

Andrew Sempere

December 2021

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*

Educational Appointments / Invited Lectures

2020 - Current **Course Instructor / Developer**
Geneva, CH
EPFL Extension School

2015 - Current **Adjunct Instructor, Including the following Universities:**
(specific courses outlined in Teaching Dossier)

- Aarhus University, Denmark
- Bern University of the Arts | BFH (HKB)
- Geneva University of Art and Design (HEAD)
- University of the Performing Arts of Western Switzerland /
La Manufacture (HETSR)
- Zürcher Hochschule der Künste, Zürich (ZHdK)

2016 **Invited Lecture**
Direct Encounters with History
Dedman College of Humanities and Sciences
Southern Methodist University, Texas

2013 **Invited Lecture**
Art / Design / Research
Research Week
Geneva University of Art and Design (HEAD)

Research Experience

2012 - 2015 **Doctoral Assistant**
Lausanne CH
École Polytechnique Fédérale de Lausanne

Researcher in Residence

Lausanne CH

University of the Performing Arts Lausanne (La Manufacture / HETSR)

Researcher

Lausanne CH

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 with methodologies and tools for 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

Design Researcher

Cambridge MA 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 Spatial 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.

2001 - 03

Research Assistant

Cambridge MA 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.

Employment

2020 - Current

Director of Special Projects
Lausanne, CH / Andover, MA USA
Place Lab Ltd.

Director of Engineering
Toronto, ON Canada
Toasterlab

2019 (1/19-12/19)

Software Developer / UX Designer
Zurich, Switzerland
ElectricFeel

2017 - 2018

Software Developer in Digital Humanities
Charlottesville VA, USA
Performant Software LLC

2016 - 2017

Senior UX Designer
New York, NY
Food52.com, NYC
Commercial UX and product strategy for a NY based media and e-commerce company.

2006 - 07

Boston MA

Senior Software Engineer
Pearson Education

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

Senior Designer
Los Angeles CA
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.

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.

Grants (PI)

2015

HES-SO Haute école spécialisée de Suisse occidentale Digital Scenography / Performing Space

This project follows on from research carried out at the SINLAB, and seeks to create the conditions for an experiment at the crossroads of theatre and technology, in collaboration with the theatre company MOTUS and students following the Master in Scenography at the Manufacture.

This project pays particular attention to questions asked of the theatre by contemporary technologies: how does the recent advent and prevalence of mobile digital technology change our experience of the world and the ways in which can be interpreted (acted and viewed) in the theatre?

Affiliations

2019 - 2021

Canada Council, Toasterlab Mixed Reality Performance Atelier

Funded by the Canada Council for the Arts, Toasterlab's Mixed Reality Performance Atelier is a two-year deep dive into the current mixed reality methods used by theatre and performance makers across Canada and the U.S.

2017

Future Making Research Consortium RMIT Melbourne / Aarhus University

This international consortium is affiliated with Aarhus University's Cultural Transformations Research Programme and the Digital Ethnography Research Centre at RMIT University.

2015

HES-SO Haute école spécialisée de Suisse occidentale HotelCity

Hotel City is a multimedia creation research project anchored in a random film project focusing on the issue of information fragmentation at the start of the 21st century.

2013 - 2015

Swiss National Science Foundation, Sinergia

SINLAB is a unique experimental laboratory in Switzerland, situated at the intersection of Performing Arts, Architecture, Science, Engineering and Philosophy. We explore new possibilities for artistic expression and stage conception. The project is a cooperation between the Ecole Polytechnique Fédérale de Lausanne (EPFL), Manufacture (HETSR HES-SO), Zurich University of the Arts (ZHDK), Ludwig Maximilians University Munich (LMU) and Tsinghua University Beijing. The lab is situated at Manufacture in Lausanne, Switzerland.

Service to the Academic Community

- Member of IEEE
- Reviewer for CHI
- External Reviewer/Advisor for HEAD student capstone projects
- External Advisor, special Architecture Workshop ECAL

Selected Exhibitions and Performances

- 2021** *From Weeds We Grow*
Locative media application
Collaboration with Toasterlab
- 2020** *TrailOff*
Locative audio AR application
Collaboration with Toasterlab / SwimPony
- Parkway Forest VR*
Locative 360 Video application
Collaboration with Toasterlab
- 2019** *Albion Library Virtual Reality*
Audio AR application
Collaboration with Toasterlab
- Remember Me*
Audio AR application
Collaboration with Toasterlab / Sharon Reshef
Prague Quadrennial
- 2017** *Trans/missi.on*
Locative 360 Video application
Edinburgh Fringe Festival
Collaboration with Toasterlab
- 2016** *Summer of Darkness*
Digital Humanities app that performs an archive
Collaboration with Anindita Basu Sempere
- 2016** *Pylade*
Digital Scenography: Performing Space
PI HESSO Funded Research grant
La Manufacture, Lausanne
- 2015** *Blue Butterfly*
Science communications theatre
collaboration with UNIL / Catalyst Theatre
Pitoeff Theatre, Geneva
La Grange Theatre, Lausanne
- 2014** *Hotel City / CinemaMutation*
Interactive film installation / game engine
HETSR 10 year anniversary, Lausanne Switzerland
- 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

CCCCC Lyon, France

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

Selected 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