technology into their work. The role comprised technical, theoretical and pedagogical aspects, requiring successful creation of reliable new tech which also supported all of the overlapping research, teaching and artistic objectives.*

**2007 - 12**  
Cambridge MA

**Design Researcher**  
IBM Research

*Design research at IBM was an unusual dual role: As one of two embedded designers in the research organization I was responsible for user experience work on design prototypes from wireframe to implementation, as well as providing the voice of “design thinking” during strategy meetings related to research projects. The research aspect of the role consisted of critical reflection and creation of prototypes to explore the role that user interface plays in the behavior of users. The idea was to explore interface both as a means to guide desired behavior and as a possible explanation for the emergent behaviors that we see, particularly in social software. In 2009 I organized an international un-conference called The Social and the Spacial which brought together 100 attendees for two days around the topic of social software and public space. In addition I spent a week as researcher in residence at the KNAW funded Amsterdam based Digital Humanities project Virtual Knowledge Studio.*

**2006 - 07**  
Boston MA

**Senior Software Engineer**  
Pearson Education

*I was responsible for a team of three producing database-driven web application software for the educational evaluation market. In addition to front-end design and coding, a significant portion of this work was spent on working with large data sets. This included analysis, troubleshooting and management of relational databases (primarily Oracle).*

**2005**  
Los Angeles CA

**Senior Designer**  
Bricolage Systems, LLC

*Bricolage Systems was a startup founded by my graduate school advisor to fund a non-profit art-and-technology studio space through for-profit tutoring. I served as in-house designer and designed and developed the online scheduling system for tutors and clients and provided input on the role of the arts during the pedagogical development of the public studio.*

**2001 - 03**  
Cambridge MA

**Research Assistant**  
MIT Media Lab

*As a graduate research assistant for the MIT Media Lab Grassroots Invention Group I conducted my own research into the introduction of computational concepts to pre-literate children by means of animatronic robots. For this I designed and developed a prototype visual programming environment and a physical “puppetry” interface to control the robots. I also participated in several epistemology and learning projects worldwide, including running electronics workshops with schoolchildren in Cambridge and Brazil.*

**1997 - 05**  
Putnam Valley NY

**Senior Developer/Designer**  
Evolving Systems, Inc

*From 1997 until 2005 I worked as the in-house designer and developer for a small privately owned web development company. In this capacity I produced hundreds of database-driven web applications and websites for clients including Fortune 500 firms, universities, political organizations and small businesses.*

## Teaching : Courses

**2017**

**Introduction to Digital Scenography**  
LM04: La Manufacture

**2013**

**Teaching Assistant, École Polytechnique Fédérale de Lausanne**  
CS-489: PxS Design studio for computer scientists  
Special topic MOOCs in Africa

*Delivered several lectures on industrial design research and the design process in a research environment. Topics covered included the development of paper and video prototypes, wire-framing for software interfaces and approaches to lightweight user centered and participatory design. Special topics included the history of pedagogy and education and design for diverse user audience.*

**2006 - 08**

**Instructor, Harvard Extension School**  
CSCI E-9: Computational Art

*Co-taught with a physicist, computational art was a three-part foundational course designed to introduce students to the idea of creating interactive works using microcontrollers, 3D software and on-screen data visualizations. The course alternated theoretical and practical units interspersed with discussion. Topics covered included interaction design, Wolfram's New Kind of Science, morality and technology, robots and science fiction and self and identity online.*

**2003**

**Teaching Assistant, Harvard University**  
FAS Interactive Environments  
w/ Profs. Jeffery Huang and Muriel Waldvogel

*Taught three weeks of the course including a one week intensive electronics workshop. Designed and constructed an interactive floor called MagicFloor which could sense the presence of occupants in a space using capacitive fields, along with a software interface students could use to create their own interactive experiences using this interface.*

## **Teaching : Workshops**

**2013**

**Guest Lecture**  
**HEAD (Haute Ecole d'art et de Design)**  
Geneva, Switzerland  
Art <-> Design <-> Research

*Invited to participate in HEAD's "design week," I delivered a lecture to first year Masters students on the distinctions between art, design, and research and the emerging categories of artistic research and design research. The lecture was followed by a Q+A with the students.*

**2012**

**Guest Lecture and Workshop Lead**  
**Tsinghua University Art & Science Media Lab**  
Beijing, China

*Presented a lecture on the history of art and technology and interactive works using depth-camera based tracking systems. Over the course of the following two weeks ran a workshop for media lab design students interested in integrating Microsoft Kinect into their interactive projects. During the workshop the students used software which I developed for my dissertation work.*

**2011**

**Artistic Mediums II**  
Curatorial lecture  
New Art Center Newton, MA

*Artistic Mediums II was the second of two shows developed and curated by myself and public artist Mary Lucking. The idea of these shows was to explore the notion of contemporary artists working with technologies as mediums in the sense of both spiritual guides and charlatans. The second of these exhibitions was presented in a gallery space which was part of an educational art space. In support of this show I delivered a lecture and*

*facilitated a public discussion on the history of electrification, ghosts and the radio, art technology and spirituality.*

**2003**

***Jackal Project***

Electronics and art workshops  
Boston MA, Chicago IL, Austin TX

*Conceived before "making" was a movement, the Jackal Project was a multi-city, multi-year touring project which involved setting up public "drop-in" studios for teaching the public soldering skills, hacking of toys, networks and ideas. As a team, the jackals dressed in white jumpsuits and masks to descend upon various locations for limited engagements, reconstructing their environment and sharing the results in public. The project was presented at Boston Cyberarts, the Museum of Contemporary Art in Chicago and at Siggraph in Austin, Texas.*

**2002**

***The City That We Want***

Electronics workshop with the Bradesco Foundation  
Sao Paulo and Campinas, Brazil

*As part of my education and epistemology work at the MIT Media Lab, I spent three weeks teaching electronics and working with school children in the Bradesco Schools in Brazil. The topic "the City That we Want" was meant as an opportunity for students to envision the future they wanted to live in and then to create functional prototypes of systems and artifacts from that future.*

**Selected Exhibitions and Performances**

2015

*Blue Butterfly*  
Science communications theatre  
Collaboration with UNIL / Catalyst Theatre

2014

*Hotel City / CinemaMutation*  
Interactive film installation / game engine  
HETSR 10 year anniversary, Lausanne Switzerland

2014

*LIWYĀTĀN / LEVIATHAN*  
Theatre production/performance  
Work with SINLAB Artist in Residence MOTUS Company

2013

*CYBORG[AME]*  
Theatre production/performance  
Work with SINLAB Artist in Residence with Gildas Milan

*Lines of Desire*

Invited Artist in Residence

ENSAL (École nationale supérieure d'architecture de Lyon)

*SHiNMu*

Dance production/performance

Collaboration with ATOU dance company and Theoriz Crew

*Stage Digital II*

Interactive technology demonstration and residency

ZhDK Zürich, Switzerland

2012

*Les Urbaines*

Interactive technology demonstration for a public festival

Lausanne, Switzerland

*Stage Digital I*

Interactive technology demonstration and residency

ZhDK Zürich, Switzerland

2011

*The Meaning of Work*

Interactive Video for Interior-ity at the

Fourth Moscow Biennale of Contemporary Art

Moscow, Russia  
Publication List

## **Publications**

2015

*Computational Shifts in Theatrical Space*

École Polytechnique Fédérale de Lausanne (Doctoral Thesis).

2013

*Experience Catalysts and Architecture: Towards a New Tradition*

2013 eCAADe Conference on Future Traditions: Rethinking Traditions and Envisioning the Future in Architecture through the Use of Digital Technologies

2011

*Architecture and Design for Virtual Conferences: A Case Study*

MDPI Future Internet 3, no 3: 175-184

*Circles of Crowdsourcing: The Social Organization of Participatory Sensing – IBM Research Report*

Michael Muller, Susanne Hupfer, Stephen Levy, Daniel Gruen, Andrew Sempere, Reid Priedhorsky

*Participatory Sensing through Participatory Design: Collaborating on Requirements with the CARD Method – IBM Research Report*

Michael Muller, Susanne Hupfer, Andrew Sempere, Stephen Levy, Reid Priedhorsky, Daniel Gruen

*MoCoMapps - An Experiment in Crowdsourcing both Data and Applications for Mobile Services – IBM Research Report*

Michael Muller, Susanne Hupfer, Stephen Levy, Daniel Gruen, Reid Priedhorsky, Andrew Sempere

2010

*Avatars Meet Meetings: Design Issues in Integrating Avatars in Distributed Corporate Meetings – IBM Research Report*

N. Sadat Shami, Li-Te Cheng, Steven Rohall, Andrew Sempere, John Patterson

*Enhancing Distributed Corporate Meetings with 'Lightweight' Avatars  
IBM Research Report*

N. Sadat Shami, Li-Te Cheng, Steven Rohall, Andrew Sempere, John Patterson

2009

*The Work of Art in the Age of Virtual Production*  
25th Annual CHArt Conference Proceedings

2005

*Animatronics, Children and Computation*

IEEE Journal of Educational Technology & Society 2005, Vol. 8  
Special Issue on "Crafting Learning in Context"

2004

*CTRL\_SPACE: Using Animatronics to Introduce Children to Computation.* Proceedings, IEEE International Conference on Advanced Learning Technologies

2003

*Just Making Faces? Animatronics, Children and Computation*  
Masters Thesis, MIT