

ART + TECHNOLOGY LAB

Proposal

John Craig Freeman

Name of project:

EEGAR: Things We Have Lost

One sentence description of the work for which you are seeking support:

EEGAR: Things We Have Lost allows participants to conjure up virtual objects by simply imagining them into existence using brainwave sensor technology.

Full description of the proposed project (250 word maximum):

EEGAR: Things We Have Lost allows participants to conjure up virtual objects by simply imagining them into existence using [brainwave sensor technology](#). A database of objects based on the broad theme of "Things We Have Lost," which includes things such as pensions, empires and dodo birds, will be generated by asking the people of Los Angeles what they have lost.

The project consists of two parts, a city-wide public art installation and an experimental exhibition/performance.

In the first part, people will be selected at random in the streets of Los Angeles and simply asked, "What have you lost?" The location will be recorded and a series of virtual lost objects will be created based on the responses given. The objects will then be placed back in the exact GPS coordinates where the encounter took place, creating a citywide network of lost things, viewable on any mobile device using augmented reality technology.

The experimental exhibition/performance of this work requires the fabrication of a clinic-like installation. The public will be invited to participate as test subjects. They will be outfitted with EEG-reading brainwave sensors and ask to think deeply about what he or she has lost. Once the software detects a measurable and consistent pattern, it issues a database call to instantiate a virtual object selected randomly from the database. The virtual object then appears in front of the participant using augmented reality technology.

Please submit a bio of the principal artist or collective who will be responsible for this project (this may be in the form of a separate CV):

John Craig Freeman is a public artist with over twenty years of experience using emergent technologies to produce large-scale public work at sites where the forces of globalization are impacting the lives of individuals in local communities. His work seeks to expand the notion of public by exploring how digital networked technology is transforming our sense of place.

Freeman is a founding member of the international artists collective Manifest.AR and he has produced work and exhibited around the world including at the Los Angeles County Museum of Art, the San Francisco Museum of Modern Art, FACT Liverpool, Kunsthallen Nikolaj Copenhagen, Triennale di Milano, the Institute of Contemporary Art Boston, and the Museum

of Contemporary Art Beijing, He has had work commissioned by the ZERO1, Rhizome.org and Turbulence.org. His work has been reviewed in The New York Times, El Pais, Liberation, Wired News, Artforum, Ten-8, Z Magazine, Afterimage, Photo Metro, New Art Examiner, Time, Harper's and Der Spiegel. Christiane Paul cites Freeman's work in her book Digital Art, as does Lucy Lippard in the Lure of the Local, and Margot Lovejoy in Digital Currents: Art in the Electronic Age.

His writing has been published in Rhizomes, Leonardo, the Journal of Visual Culture, and Exposure.

Freeman received a Bachelor of Art degree from the University of California, San Diego in 1986 and a Master of Fine Arts degree from the University of Colorado, Boulder in 1990. He is currently a Professor of New Media at Emerson College in Boston.

Download the full [Curriculum Vitae](#).

Please describe the artistic or creative merit of the proposed project(250 word maximum):

EEG AR: Things We Have Lost is inspired by the work of Guy Debord and the Situationist International, and their concept of psychogeography. Not long after its founding in Paris in 1957, the Situationist developed the idea of the *dérive*, a kind of open passage walk or drift. Participants were encouraged to ignore the normal traffic flows and circulations of planned urban developments and instead, moved through a city in a way that followed its moods. The goal was to track the cities emotions —the feeling and atmosphere of a place, to find what they called the *plateau tourné*. A *plateau tourné* is a turntable or hub —a vortex or center of power, where forces come together to create strong atmosphere.

It is also related Fredric Jameson's idea of the cognitive map, a mental image that we create in order to navigate and negotiate the world and our everyday lives. It is practical, in that it includes directions to work, for instance, go two blocks and turn right... but it is also abstract and metaphorical. All of our formative experiences have a place on the cognitive map. In that respect, a cognitive map is like a spatial representation of our identities. Cognitive maps allow us to reduce cognitive load, enhance recall, learn and remember. *EEG AR: Things We Have Lost* will constitute a kind of citywide collective cognitive map.

Why do you consider this project to be a meaningful exploration of emerging technology? (100 word maximum):

Throughout history, all of the best technology has been developed to supplement and extend human thought and memory. Language in the era of orality, alphabetic writing in literacy and now in the age of electracy, the digital network is becoming a cybernetic memory prosthetic. *EEG AR: Things We Have Lost* will explore how space can be used, with augmented reality technology, to remember.

In what ways does your project inspire dialogue about the issues at hand, including the relationship between technology and culture? (100 word maximum):

I like to think that I am working in the tradition of Hans Richter and other avant-garde artists of Europe and Russia in the early 20th century. They were committed not only to the idea that that a new visual language needed to be invented for film and other emergent technologies of their time, but that cinema should shed its reliance on the narrative forms of the past.

Richter's concept of Expanded Cinema represented an attempt to break with the use of theater as an interface metaphor for film.

Many of the principles of 20th Century avant-garde relating to the need to invent a new visual language, such as montage, form the basis for the construction of meaning in contemporary art and cinema. However, the notions of expanded cinema space, a space that envelops and immerses the audience, has gone largely unrealized, but will perhaps find its expression in virtual and augmented reality.

The questions they raised in response to the emerging technology of their time are questions that will never be fully answered and must continue to be asked in the 21st Century.

Please describe your proposed plan for public engagement. What opportunities do you foresee to share prototypes, demonstrations and process with the public? (100 word maximum):

In the first part of the project, people will be selected at random in the streets of Los Angeles asked, "What have you lost?" Once the project is complete, anyone with a late model mobile device can return to these same locations and experience a tour the virtual lost things. In the second part, the public will be invited to conjure lost things using their brainwaves in the experimental exhibition/performance installation.

What data will your project produce that may be of interest to other artists, technologists, or arts organizations? (50 word maximum):

I am not sure that the outcomes of this project could be regarded as data. It does however require the research and development of new emergent technologies which will most certainly be of interest to those engaged in the invention of new artistic forms and practices for the 21st century.

Please list any other sources of funding for this project, including in-kind support, and, if applicable, any conditions related to that funding or support:

If successful with this application, I may qualify for matching research and/or travel funds from Emerson College where I am a professor. Also, Emerson just opened a new campus in Los Angeles, so I might have a teaching opportunity that could dovetail with this project. This would allow me to spend a semester in Los Angeles working on the project.

Total amount requested:

Detailed project budget (please include direct costs, including materials, software licenses, etc. and any artist fees as well as fees any other contributors to the project):

Personnel

Artist fee

Software development

██████████
██████████

Travel

Round trip airfare, Boston to Los Angeles

Accommodations

3 @ ██████████ each
30 @ ██████████ each

██████████
██████████

Equipment

MindWave Mobile
Apple Mac Mini, mouse and wireless keyboard
Epson PowerLite 96W projector w ceiling mount
Two Anchor AN-1000X pre-amp 100 watt speakers
iPad with Wi-Fi + Cellular 32GB – Black
Service, 5GB per month
Four sectional chrome privacy screen, white curtains
Medium flat screen HD TV and stand
Apple TV with cables and extensions

3 @ [REDACTED]

12 @ [REDACTED]

[REDACTED]

Furniture Rental

One reclining dental chair
One rolling stools
Rolling laptop cart
One standard office desk
One standard office chair
One coat racks
Two Lab coats
One folding table
Seven potted plants
Assorted medical/lab equipment and tools
SUBTOTAL

\$ [REDACTED]

TOTAL

[REDACTED]

If appropriate, please submit up to five images, schematics, renderings, etc. that represent the idea for your project (jpeg, PDF). Video files (.mov, mp4) of less than 5 minutes in length will also be accepted. Supporting media files are not required.



EEG AR: Things We Have Lost, Visualization.

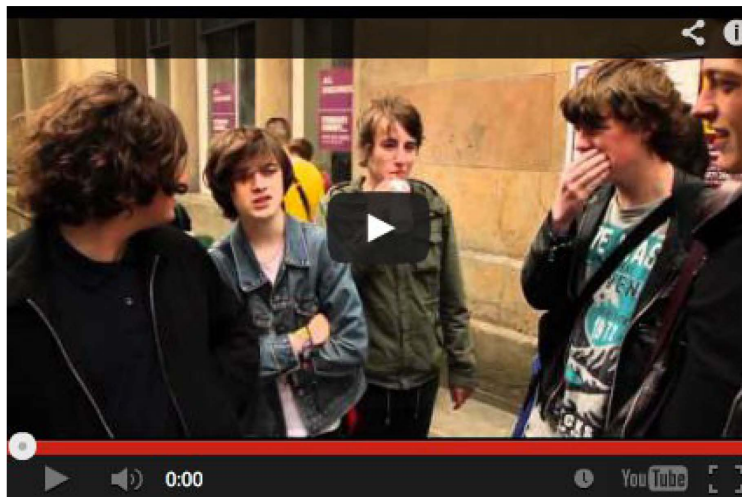


EEG AR: Things We Have Lost, Visualization.



EEG AR: Things We Have Lost, Visualization.

In the first iteration of this project took place in 2012 at the Foundation for Art, Culture and Technology (FACT) in Liverpool. The project was never fully realized due to inadequate technical partnerships and the loss of European Union funding due to austerity measures. However much of development and proof of concept was exhibited in 2013. In the following [video](#), people were selected at random in the streets and simply asked, "What have you lost?" This technique would be repeated in communities across Los Angeles.

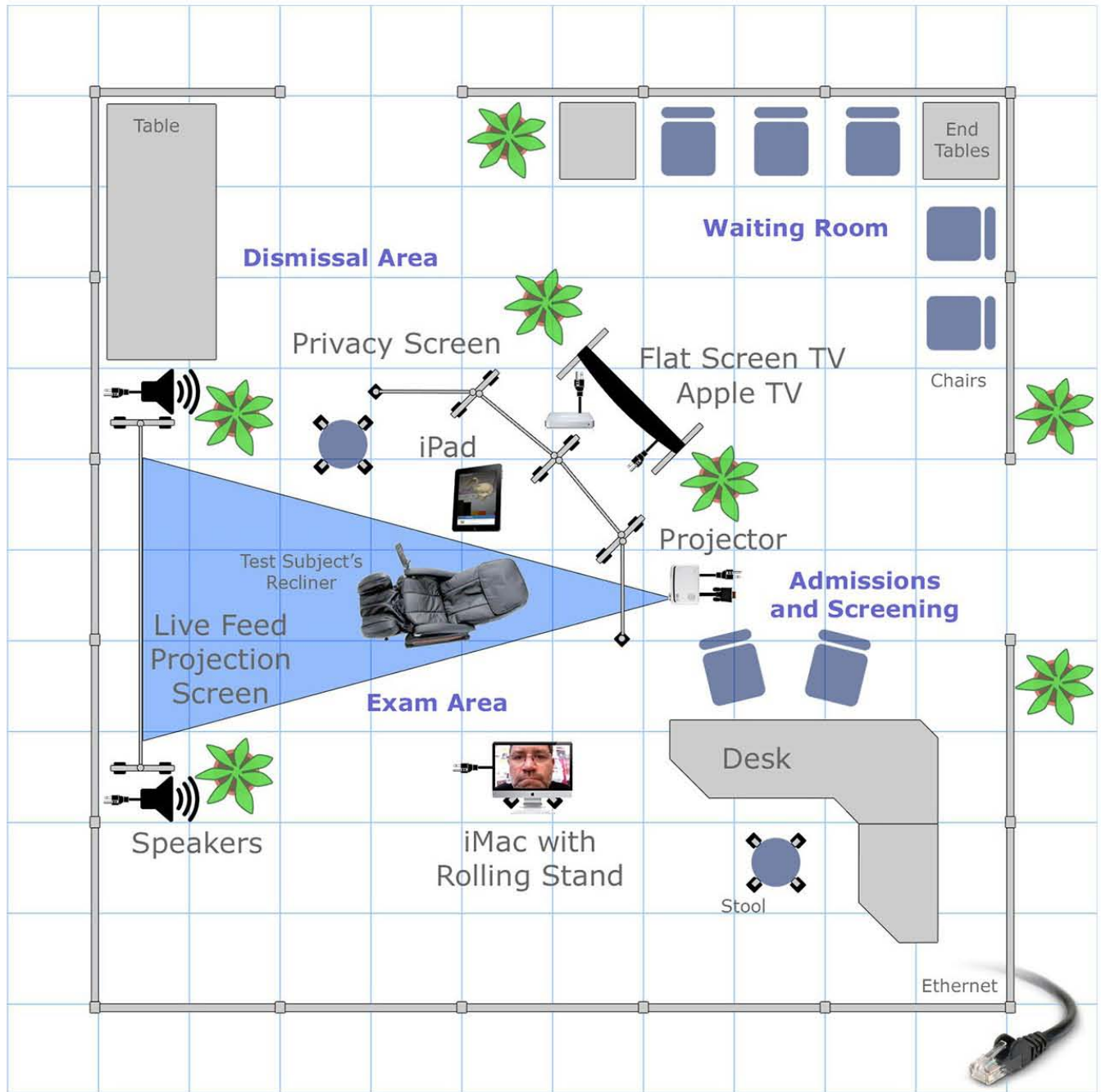


EEG AR: Things We Have Lost, Liverpool, video, 2012.

The exhibition/performance of this work requires the fabrication of a clinic-like environment with a ceiling mounted projector, a suitable projection surface, a stereo audio system with a selection of computer equipment, clinical furniture and a flat screen television, contained

within a 10 x 10 x 3 meter space. The lighting needs to be kept low and controlled. If audio spill over is a factor in the space, a localized speaker system should be used. Installation time should take one week using standard preparator's tools and techniques.

During gallery hours beyond those designated for the lab/clinical trial performance, the clinic is open to the public as a video installation. It should be staffed with an gallery attendant for security of the equipment and to assist gallery visitors whom might find interactive works of art intimidating.



EEG AR: Things We Have Lost, floor plan.

Please provide an implementation plan delineated in a chart similar to the one below:

Implementation Plan

Key Milestones	Start Date	Funds Needed
(Major steps in the project development)	(Estimated date for each project step)	(Amount of funds that will be needed)
Research planning and production	06/01/14	50.00%
Deployment testing and completion	05/31/15	50.00%

Art + Technology, 2014

Los Angeles County Museum of Art

John Craig Freeman

June 27th, 2014

Dear Amy and Joel, Please see the following draft of my revised Proposal, including Project Description, Budget, Funding dispersement schedule, and Timeline with millstones.

There are a number of line items which I will need either approval from you, or I need to discuss them with you. I have marked these with an * asterisk. If any of these issues are time sensitive, I am hoping we can work them out via email or over the phone. Others are general planning questions which we can discuss in detail when I visit in July.

Once you have had a chance to respond, I will make the necessary changes and strip the note from this document so that we have a working plan going forward.

* I am leaving the description from the original proposal intact. However, I would like remain flexible and open to possible contributions that LACMA's Art + Technology partners might be able to make. Although the key concepts, objectives and goals of the project will remain consistent with the original proposal, it may be necessary to revise it over time to more closely reflect the direction of the project as it evolves, and to allow for unexpected lines of inquiry which might open up with interactions with the partners, as well as with interactions with the communities of Los Angeles.

Project Description

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Emerson College Los Angeles

I have been awarded a Faculty in Residence position at Emerson College's new Los Angeles Center in Hollywood for the Spring Semester 2015. I will be teaching my normal course load of two classes

from January 20 to May 6, 2015. Emerson will provide me with an apartment on campus during this time, which will allow me to live in Los Angeles for the entire production phase of the Art + Technology project.

* If the Museum is able and willing, I intend to spend significant time working in the Art + Technology Lab and interacting with the public, both at LACMA's public spaces and in the city at large.

Further, the curricular innovation grant proposes curriculum which would allow students to earn course credit for contributing to faculty research and creative projects.

The College has agreed to allow me to use the *EEG AR: Things We Have Lost* as a prototype to work through the various pedagogical and administrative issues relating to this curricular development work.

This means that I will be able to recruit up to a dozen of my best students, to come with me to Los Angeles and work directly on the *EEG AR: Things We Have Lost* project, *assuming that this is okay with the museum, of course.

Public Events

The project will include a series of public events in the Art + Technology Lab and/or the public plaza area just north of the Grand Entrance, as well as public city tours in various communities around Los Angeles.

Plaza

The plaza area will be used as a studio of sorts where the public will be able to view the work as it is being produced, using a custom designed AR viewing device.

The AR viewing device will include an iPad mounted on a heavy-duty dolly system which the public can wheel around the plaza to view and interact with the work.

The device will be brought out into the plaza in the evening when the lighting is best for viewing augmented reality and either I, or my team of students, will engage with people, show them the work and explain the concepts.

Lab

The original proposal called for fabrication of a clinic-like installation. The public will be invited to participate as test subjects. They will be outfitted with EEG-reading brainwave sensors and ask to think deeply about what he or she has lost. Once the software detects a measurable and consistent pattern, it issues a database call to instantiate a virtual object selected randomly from the database. The virtual object then appears in front of the participant using augmented reality technology.

* It is my intention to do a low impact version of the clinic-like installation in the Art + Technology lab. All of the equipment and furniture will be on wheels, so that the space can be easily converted for public performances and returned to its usual state when completed.

* Would this be acceptable to the two of you and anyone else who uses the space?

City

In the coming months, I will be choosing a number of Los Angeles communities to work in, over the course of the project. A virtual public art installation will be constructed in these communities using augmented reality technology. The public will be able to view this work using any late-model iPad, iPhone or Android mobile device. Towards the end of my residency, I will conduct a series of public

tours of these installations.

Budget

* The original budget, abbreviated here, seems more or less on track. I would like to have the ability to move the numbers around a bit, if that is okay, so as to be more efficient. I may be able to defer some of the travel cost to Emerson and use those funds on project production.

* Please let me know your thoughts on this.

Personnel
Travel
Equipment

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

TOTAL

* I am including an itemized budget, in a separate document, for some initial spending that I would like to do this month.

Funding disbursement schedule

* The original proposal called for two disbursements of funds, one at the beginning of the project and one at its conclusion. In order to more carefully allocate the funds, I would prefer to divide it into three disbursements, based on three of the more critical milestones, Project begins, Public launch of project, and Project concludes.

* Is this okay?

* Should I invoice it these disbursements as needed?

Project begins, July 1, 2014, [REDACTED]
Public launch of project, January 1, 2015, [REDACTED]
Project concludes, June 1, 2015, [REDACTED]

Timeline

Planning

March 17, 2014	Art + Technology commission awarded
May 13 – 15, 2014	Art + Technology partner planning meeting at LACMA
May 14, 2014	Site visits to Gensler
May 15, 2014	Site visit Jet Propulsion Laboratory

May 15, 2014

Art + Technology Lab Project Series: Augmented Reality
John Craig Freeman and Brian Mullins, DAQRI

Milestone: Project begins

Preproduction

June 1, 2014

Review and revise Proposal, including Project Description, Budget, Funding dispersement schedule, and Timeline with millstones.

July 1, 2014

Prototype AR viewing device equipment acquisition

* NOTE: can I deliver to LACMA, Attn: Joel

Develop and test database

Develop and test asset production workflow

* Social networking plan

* Draft project blog

Offsite research of the city of Los Angeles

July 13 – 27, 2014

Site visit to Los Angeles

Assemble and field test prototype AR viewing device on location at LACMA

* NOTE: requires onsite storage

Art + Technology partner follow-up meetings

Onsite research of the city of Los Angeles

Preliminary asset production on location in Los Angeles

Milestone: Research and development, Boston

Studio production

September 1, 2014

Lab technology acquisition

Software development

Bench testing

User interface design

October 1, 2014

Field testing

Publicity and promotion plan

Milestone: Project operations move to Los Angeles

Field production

January 10, 2015

Arrive in Los Angeles

January 15, 2015

Lab equipment, furniture and technology acquisition

Art + Technology Lab reconfiguration, as needed

*NOTE: all project lab equipment and furniture on wheels for easy reconfiguration

January 20, 2015

Spring classes begin, ECLA

January 22, 2015

Student research assistant orientation, Art + Tech Lab

Publicity and promotion distribution

Milestone: Public launch of project

Public event series

February 1, 2015	Public lecture, presentation of work-to-date, ECLA
Week 1, February, TBD	Public event, LACMA and/or Art + Technology Lab
Week 2, February, TBD	Public event, LACMA and/or Art + Technology Lab
Week 3, February, TBD	Public event, LACMA and/or Art + Technology Lab
Week 4, February, TBD	Public event, LACMA and/or Art + Technology Lab
Week 5, March, TBD	Public event, LACMA and/or Art + Technology Lab
Week 6, March, TBD	Public event, LACMA and/or Art + Technology Lab
Week 7, March, TBD	Public event, LACMA and/or Art + Technology Lab
Week 8, March, TBD	Public event, LACMA and/or Art + Technology Lab
Week 9, April, TBD	Public event, city tours (Los Angeles community TBD)
Week 10, April, TBD	Public event, city tours (Los Angeles community TBD)
Week 11, April, TBD	Public event, city tours (Los Angeles community TBD)
Week 12, April, TBD	Public event, city tours (Los Angeles community TBD)
April 30, 2015	Public reception, LACMA
May 6, 2015	Spring classes end, ECLA

Milestone: Project concludes

Postproduction

May 1, 2015	Documentation
May 11, 2015	Depart Los Angeles
June 1, 2015	File final report

INCOME						USD
LACMA						
					TOTAL INCOME	
EXPENSES						
Equipment						
iPad mount w fluid head	image	1	@			
Side arm	image	1	@			
Boom clamp	image	1	@			
31.5 inch center poll	image	1	@			
15.75 inch center poll	image	1	@			
Dolly base with casters	image	1	@			
					TOTAL EXPENSES	
SURPLUS/DEFICIT						
					TOTAL + or -	