

2004 Project Cover Form

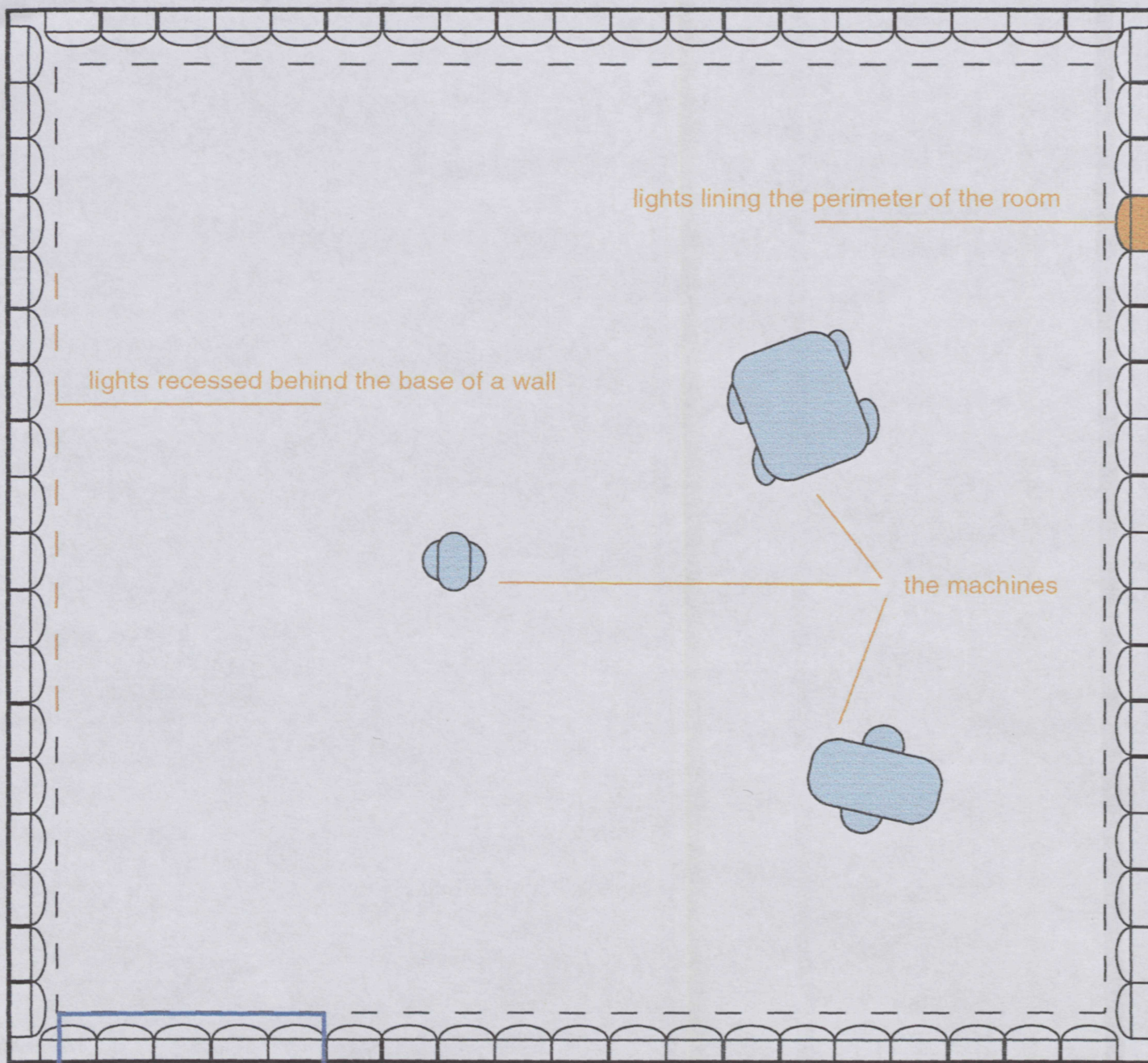
RANIA HO

Title	<i>Mu Gu Gai Pan Over Rice Special #8</i> (working title)
Genre	Interactive Installation
Applicant's Role in Production	Creator/Fabricator/Programmer
Production Format	Research / Installation

Brief Project Description (do not exceed space given below)

Mu Gu Gai Pan Over Rice Special #8 consists of seven to ten different folk toys collected from rural areas of China that are mechanically enhanced and then instructed to chase visitors around an exhibition space. Outfitted with electronics and light sensors, the mechanized folk toys are part of an interactive installation that combines high and low technology to create pieces that interact with one another and with the viewer.

An installation that invites participation, each of the folk toy machines in *Mu Gu Gai Pan Over Rice Special #8* will be programmed to seek darkness and shun light. The perimeter of the exhibition space will be lined with lights and as visitors enter the exhibition space, their bodies will block areas of light and create shadows that will attract the machines. Each of the toys will be custom designed and outfitted with mechanics that highlight its unique characteristics.



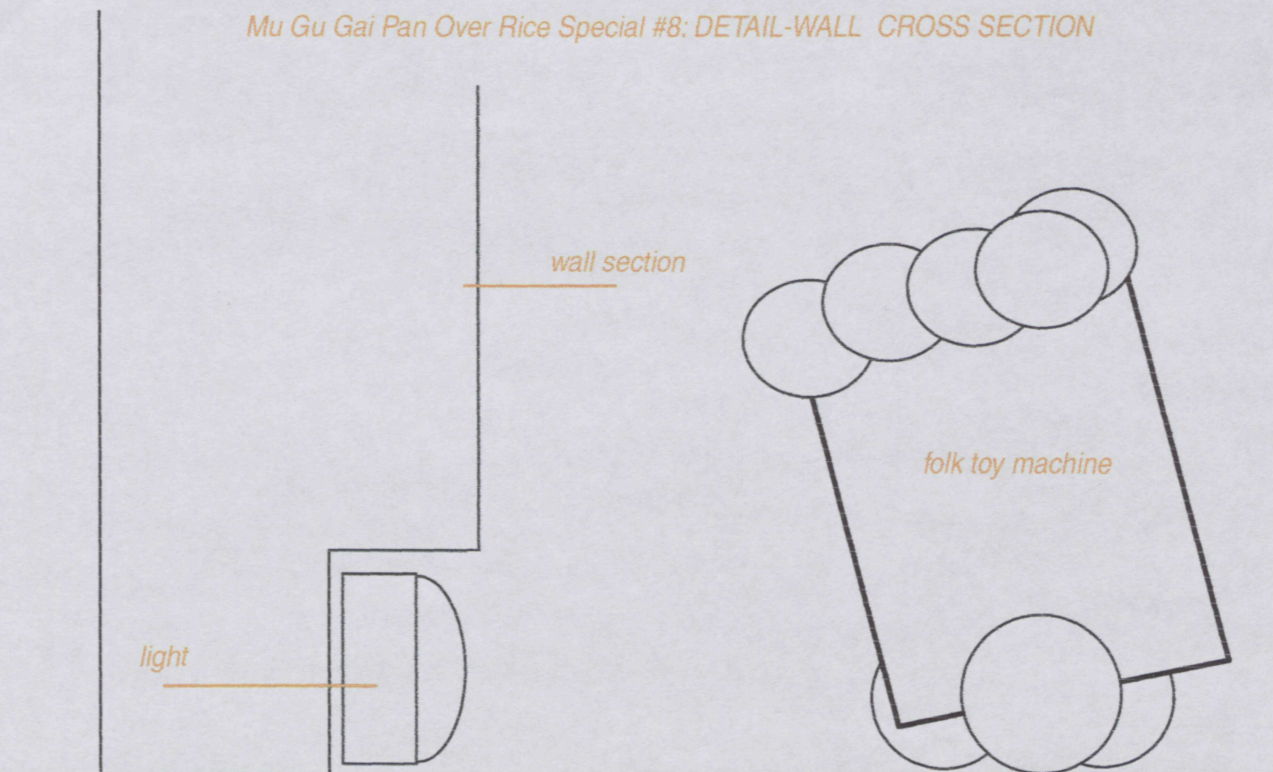
Mu Gu Gai Pan Over Rice Special #8: FLOOR PLAN

Most of the lighting will be coming from the recessed lights on the floor. Recessing the lights has a dual purpose: The lights are protected from machines or humans hitting them, and the wall of the recessed area helps to narrow the beam of light so it is limited to a horizontal beam across the floor.

The entrance will be a ramp up to the edge of the room and then a small step to enter the space. This allows for a continuous row of lights along the perimeter.

The top part of the room will be lit dimly, to draw attention to the floor where the folk toys will be moving around.

Mu Gu Gai Pan Over Rice Special #8: DETAIL-WALL CROSS SECTION



The lights are protected from kicking and excessively vivacious folk toy machines.

Mu Gu Gai Pan Over Rice Special #8: DETAIL - CROSS SECTION ENTRYWAY RAMP



Rockefeller Foundation New Media Fellowships
2003 Sample Work Form

RANIA HO

If you are sending more than one sample, please copy this page. Sample(s) must be cued: indicate how long each sample should be viewed for a COMBINED viewing time of no more than 15 minutes. If slides are included in this application, please list the title and year of the work on this form.

Title *Untitled (Demo Reel)*

Year 1999-2003

Technical Info

Original Format

☒ Software

☐ Web

☒ Installation

☐ Other _____

Format Submitted for Viewing

☐ Software

☐ Web

☐ Installation

☒ Other DVD

Preferred OS

☐ Windows

☐ Mac

☐ Unix

Web Info (answer only if sample work is in Web format)

☐ URL _____ (if more than one please list them below)

☐ Browser requirement _____

☐ Plug-in requirement _____

☐ This sample requires broadband connection (fast Internet Connection)

☐ A local copy of the sample work has been included with the application

Special Information For Viewing:

This is a NTSC formatted DVD that should work in any DVD player.

Running time: 10 minutes 30 seconds.

Description of Work (use an additional sheet if necessary)

This DVD contains short video excerpts describing seven different installations and screen-based works. Below is a description for each of the different sections:

1. ***Free Range Appliances in a Light Dill Sauce*** is a fleet of light sensitive robotic kitchen appliances that are retrofitted with motors, sensors and programmable microcontrollers and designed to seek heat and light. Audience members are given flashlights that are used to lead the autonomous kitchen appliances around the

installation site. The fake fireplace had a light inside that would turn on at intervals. When the light was on, the appliances would flock; when the light turned off they went off in various directions seeking warmth elsewhere. The piece was presented at ISEA 2000 in Paris, France; the Doors of Perception conference in Amsterdam, Netherlands and won Honorable Mentions at both ArtFuture 2000 in Taipei, Taiwan and at the Prix Ars Electronica 2000 in Linz, Austria. My role in this work spans from the initial conceptualization to fabrication to refinement and currently to maintenance.

2. In a performance variation of *Free Range Appliances*, called ***Free Range Appliances in a Light Dill Sauce, Swans Added*** the appliances were outfitted with infrared communication capabilities and choreographed to dance to a section of Tchaikovsky's *Swan Lake*. During the performance, as the appliances lurched and jerked to the music, footage from the Bolshoi Ballet's *Swan Lake* was projected on an adjacent wall. For this piece I modified the *Free Range Appliances* with infrared sensors; designed and built the transmitter beacon and wrote the communications protocol for transmitting each of the choreography elements to the appliances. I also created the choreography for the dance.
3. The interactive video installation, ***Modem***, strings together video clips of people doing impressions of their dial-up modems. Triggered by a normal household phone, each time the telephone handset is lifted, a new dial-up sequence plays. The clips are randomly drawn from a database of video clips and the sound can only be heard through the telephone handset. Future versions of *Modem* will allow visitors to leave their own modem impressions and messages in the video database. This piece was presented at the Digital Art Conference at Brown University; NewFangle, the

GenArts annual exhibition of new media art in San Francisco and was part of an exhibition called *Close Calls* at the Headlands Center for the Arts in Sausalito, California. I was responsible for each part of the building of this piece from concept to design to implementation.

4. ***PuttFarm*** and ***PuttFarm II: MiniGolf*** are site-specific projects that were set up along the Gowanus Canal in Brooklyn and Houhai Lake in Beijing. Built of Astroturf, scrap lumber and in the latter piece Styrofoam, both pieces were highly interactive. The exhibitions in Brooklyn and Beijing were part of community events promoting environmental awareness and both iterations of the project saw a crowd of participants lining up to take a swing. Although not highlighted in the DVD documentation, *PuttFarm II: MiniGolf* had an added element of a radio-controlled boat that formed the base of the red-flagged “hole”. From the shore, visitors could use the radio control unit to drive the hole all around the lake. Occasionally participants would “double-team” having one person drive the golf ball and another person driving the hole in an attempt to catch the ball and complete the par 1 course. My involvement with this piece was all encompassing from initial conception to design to fabrication.
5. Consisting of motors, handmade flipbooks, an old cigarette machine and abandoned candy, ***Flip*** was part of a series of machines that played with toys for you. I was inspired to meld handheld flipbooks with the concept of digital video loops. There are basically three parts to the installation: the spinning carousel with the image of me eating; the cigarette machine and a series of small handmade flipbooks made from archival video footage. The small flipbooks were arranged according to abstract titles with clips of bowling instruction filed under ‘Industry’; Civil Rights

marches under 'Unrest' and clips from the movie *Fu Manchu* in 'Exotic'. The books were sold for \$3 out of the vending machine and the machine only accepted change. I conceived and fabricated all the elements of this piece and made a whooping \$6 off the vending machine.

6. Actually the first work in a series of machines that plays with folk toys for you, ***Stop Bugging Me, I'm Gonna Tell...*** was inspired by a handmade folk toy I bought on a street corner in Beijing and forms the basis for the work I am proposing here.

Although not pictured, I attempted to mirror the irregular and handmade aspects of the two wrestling figures in the gear mechanism and used a bent coat hanger to create the gear teeth. The clacking sound of the two figures jumping and flailing around on the wooden plank is not adequately represented on the demo reel, but it really adds to the overall humor of the mechanics.

7. ***The Femme Fish Chart*** is an early work that addresses the physiological characteristics of a close social group. It addresses issues that I continue to explore today: interaction among social groups and reactive objects. I wrote the software for this piece as well as designed the interface and the look and feel of the fish.

Rockefeller Foundation New Media Fellowships
2004 Supplemental Work Form

Rania Ho

If you are sending more than one sample, please copy this page. Sample(s) must be cued: indicate how long each sample should be viewed for a COMBINED viewing time of no more than 15 minutes. If slides are included in this application, please list the title and year of the work on this form.

Title **www.dancingtoasters.com**

Year **2003**

Technical Info

Original Format

☐ Software
☒ Web
☐ Installation
☐ Other _____

Format Submitted for Viewing

☐ Software
☐ Web
☐ Installation
☐ Other _____

Preferred OS

☒ Windows
☐ Mac
☐ Unix

Web Info (answer only if sample work is in Web format)

☐ URL www.dancingtoasters.com (if more than one please list them below)

☐ Browser requirement _____

☐ Plug-in requirement ☐ Quicktime, shockwave _____

☐ This sample requires broadband connection (fast Internet Connection)

☒ A local copy of the sample work has been included with the application

Special Information For Viewing:

Please start at index.html for maximum viewing pleasure

Description of Work (use an additional sheet if necessary)

This is a copy of my website (www.dancingtoasters.com) that documents most of my recent projects. Any additional information and images needed on the projects mentioned on the sample work DVD can be found at this website. Also a few projects not mentioned on the DVD are documented here.

Rania Ho
Artist's Statement

Recycling discarded materials into comically poignant installations forms the basis of my work. Coupling new and old with high and low technology, the work is a metaphorical “birth” of (questionably) intelligent life out of broken and outmoded objects. These cast-off items are integrated into pieces that respond to environmental stimulus and celebrate the “inappropriate” reuse of consumer goods in our highly materialistic society.

Using computational media is an integral part of my working process. Although the work does not always rely on computers (*PuttFarm*, for example) I am dedicated to electronic media's potential as expressive a tool for artists. My work tends towards strange pairings of low and high technology to draw attention to our reliance on machines and the way we have so effortlessly accepted their ubiquity.

The installations use familiar forms of interaction. Picking up a household phone in *Modem* is a common act that in this installation yields surprising results. An important part of my process is the employment of these mundane actions to tap into a collective physical memory. The work is intuitive with seamless navigation. Even as the results are unexpected, the methods of engagement are recognizable by most.

I am exhilarated by small moments of confusion. With looped flipbooks and folk toys that play by themselves with a push of a button, my work forges relationships between seemingly incongruous objects to create new meaning and inspire an amusing vision of the world. I aim to capture this clash of forms, using familiar consumer objects in humorous ways to set up unfamiliar and ridiculous scenarios that rejoice in these fleeting and funny spaces in time.

Once an idea is formulated I am methodical about seeing a project from beginning to end. All of my pieces to date are created single handedly, from the initial design to software programming to final implementation and installation. There is an organic way that the pieces evolve during the development process, and changes are often made to accommodate specific site requirements. At each step of the process, I balance problem solving with preserving the initial artistic vision. *Free Range Appliances* is a project similar in ambition to my proposed project *Mu Gu Gai Pan Over Rice Special* #8. *Free Range Appliances* took a year to research and develop, taking time to explore tangential possibilities like the choreographed performance of *Free Range Appliances in a Light Dill Sauce, Swans Added*. Since then, I have finished a number of other projects that have deepened my understanding of the mechanics and software needed to complete the project, including designing and building several robotic puppets used in the independent feature film, *Robot Stories* by Greg Pak.

My work is designed to tap into an audience's sense memory, physical memory and unconscious tendencies towards anthropomorphizing objects. I endeavor to comment on established norms of socialization and to see our (often) bizarre ways of interacting.

Rania Ho
Project Narrative

Background

Mu Gu Gai Pan Over Rice Special #8 (working title, aka *Mu Gu*) continues a line of work that I have been developing over several years, combining high and low technology to create pieces that interact with one another and the viewer.

Project Description

Upon entering the exhibition space of *Mu Gu*, the viewer sees a fleet of robotically enhanced Chinese folk toys that move from different parts of the room to flock around the viewer's feet. Outfitted with motors, programmable microcontroller chips and sensors, the mechanized toys will retain their original movements, knocking and twirling around each other while clipping at the heels of visitors who move about the space.

Inspired by the rapid modernization, industrialization and urbanization of the Chinese countryside and its effect on rural culture, *Mu Gu* “updates” traditional handmade toys with “features” and “capabilities.” Creating handmade folk toys is a dying art. In China, as in other developing countries, children are more interested in pre-fabricated playthings and battery-operated Western knockoffs. Artisans who produce traditional toys are dwindling in number and such lore may soon be lost. The irony that these machine-made toys are produced in China in mass quantities and are driving these traditional crafts into extinction is often lost on the average Chinese consumer.

The concept behind this project is to mechanize traditional toys in creative and humorous ways to bring out their amusing, toy qualities while commenting on the notion that “newer” or “faster” or “machine-made” equal “better.” Folk toys will be reworked into a modern package that bridges the gap between pre- and post-industrialization.

Another source of inspiration for this work is the constant sensation of crowds in urban China. The sprawl of Beijing contains a registered population of 13 million and an additional estimated unregistered population of 7 million. The daily mental and physical pressure of interacting (loosely defined) with 20 million people, greatly influences the way people cope with their surrounding space. The experience of

interacting with the flocking folk toys is my highly subjective distillation of moving through the busy streets of Beijing.

The Installation

Mu Gu will consist of seven to ten different mechanized folk toys collected from rural areas of China, and outfitted with electronics and light sensors. Each toy will be custom-designed and fitted with mechanical devices that will evolve as the toys are located and wired.

One example is a popular toy called “Tiger Eating Kids,” a paddle with three papier-mâché figures of a tiger and two kneeling humans. The heads of the figures traditionally sway from side to side when a string underneath the paddle is pulled. In the mechanized version, the entire toy might move in a pattern that replicates the sway of the figures’ heads.

The perimeter of the exhibition space will be lined with a row of lights. The mechanized toys will be programmed to seek darkness while shunning light. As visitors enter the exhibition space, their bodies will block areas of light and create shadows. The folk machines will sense the darkness and move toward the viewers. The machines will also sense one another, and move toward each other, creating a flocking effect. The larger shadows cast by viewers will take precedence, so when people are in the space, the machines will chase visitors rather than one another. Thus, just by being present, the audience interacts directly with the installation and continually affects the exhibition space.

Context of the Work

Interactivity with the audience is vital to this project. Without an outside presence, the folk machines will be drawn to each other and cluster in the middle of the room. The participatory nature of this work is typical of all my work: I seek to involve viewers as active participants, and engage them as co-creators of the final piece.

Mu Gu builds upon my previous installation work *Free Range Appliances in a Light Dill Sauce*, which took discarded kitchen appliances and similarly “enhanced” them with electromechanical movement and light sensors. Audience members mingled with the appliances and led them around the exhibition space using flashlights.

Another piece entitled *Stop Bugging Me... I'm Gonna Tell* was a machine built around a handmade string-pulled wooden toy. I fashioned a gear wheel to tug on the string, which gave the two wooden figures the appearance of wrestling with one another.

Feasibility

My experience and interest in continuing this type of work gives me confidence that within 18 months I can locate, design, modify, test and install *Mu Gu*. Within the city limits of Beijing and its surrounding areas, there are a number of (former) artisan toy makers and millions of electronics piece parts, so it will be easy to locate the raw materials. The challenge is in choosing the right elements in a teeming city of 20 million people.

Use of Fellowship Support

If selected, I plan to use the fellowship support to rent studio space, purchase equipment, acquire toys, and begin designing and tinkering for maximum interactive effect. A portion of the fellowship will also go towards labor and artist's fees to pay assistants and support myself for the duration of the project.

The first two months will be spent gathering equipment and materials. The following eight months will be spent designing and building the machines. Months 10-12 will be spent testing the durability and refining the functionality of the modified toys. The final stage of development in months 13-17 will be devoted to honing the sensors and environmental light design for optimal response. The final month will be dedicated to customizing the project for public exhibition in Beijing. Exhibiting the toys in their country of origin ensures that the machines in *Mu Gu* will be seen in the context of the culture that created them. Also, a number of experimental galleries like the 25,000 Li Cultural Transmission Center in Beijing whose focus is on the intersection of traditional and contemporary arts in modern China have been approached and have expressed their interest in exhibiting this piece.

Following the Beijing installation, I plan to seek opportunities to exhibit the work in North America and in other countries. Estimated total budget for this project is \$60,100. If appropriate venues can be located, the noncommercial nature of this work will require that additional resources be found to properly ship, install and maintain the work.

Rania Ho

**2004 New Media Fellowship Application Budget Breakdown for
Mu Gu Gai Pan Over Rice Special #8**

item	price per unit	quantity	cost
motors	\$ 40.00	25	\$ 1,000.00
electronic components per robot	\$ 400.00	10	\$ 4,000.00
microcontroller programming hardware/software	\$ 700.00	1	\$ 700.00
microcontrollers	\$ 20.00	40	\$ 800.00
miscellaneous tools (drills, saws, etc.)	\$ 2,000.00	1	\$ 2,000.00
monthly internet connection for design resources	\$ 40.00	18	\$ 720.00
miscellaneous hardware (nuts, bolts, screws, etc.)	\$ 600.00	1	\$ 600.00
Custom parts (formed sheet metal, diecut gears)	\$ 1,500.00	1	\$ 1,500.00
folk toys	\$ 100.00	20	\$ 2,000.00
rechargeable batteries	\$ 80.00	16	\$ 1,280.00
battery charging equipment	\$ 150.00	5	\$ 750.00
studio rental (monthly)	\$ 500.00	18	\$ 9,000.00
international travel to China	\$ 1,600.00	1	\$ 1,600.00
local travel (within China)	\$ 1,300.00	1	\$ 1,300.00
Accomodation in China	\$ 1,400.00	1	\$ 1,400.00
Food in China	\$ 1,000.00	1	\$ 1,000.00
local translation services	\$ 750.00	1	\$ 750.00
fabrication assistance	\$ 1,000.00	1	\$ 1,000.00
programming assistance	\$ 1,000.00	1	\$ 1,000.00
artist fees	\$ 2,600.00	1	\$ 2,600.00
TOTAL			\$ 35,000.00

Exhibitions / Performance

2003	<i>MiniGolf</i>	Water 0.03%	Beijing China
	<i>Bullhorn</i>	Post-Sensibiliy: Inside Story	Beijing, China
2002	<i>Flip</i>	Close Calls	Headland Center for the Arts Sausalito, California
		Art That Moves	Cellspace, San Francisco, California
	<i>Stop Bugging Me, I'm Gonna Tell</i>		
		Art That Moves	Cellspace, San Francisco, California
2001	<i>Modem</i>	ArtMuseum.net	
		NewFangle 2001	GenArts, San Francisco, CA
		Digital Arts Conference (DAC)	Brown University, Providence, RI
		New York University	New York, NY
2000	<i>Free Range Appliances in a Light Dill Sauce</i>		
		SIGGRAPH 2000	New Orleans, LA
		Prix Ars Electronica	Linz, Austria
		Doors of Perception	Amsterdam, Netherlands
		ArtFuture 2000	Taipei, Taiwan
		ISEA 2000	Paris, France
	<i>PuttFarm</i>	Canalogy	Brooklyn, NY
1999	<i>Free Range Toasters in a Light Dill Sauce</i>		
		Life Culture	Beijing, China
	<i>Vibe Meetah</i>	(Collaboration with Josh Rooke-Ley and Yuri Sunahara)	New York University, New York, NY
	<i>Streaming Karaoke</i>	(Live performance with Tarikh Korula)	
		Rising Tide Summit	New York, New York
Ongoing			
	18 Mighty Mountain Warriors		Performances in venues from New York City to Hong Kong
	<i>Frenz4eva</i>	(Collaborative Video Mix Performance with Paul Chan and Tarikh Korula)	
		Performance	Bard College, Annadale-on-Hudson, NY
		Digital Arts Conference (DAC)	Brown University, Providence, RI
		Interactive Telecommunications Program	New York University, New York, NY

Awards

2000	Prix Ars Electronica 2000	
	ArtFuture 2000	Honorable Mention: <i>Free Range Appliances in a Light Dill Sauce</i> Honorable Mention: <i>Free Range Appliances in a Light Dill Sauce</i>

Fellowships

1999- 2000		
Research Fellow	Interval Research Corporation	
	Interactive Telecommunications Program, New York University	
	Independently directed exploration of interactive art.	

Lectures

2002	Lunches Tender: Frenz4eva and Live Video Manipulation	
	ISEA2002	Nagoya, Japan
2001	The Feeling Machine: Intro to Physical Computing	
	The Loft Gallery , Multimedia Space	Beijing, P.R. China
2000	Anthropomorphism and Toasters Ovens	
	Invisible Computing Conference SIGGRAPH New York	
		New York, NY

Education

New York University, Tisch School of the Arts
New York, New York 1997-1999
Masters of Professional Studies (M.P.S.) Interactive Telecommunications

San Francisco Art Institute
San Francisco, California 1995
Extension Education : Filmmaking

Central Academy of Fine Arts
Beijing, P.R. China 1992-1993
Certificate of Advanced Studies: Oil Painting

University of California, Los Angeles
Los Angeles, California 1986-1990
Bachelor of Arts: Theater Arts

Projects

Bullhorn

Three light sensitive robots were equipped with motors, wheels and a whining bullhorn. Part of a site-specific performance / installation at the Seven-Color Light Theater in Beijing, China.

The Femme Fish Chart

A Virtual fish tank that aims to display the general stress level in a community by charting menstrual cycles.

Flip

Part 2 of a series of machines that plays with toys for you. The installation consists of a mechanized flipbook loop, handmade flipbooks made from archival video footage and a vending machine to dispense the books.

Free Range Appliances in a Light Dill Sauce

An exploration of anthropomorphic qualities inherent in household gadgets and an irreverent look at the meaning of 'smart' appliances. Kitchen appliances are liberated from their mundane existences and taught motor skills; enabling them to fully realize their suppressed ambulatory desires.

Frenz4eva

This art-tech collective engages in the manipulation of digital and analog media in live audio/video mix performances.

MiniGolf

This follow-up to PuttFarm is a par-1 miniature golf course made of astroturf and styrofoam, the piece consisting of three floating islands: the sandtrap, the green and a radio-controlled hole that could be driven around Houhai Lake in Beijing.

Modem

An interactive video project that grazes on the leftovers of high speed telephony. When picked up, this household telephone triggers video clips of people doing imitations of their modems.

PuttFarm

A site specific project along the Gowanus Canal. PuttFarm is a 3-hole miniature golf course installed for the exhibition, Canalogy, in Brooklyn, New York. Built of astroturf and scrap lumber, PuttFarm addressed the need for suburban diversions in a post-industrial setting.

Robot Stories

Design and fabrication of robotic puppets for the independent feature film, *Robot Stories* by Greg Pak

Stop Bugging Me, I'm Gonna Tell...

First of a series of machines that play with toys for you. Built around a Chinese folk toy, the machine was designed to tug on the string making the two figures appear to wrestle.

Streaming Karaoke

A stage performance of a fevered pitch for a fictional product during the height of the internet bubble. Performed at a conference catered to the interests of start-up enthusiasts and venture capital investors, the irony and sarcasm was lost on a portion of the audience. Written and performed in collaboration with Tarikh Korula.

Vibe Meetah

Collaboration with Josh Rook-Ley and Yuri Sunihara. The vibe meetah is a portable device that lets you feel other people's heartbeat from a distance. By donning the stylish Vibe Meetah™, and slipping the special pointing device on your index finger, You can send your heartbeat to your partner across the room.