

BEHNAM SAMAREH, PH.D.

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EDUCATION

University of California, Los Angeles

PhD in Design and Computation

2005

Major: Architecture

Minor: Film and Television

University of California, Los Angeles

Master of Architecture

1997

Major: Architecture

Minor: Computer Science

University of Maryland, College Park

Bachelor of Science

1994

Major: Architecture

University of Maryland, College Park

Bachelor of Arts

1994

Major: Sculpture

TEACHING POSITIONS

California State University, Pomona

Lecturer

2007 - Present

First year Architecture Studio

Upper level elective Digital fabrication

Otis College of Art and Design

Senior Instructor

2008 - 2009

Teaching senior level Interactive Product Design Thesis

University of California, Los Angeles – Department of Design | Media Arts

Instructor

2003

Teaching DESMA 24: Visual Technologies - Introduction and integration of traditional design tools, the camera, and digital technologies for application to visual thinking and fundamentals of design.

RESEARCH

Ph.D. Dissertation

Extreme Spatial Experience Apparatus

2005

Altering the Perception of Space through Computer Mediated Movement

The Extreme Spatial Experience Apparatus (E-Sea) incorporates 11 motors arranged in a cross formation. Using straps and cables, each motor is connected to a joint of the body suspending the figure face-down in a horizontal position above the ground (fig. 3,4,5). The body is also connected to a series of monitoring instruments that provide data such as pulse, breath, brain activity, and other such physiological information. This data is subsequently fed into a computer which controls the motion of the motors connected to the body. In the E-Sea, the primary orientation of the body is horizontal and motion is parallel to gravity. The usual feedback system between the occupant's senses and the environment is replaced by information about the person's physiological state determining the person's interaction within the space. Here the subject no longer has the choice of adjusting their relationship with the environment rather; movement is mandatory in a manner outside the subject's external control.

Eyematic Interfaces, Inc., Los Angeles

Virtual Environment Architect

June 1999 – May 2001

Research for the creation of real-time virtual environments and user interfaces.

University of California, Los Angeles
Research Assistant
 Exploration of web-data visualization

June 2000 – April 2001

Urban Simulation Team, University of California, Los Angeles
Animator/Modeler

June 1996 – January 1998

The Urban Simulation Team at UCLA is a research group exploring applications for real-time visual simulation in design, urban planning, emergency response, and education.

WORK EXPERIENCE

Machine Inspired Art LLC
Co-founder/Lead Designer

2014 – present

Machine Inspired Art (MIA) is a Los Angeles based design studio initially conceived of as a place of exploration and experimentation, MIA is a place of learning and education to serve the local student community as well as members of the local artist community.

Crimson Collective
Founder/Lead Designer

2009 – 2014

The Crimson Collective is a Los Angeles based consortium of artists, architects, and designers who bridge the gap between art and architecture, creating experimental and temporary built environments that evoke action and intention through physical interaction.

Plasis Design, LLC
Principal/Designer

2001 – 2005

Focused on exploring in the world of design and manifestation, involved in all aspects from concept development to final production and in many fields, from Experience Design to Computerized Fabrication.

Eyematic Interfaces, Inc.
Virtual Environment Architect

June 1999 – May 2001

Design and creation of real-time virtual environments and user interfaces. Production of interactive and print promotional materials.

PROJECTS

"City Roller" Los Angeles, CA
LA Plaza, Los Angeles

2011

The City Roller was created as an interactive hands-on exhibit, focused toward showing the changes in the urban fabric of the city of Los Angeles over the course of the last 100 years. The objective of this installation is to provide the intended users, children ages 5-12, with the opportunity to spatially see the change and development of this city in an interactive and practical way.

The City Roller utilizes 2 cylindrical drums each of which has been inscribed with an inverse impression of a city building plan. These inscriptions are such that if the drum is rolled on a soft and impressionable surface, it would leave an imprint of the city buildings. One drum depicts the urban landscape of Los Angeles in 1911 and the other drum shows the city as it was in 2011.

The drums are placed side by side and partly in contact with an impression medium (white polymer). Once a drum is rolled across the impression medium, it leaves an imprint pattern of the urban fabric as it was in that specified year. Subsequently, rolling the second drum will erase the currently imprinted landscape and replaces it with a new imprint pertaining to a different century. The Plaza at Olvera Street, the starting point of LA, shown as a circle, in both cases remains unchanged. However, the surrounding area undergoes a significant transformation with the development of Downtown. (installation)

“Acension (Crane)” *Coachella, CA*

Client: Goldenvoice

2010

Ascension is a 150-ft wide, 45-ft giant white origami crane crafted from soaring planes of white fabric and a modular aluminum and tension wire skeleton. Physically, the giant creature serves as a living art installation; a beacon, a shelter, and a destination for visitors. Metaphorically, the giant crane carries a universal message of peace. Poised to take flight, it is a symbol of hope and a prelude to ascension through awareness and understanding. The giant white origami crane stands as the sum of its parts or a grand manifestation of collective intention. The installation features the latest in addressable LED lighting system and is configured to run purely on solar power making it deployable to any location on Earth. It is engineered to withstand winds of up to 90 miles per hour and is able to be dismantled and transported in a standard 40 foot shipping container. (installation)

“deLaB Installation” *Los Angeles, CA*

Client: Design East Of La Brea Organization

2010

This project is an installation measuring 40' x 8' consisting of 13 clusters of milled foam PVC with laser engraving on the surface. It is a collaborative project with Ando Pndlian with production assistance from Oleg Korchinski. The background image of the 6th street bridge in Los Angeles, was printed in large scale format. The inserts/ detail of PVC are placed on top of certain parts of this larger image, the technique used to create these over-lays is one where the image is created using a parallel lines that vary in size, to produce the image. The laser engraving presented the idea of the image in an other-worldly environment, where its occupants were unlike our current / “normal” setting or our everyday idea of this 6th street bridge. (installation)

“International Design Awards”

Client: London International Creative Competition

2009, 2008

The design and production of the International Design Awards given to recipients for 2008 and 2009. The 2009 design was used again for 2010 and 2011. (product design)

“Keshot Collapsible Video Display Unit” *Los Angeles, CA*

Client: Keshot

2011

A prototype for a digital photo booth designed to be a mobile flat packed kiosk for the client. (industrial design)

“PLEx Artwork” *Los Angeles, CA*

Client: Personal

2010

The PLEX (Pixel Luminance Extrapolation) Technique: These works are the result of a process that has been in development for close to 4 years and has been used to produce works on materials ranging from wood to plastic and acrylic to aluminum. Using principals of half-toning, an image can be converted into machine code to run a CNC router. Each piece consists of from 12,000 to 18,000 thousand holes depending on the size and resolution. On average there are 8 different diameter size holes arranged in a way that they create the tonal qualities of the overall image/subject matter. Each material adds its own character and qualities to the end piece making it suitable for a specific setting, be it for display in a gallery or hanging from the side of a building.

The technology and process developed for creating these works has its roots in half toning and the early years of printing but incorporates today's latest in computer processing and manufacturing technology. Half toning is a method of printing pictures (which naturally have a continuous scale of tones) using only a single ink for each color by varying the size and/or density of dots of ink. The halftone causes an optical illusion of a shade somewhere between the tone of solid ink and the contrasting tone of the background paper. Thus a black and white half tone image at close scale consists of black dots of varying diameter on white paper. All scales of gray are in turn created by different size black dots set against the white paper, in that the larger and the more dense the dots, the darker the shade of grey created. Variation in tone is created through different size holes in a given material as opposed to ink on paper.

The pieces created on clear acrylic are worthy of special note. These pieces are created on 1" thick clear acrylic and each consists of about 16,000 holes of 8 different sizes. As the diameter of the hole increases so does the depth of the hole. All the holes are then filled with pigment creating an array of suspended "plugs" of color within the body of the acrylic. (machine inspired art)

"Circle" Boulder, CO

Client: Circle Restaurant

2009

The parameters of the project required all production to be done in Los Angeles, CA, which dictated the scope and specifics of what could be produced, as any elements designed would have to be able to be shipped to Colorado and assembled on site Boulder. These parameters required innovation from design and fabrication to transportation and installation.

These factors led to the choice of a PVC material known as Komatex (Expanded foam PVC) for much of the paneling and lighting, which could be milled easily by our in-house CNC machine. Much of the lighting in Circle is by use of Electroluminescent wire (EL). EL wire is a flexible wire which emits light and is available in a variety of colors. Its flexibility allowed us to use it in the paneling and light fixtures, as it could easily follow the contours of the panel shapes. In all over one mile of EL wire was used in the project.

All elements of the project, including wall panels, circular lighting fixtures, hanging fixtures, and signage were created using Komatex. Additional art work, guard rails, and main sign used plexiglass, metal, and MDF board. (interior design)

"Betty" Los Angeles, CA

Client: Personal

2009

Electric powered vehicle designed and built for Burning Man. (industrial design)

"Shade Structure" Los Angeles, CA

Client: Crimson Collective

2008

The project is a modular shade structure, made from triangular components of mesh fabric. Other elements included aluminum pipe and steel cable. Its designed based on structural principal of tensegrity, coined by Buckminster Fuller, where all components are either in tension or compression. The inspiration for the structure came from the Bedouin tents found in the Middle East. The design takes advantage of modern materials and technology. The objective was to create a system that was scalable, simple, portable, and fast to erect, and offered the maximum amount of shade. (tensegrity structure)

"Skrzyniarz & Mallean" Los Angeles, CA

Client: Skrzyniarz & Mallean

2007

Complete design and construction of a 1700 sqft Law office in Beverly Hills CA. In addition to the architectural space, we designed all of the identity and branding material. (interior design)

"Breathing Wall" Los Angeles, CA

Client: SCI-ARC (Southern California Institute of Architecture)

2007

The project was an installation at sci-arc. It is a fragment of a theoretical building that has no conventional openings, windows or doors, but only apertures that momentarily open and close, allowing the movement between inside and out of air, light and people. It was constructed out of aluminum and lightweight cardboard with resin coating. All of the project's movement, which included the motor and cable systems were computer controlled. (fabrication/installation)

"Modular Office" Los Angeles, CA

Client: Grace Entertainment

2007

The project was a concept development for the office of a Los Angeles based event and entertainment company. With a one-week time frame to build and move an entire office space, we set out to design a pre-fabricated office environment. Using shipping containers for

ease of mobility and production, the office space was created as a modular office environment. (architecture/research)

“Geisha House Restaurant” Los Angeles, CA

Client: Dolce Group

2006

Video Installation

This project focused on adding atmospheric elements into the building. The bar needed visual stimulations. This installation featured 3 screens, with a single image stretched over all screens. The image for each screen was shot with an individual camera mounted on a custom made armature that held 3 cameras at the exact relative position as each display monitor.

Digital Fish Tank

This installation features a single digital aquarium spanning 3 screens. Digital fish are fully autonomous and exhibit life-like behavior in the interaction with each other. This installation posed some technical challenges such as the adaptation of existing off the shelf software with completely custom configured computer hardware.

Geisha PLEx Wall Piece

Dot matrix custom made portrait of 4 Geishas. The image is created from over 40,000 holes of 7 different diameters. The entire piece is lit internally through the clear Plexiglass medium by Electro Luminescent tape attached to the outer perimeter.

“Club Canary” Thessaloniki, Greece

Client: Pylea

2005

The project was a proposal for a futuristic aviary, whose form was functional, easy to clean and designed for the needs and comfort of the canaries. The installation would be a modifiable acoustic environment, where the singing of the canaries are the ‘notes’ and the habitat is the ‘instrument.’ This aviary provided “Perches” where canaries were able to sit where their song was picked up by microphones. These sounds, in turn, were able to be modulated and modified through an array of touch pads which the audience could interact with. The song of the canaries was then played back to the canaries and the audience. (installation Unrealized)

“Hangar 7 Opening Celebration” Salzburg, Austria

Client: Red Bull

2004

Located in Salzburg, Austria, Red Bull’s acrobatic flying team, The Flying Bulls, needed a new home for one of the most unusual collection of planes in the world. Red Bull had a vision to create a place that would bring together a love of aviation and of art. Red Bull approached us with the challenge of creating a formal opening event for 10,000 people over the course of 12 hours.

We were relocated to Salzburg for 7 intense weeks to design and produce all aspects of the event including: atmosphere, timeline for 12 hours, project and performance coordination, food and drink menu, furniture design, spatial layout, mobile full service gourmet kitchens, fashion wearable for those working at the event, and movement of guest throughout the space. (event design and production)

“2004 Summer Olympics” Athens, Greece

Client: Red Bull

2004

For the Summer 2004 Olympics in Athens, Greece, Red Bull approached us to conceptualize, design, and implement a 2 week athlete and VIP “chill zone.” Red Bull wanted to provide it’s 80+ Olympic athletes a place where they could hang out, play video games, eat, and have entertainment all in one venue. They wanted a place where athletes could mingle with Red Bull VIP’s and celebrities, a place that reflected Red Bull’s brand image. The proposal was to take-over and convert a 200 year old abandoned Greek villa. (architectural design)

“17 Walls Video” Costa Mesa, CA

Client: Red Bull

2003

The project is an action sports film profiling the work of one of skateboarding's top vert skaters, Sandro Dias. The aim is to explore the deeper roots of skateboarding by stepping away from the typical film simply about tricks, history, techniques and other such surface topics. Using groundbreaking high-speed video technology, scientific analysis, brain science, psychology, and spiritual analysis, skateboarding will be shown in a whole new light. This film is to be more than a profile of Sandro. We will use his personality attributes, life experience, and knowledge of skating as a vehicle to explore and analyze the hidden dimensions of skateboarding. The film will consist of three elements: MIND, BODY, and SPIRIT. Within these elements, we will leave the reigns of the established cinema style and forge a new approach to documenting action sports athletes. (film proposal)

"LVP: The Probe" *Las Vegas, NV*

Client: Red Bull

2003

The project set out to convert a classic English style double-decker bus into a mobile marketing vehicle that will influence and introduce various aspects of pop culture to Red Bull. The target is everyone in Las Vegas. The city hosts over 35 million visitors annually who are looking to be a part of a unique experience. This vehicle is to make a lasting impression that will stand out and "wow" our guests and spectators. The overall objective of this vehicle is to increase brand awareness and gain loyal consumers.

The goal of this project is to create a mobile marketing vehicle that will influence and introduce various aspects of pop culture to Red Bull. Keeping in mind the conceptual objective, our aim is to incorporate Active Camouflage technology in the design of the vehicle. Conceptually, just like a chameleon, the objective of this vehicle would be to blend into the background, not compete with its surroundings, and thus be different. A behavior quite uncommon to Las Vegas. That objective alone will make this vehicle unique and different. (industrial design/installation Unrealized)

"Hypressions" *Thessaloniki, Greece*

Client: Sonae Sierra

2003

Hypression: (hyper-impression) hyper as in hypertext (digital, web, cyber, etc.) and impressions (an effect, feeling or image retained as a consequence of experience). The installation is a large, interactive, dynamic and engaging display system. It represents and displays information in a unique and digestible way. In essence, this installation can stylistically and three-dimensionally represent whatever one could display on an LCD monitor or a projection screen.

Pinpressions is a popular tabletop game that appeals to all ages. The concept is simple and basic: to store and display information through manipulation (extension and retraction) of an array of pins. Our concept takes the idea of "Pinpressions" into the 21st century by incorporating computer and wireless technology, infusing it with remote interactivity and multiplying the scale by a factor of 10. Unlike Pinpressions, in Hypressions the public never comes in direct contact with the installation. The movement of each pin is computer-controlled, allowing a central computer to calculate the position of each pin in order to create a "hypression." The basic technology (wireless) and root components (pistons and motors) are readily available. (installation Unrealized)

"Jhaleh Salon and Spa" *Wayne, NJ*

Client: Jhaleh Salon and Spa

1999

We provided complete design and construction of a 2,000 square foot beauty salon in Wayne, New Jersey. In addition to the space, we designed all of the identity and branding material including the website. (interior design)

PUBLICATIONS

- "Extreme Spatial Experience: Altering the Perception of Space"*
ACADIA 2002, Thresholds **October 2002**
- "Projects produced in collaboration with Dagmar Richter"*
XYZ, The Architecture of Dagmar Richter **April 2001**
- "Jhaleh Salon and Spa"*
Allure Magazine **October 2000**
- "Shanghai city development competition entry" (Projects in collaboration with Dagmar Richter)*
Columbia University Newsletter **May 1998**
- "3D Morph" Subject: Software based morphing between two 3 dimensional objects*
Form-Z Magazine, Partnership for Learning **September 1996**

CONFERENCE PRESENTATIONS

- "Extreme Spatial Experience Apparatus" – Topic: Altering the perception of space*
Paper accepted to the **ACADIA (Association for Computer Aided Design in Architecture) Conference, Los Angeles, CA** **October 2002**
- "Emotive Spaces" – Topic: Representing emotion through virtual architecture*
Paper presented at the **Design Tools 2000 Conference, Los Angeles, CA** **September 1999**
- "Geometric Avatar" - Topic: Non-anthropomorphic avatars*
Paper presented at the **World Movers Conference, San Francisco, CA** **April 1998**

LECTURES

- "Excursions: A Journey of Manifestations"*
California State University, Pomona, CA **2012**
- "Recent Works"*
UCLA design and media arts dept, Pomona, CA **2002**

EXHIBITIONS

- "City Roller"*
Council on Foundations Annual Conference, Los Angeles, CA **2012**

PRESS

- "Experience Art"*
Council on Foundations (www.cof.org) **2012**
- "Temporary fabric structure for peace" By InTents Staff*
InTents (www.intentsmag.com) **June 2010**
- "Global Truss Provides Support For Coachella Exhibit" By PSW Staff*
ProSoundWeb (www.prosoundweb.com) **May 10, 2010**
- "Crimson Collective's ginat crane sculpture at Coachella carries message of peace" By Kimi Canete*
San Diego Entertainer Magazine (www.sdentertainer.com) **April 21, 2010**
- "Giant, Origami Style Crane Ascends Over Coachella" By Lewis Wallace*
Wired (www.wired.com) **April 16, 2010**
- "Coachella's Giant Origami Solar-Powered Crane Installation" By Bridgette Meinhold*
Inhabitat (www.inhabitat.com) **April 16, 2010**
- "The Coachella Crane" By Sam Lubell*
Architect's Newspaper (www.archpaper.com) **April 15, 2010**
- "The Crimson Collective Launches Ascension at the 2010 Coachella Music & Arts Festival" By Sebastian J*
Arch Daily (www.archdaily.com) **April 15, 2010**
- "The Coachella Crane" By Archinect Staff*
Archinect (www.archinect.com) **April 15, 2010**

"Circle opens on Boulder's restaurant row" By Boots Gifford
Denver Business Journal (www.bizjournals.com)

December 21, 2009

"Iranian Americans: Art Intimidates Life" By Amar C. Bakshi
Washington Post (www.washingtonpost.com)

August 24, 2007

LANGUAGES

Farsi

English