New Media Fellowships

2005 Project Cover Form

YOUR NAME HERE

Joel Slayton

Title	The Analogous Landscape
Genre	New Media
Applicant's Role in Production	Artist/Director
Production Format	Installation

Brief Project Description (do not exceed space given below)

The Analogous Landscape project merges adventure sports, art, and information technology. The centerpiece of the project is the climbing of ten high altitude volcanoes around the Pacific Rim-Ring of Fire. An evolving media installation is associated with the expeditions that integrates sculpture, data visualization and environmental mapping. It is my intention is to examine the changing conception of landscape as mediated by information technology. *The Analogous Landscape* project presents an experience of land as defined by human interaction with databases, networks and interfaces. This is a work in progress.

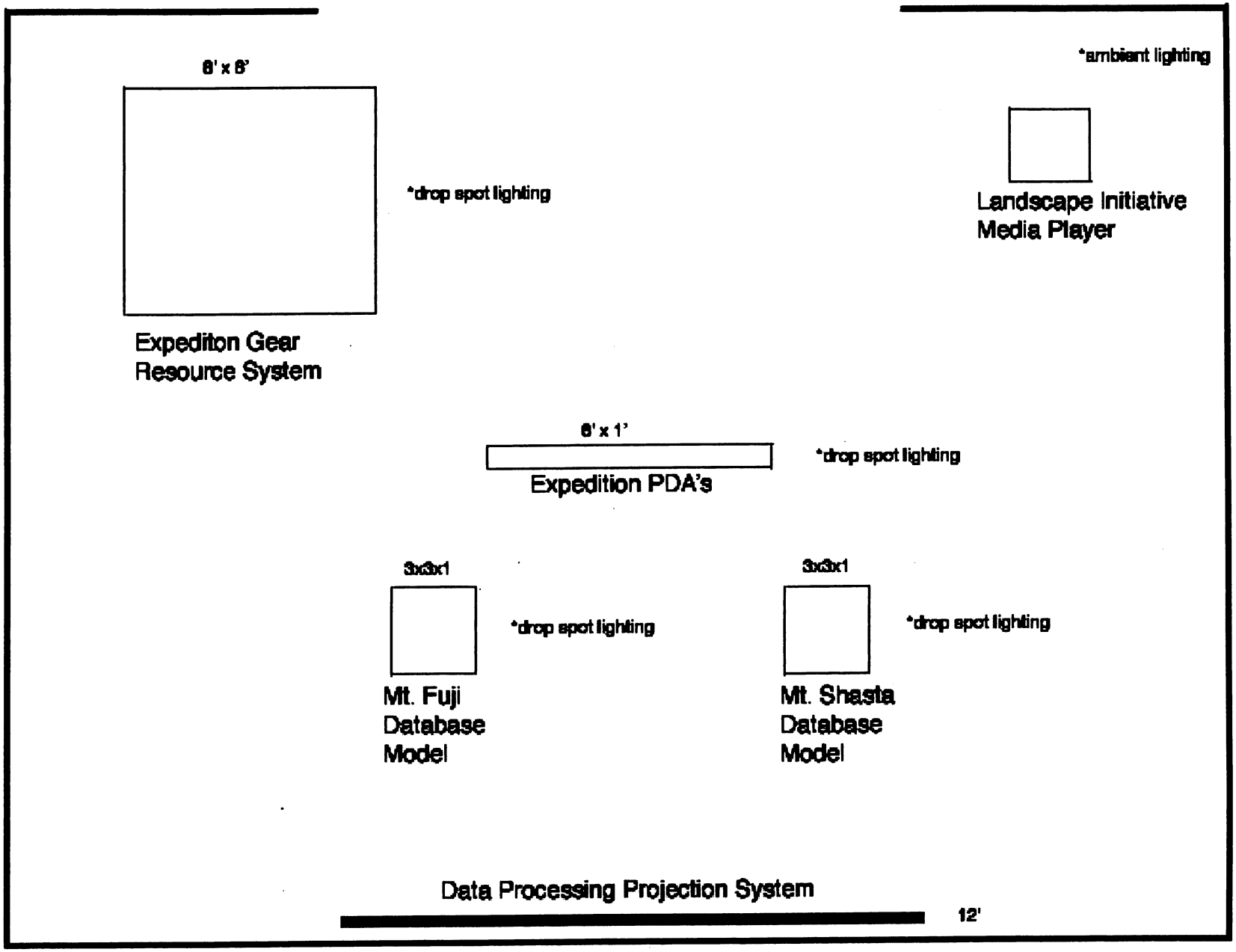
The Analogous Landscape project will be realized as an extended performance/installation of exhibitions realized over the next five years. The dramatic challenge of the climbing ten high altitude volcanic mountains is intended as a test of skill, determination and team cooperation. Although the selected volcanoes share many topographical characteristics they differ significantly in the specificities of their actual terrain, longitude and latitude and weather considerations, all factors that influence the strategy and resources for each expedition. The first two volcanoes in the expedition series are Mt. Shasta located in the Cascade Range of California and Mt. Fuji, the tallest mountain in Japan. Expeditions to these have been completed.

The conceptual objective involves not only the performative nature of the expeditions but also development of software that can inference by analogy best path scenarios. This will be accomplished through an analysis of GPS and Digital Elevation Mapping data. As *The Analogous Landscape* project evolves, an increasingly accurate prediction process will be used to mediate path navigation enacted by the expedition team. I will lead both the expedition/research team and the software development team.

The media installation series will include database sculptures produced directly from Digital Elevation Models using a CNC fabrication system. These forms will be presented along with video projection of the real time data processing of the inference algorithm represented in three dimensions. The installation also will feature the expedition equipment, personal resources (packs, clothing, food), and the PDA's and GPS units from each team member. A network art component will be realized as a rich media platform for the presentation of all expedition documentation.

In a world in which exploration of geographies have limits; traversing the land under computer instruction opens up new possibilities. *The Analogous Landscape* project embraces a potentiality of new media to re-inform our sense of presence and perception of the land.

The Analogous Landscape



New Media Fellowships
2005 Sample Work Form

Check One: _X_ Sample Work
___ Supplemental

YOUR NAME HERE

Joel Slayton

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 10 minutes. If slides are included in this application, please list the title and year of the work on this form.

Title C5

Year 1999-2004

Technical Information Information visualization and mapping exploring issues of navigation and social networks.

Original Format	Format Submitted for Viewing	Preferred OS
__ Software	__ Software	__ Windows
__ Web	__ Web	_X_ Mac
__ Installation	__ VHS	__ Unix
__ Other_____	__ Other___PowerPoint_____	__ Other_____

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

__URL_____ (if more than one please list them below)

__ Browser requirement(s) _____

__ Plug-in requirement(s) _____

__ 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: Three separate work samples are contained in a single PowerPoint Presentation: *C5, Lost Chihuahua and Panamint Launch at Lucky Jim Wash.* They are presented in sequence of approximately 3 slides per project. A separate Sample Work Form is submitted for each. Click on the PowerPoint Icon on the CD labeled Work Samples. Click on the slide show icon in the bottom left of the window. Advance through slides using the arrow key.

Description of Work (use an additional sheet if necessary)

In 1996 I created a long-term artwork called the C5 Corporation. It has been the centerpiece of my artistic practice. C5 is an experiment in collaboration systems design. The intention of this endeavor was to

enable a new form of authorial identity to not only challenge traditional conceptions of arts function but to also enable a form of cultural production informed by the blurred boundaries of art, research and business practice. C5 makes no distinction between the research ambitions of business or art. C5 is not ironic. It is not a commentary or political action. It is simply the necessary means to an end. For C5 theory is product.

Presented here are 3 examples in the lineage of C5 production. Each is built upon the technical and conceptual platform of its predecessor.

Slide 1: Radio controlled Surveillance Probes. A project using algorithmic surveillance strategies to map public spaces.

Slide 2: 16 Sessions. An exploration of the relationship of virtual and physical space. Use of physical motion tracking to create visual maps that are used as paths through the virtual space of the internet.

Slide 3: SoftSub. A data mining screen saver that depicts the organizational style of a client computer. A web site component enables comparative analysis between users.

New Media Fellowships
2005 Sample Work Form

Check One: _X_ Sample Work
___ Supplemental

YOUR NAME HERE

Joel Slayton

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Title **Lost Chihuahua**

Year **2003**

Technical Information **New media performance/public art and site installation.**

Original Format	**Format Submitted for Viewing**	**Preferred OS**
__ Software	__ Software	__ Windows
__ Web	__ Web	_X_ Mac
__ Installation	__ VHS	__ Unix
__ Other_____	__ Other___PowerPoint_____	__ Other_____

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

__URL_____ (if more than one please list them below)

__ Browser requirement(s) _____

__ Plug-in requirement(s) _____

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Description of Work (use an additional sheet if necessary)

In 2003 a created a rock band called, Lost Chihuahua with the sole purpose of playing one major concert. Non of the members was a musician and nearly all played no instruments. I negotiated with the Las Vegas Motor Speedway, the larges NASCAR track in the Western United States, to permit Lost Chihuahua to

peform during the filming of a made for television pilot called the Wedding Game which featured unusual weddings. The concert took place during the Richard Petty Driving School Time Trials.

Slide 1: Lost Chihuahua at the Las Vegas Motor Speedway

Slide 2: Lost Chihuahua Logo and Performance Staging

Slide 3: Lost Chihuahua performs Graham Parsons' *Oh-Las Vegas* 5 minute video. Click on image to start or stop, arrow key to advance to next frame.

New Media Fellowships
2005 Sample Work Form

Check One: _X_ Sample Work
___ Supplemental

YOUR NAME HERE

Joel Slayton

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Title Panamint Launch at Lucky Jim Wash

Year **2002**

Technical Information Crazy Rocketry

Original Format	**Format Submitted for Viewing**	**Preferred OS**
__ Software	__ Software	__ Windows
__ Web	__ Web	_X_ Mac
__ Installation	__ VHS	__ Unix
__ Other_____	__ Other___PowerPoint_____	__ Other_____

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

__URL_____ (if more than one please list them below)

__ Browser requirement(s) _____

__ Plug-in requirement(s) _____

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Description of Work (use an additional sheet if necessary)

In 2003 I organize a group of artists to conduct a social insertion site work on the border of the U.S. China Naval Weapons Research Station in southern California near Death Valley. A team of artists under my coordination launched a series of custom designed rocket experiments into the military airspace. The combination of desert, explosions, alcohol, cameras and out of control rocketry experiments resulted in a

high stakes game of performance art as confrontation. Each rocket launch was pre-planned, tested and documented.

Slide 1: Panamint Launch at Lucky Jim Wash. Joel Slayton Artist with Maypole experiment. 4 rockets are simultaneously launched while tethered by thin wire cable to a 30ft high pole.

Slide 2: Trajectory Test in to China Lad Naval Weapons Station.

Slide 3: Misc. Images: Rocket Bar, Swarming Bifurcation Mass launch of Kotex rockets, high altitude Black Beauties, and myself and daughter getting ready to shot rockets out of the sky with a 12 gauge pump shotgun.

New Media Fellowships
2005 Sample Work Form

Check One: __ Sample Work
X Supplemental

YOUR NAME HERE

Joel Slayton

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 10 minutes. If slides are included in this application, please list the title and year of the work on this form.

Title Analogous Landscapes

Year **2003-4**

Technical Information GPS/3D Mapping, CNC Sculptural Forms, Video Projecton, Media Installation

Original Format	**Format Submitted for Viewing**	**Preferred OS**
__ Software	__ Software	__ Windows
__ Web	__ Web	X Mac
__ Installation	__ VHS	__ Unix
__ Other_____	__ Other PowerPoint	__ Other_____

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

__URL_____ (if more than one please list them below)

__ Browser requirement(s) _____

__ Plug-in requirement(s) _____

__ 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 single work sample presented in a 10 slide PowerPoint presentation. Click on the PowerPoint Icon on the CD labeled Work_ Samples. Click on the slide show icon in the bottom left of the window. Advance through slides using the arrow key.

Description of Work (use an additional sheet if necessary)

The Analogous Landscape project merges adventure sports, art, and information technology. The centerpiece of the project is the climbing of ten high altitude volcanoes around the Pacific Rim-Ring of Fire. An evolving media installation associated with the expedition integrates sculpture, data visualization, video projection and environmental mapping.

The work samples presented here demonstrate significant progress on the proposed project submitted for the New Media Fellowships.

Slide 1: -The Analogous Landscape Project
-Illustration: Data topography Mt. Shasta California.

Slide 2: -Pacific Rim of Fire

Slide 3: -Expedition Team Geo-Cached Field Mediation

Slide 4: -Computer Mediated Software

Slide 5: -Digital Elevation Mapping of Terrain and GPS Modeling

Slide 6: -GPS Path and 3D Modeling

Slide 7: -Computer Mediated Expeditions

Slide 8: -Mt. Shasta Expedition

Slide 9: -Refined Models for Computer Fabrication of Database Sculpture

Slide 10: -Installation Configuration

Artist Statement

Joel Slayton

I am an artist, writer and researcher. My career began in the mid 1970's as a fine art post-graduate at the MIT Visible Language Workshop (VLW). The VLW was one of seven divisions that would in the early 80's evolve into the prestigious Media Lab. My experience at MIT was very rich in terms of the opportunity to engage with leading thinkers and practioners in engineering and science. It also afforded an opportunity to work directly with hybrid artists from diverse backgrounds who shared an interest in computing technology. My tenure at MIT also coincided with that unique moment in the history of computing when experimental investigations ushered forth a new generation of visualization tools and interactive processes.

On a personal level, it was a formative time aesthetically, technically and conceptually. What I consider to be the foundations of art practice involving information theory, artificial intelligence and networks were incubated. In retrospect, I find it not coincidental that the emergence of my orientation to art practice ran parallel with new formulations spawned by post-modern theoretical frameworks. It was a condition that I now appreciate in more full detail. Indeed, I was a lucky young man whose practice and philosophy would be shaped by such a significant time and environment that emerged a generation of innovation and creativity involving computing and art.

In the present, I see myself as an artist who works with collaboration systems, social networks and cooperative models. I have made a very distinct attempt to break down the Renaissance ideal of the heroic lone artist. In my world to be an artist requires working intentionally with people normally outside the art world, such as scientists, business owners, sports enthusiast, bureaucrats, venture capitalist, politicians and the public. My work has focused on producing art as an engagement with collaborative systems of cultural production. Informed by research and theoretical investigations regarding the nature of social software, my artistic production centers on issues of emerging knowledge from what I call 'big data'. That is, data that has a threshold of complexity so as to be very difficult to fully appreciate or understand, such as that found in extremely large databases. In such systems we can look for social manifestations of data in the form of interfaces, software, databases and networks. These are the media of my artistic practice. I am also very concerned with the relationship of virtual to real experience.

I believe that our conception of software is ever changing. Our expectations continue to shift as new mechanisms of human to machine interaction and machine-to-machine interaction are devised. New hybrid forms of software are just now beginning to emerge that rely on distributed functionality and cooperative systems design. Such ambition for information technology sets squarely within a discourse

Project Narrative: The Analogous Landscape

Joel Slayton

Description

In 2002,I initiated *The Analogous Landscape* project to investigate how information technology influences our understanding and experience of the land. *The Analogous Landscape* examines the changing conception of landscape as defined by an aesthetics of representation to one informed by database, networks and interface.

Defining the nature of resemblance between things that are otherwise unlike is the conceptual focus of *The Analogous Landscape*. Following in the tradition of monumental works by environmental artists Robert Smithson, Michael Heizer and Richard Long, and informed by research orientation of the Helen Meyer Harrison and Newton Harrison, *The Analogous Landscape* is an ambitious interaction and engagement with the landscape.

Beginning with a training expedition of Mt. Whitney in California (the highest peak in the continental United States) I have began the preparation for defining a process to climb ten of high altitude volcanoes around the Pacific Rim's-Ring of Fire. The project will result in a series of evolving installations. A network art component will be realized as a rich media platform for the presentation of all expedition documentation *The Analogous Landscape* project will be realized over the next five years. A pre-view installation of *The Analogous Landscape* project was featured at the Museo National de Belle Arte at the II International Art Biennial Buenos Aires in November of 2002. The first exhibition in the series will open at San Francisco Camerawork in May of 2005. An exhibition is scheduled for ISEA2006 Symposium (International Symposium of Electronic Art) in San Jose California. I am currently exploring other venues in Japan, Singapore, Indonesia, the Philippines, New Zealand and NYC.

At the heart of *The Analogous Landscape* project is the development of an inference technique that can be used for navigation of terrains of similar characteristic. At question is whether a computational process can be determined that will guide navigation based on previous experience in an environment of similar, but different, characteristic. Inference procedures are a common form of knowledge engineering and data mining that often use the concept of analogy for emerging useful information from complex forms of data. For *The Analogous Landscape* the issue is whether an expedition scenario can be transposed by analogy from one location to an *Other* based on analysis of path data?

Although the selected volcanoes share many topographical characteristics they differ significantly in the specificities of their actual terrain, longitude and latitude and weather considerations, all factors that influence the strategy and resources for each expedition. To better understand the relationship of path and navigation, I

propose to gather GPS data from each climb and to analyze it within an accurate three dimensional model of the landscape in order to characterize the factors that define path structure and human performance. The idea is to emerge increasingly accurate predictive software that can be used to mediate the actual expeditions. The software will be improved with the successive climbs as the expedition/research team that I will lead enacts it.

Landscape as Performance

The expedition/research team will draw on members from a collaborative arts group called C5 that specializes in information visualization, of which I am founder. My role will be to direct and lead the team in all facets of operations including appropriate technical training for high altitude data collection and documentation. As director of the expeditions I am responsibility for the safety of all participants. Altitude range is between 12,000 and 16,000 feet. Some volcanoes are active and the terrain itself presents a serious danger. The adventure sport factor of the expeditions is very much an element in the performance orientation of the artwork.

The Analogous Landscapes expedition team will collect GPS path data that will be computer modeled and integrated with a detailed topographic 3D database of each volcano. This database will be created from satellite and space shuttle Digital Elevation Mapping (DEM). GPS track logs can then be visualized within an accurate computer model of the landscape. A database of photographic, video, sound and text files from the ten expeditions will be attached to this database to enable an interactive media player platform for the Web.

Installation Description

The initial installation that will premier at San Francisco Camerawork in May 2005 will feature two CNC computer fabricated sculptural forms representing the first two volcanoes in the series; Mt Shasta, a 14,162 ft. mountain in the Cascade Range of North America and Mt Fuji, the tallest mountain in Japan at 12395 ft. The sculptures will be produced directly from the DEM/GPS database. I consider these to be database sculptures that depict the actualities of terrain accurate to 10 meters. The sculptures will be produced in Aluminum at approximately 3x'3'x1'. A computer generated LCD projection (ceiling mounted) of the algorithmic processing of GPS and topographic data is displayed on wall at a distance to the sculptures. Immediately adjacent to this display are the expedition team members PDA's (6-8) encased within an acrylic case. Each PDA cycles through a set of drawings and text messages composed by the team member while on the expedition. A stylized presentation of climbing gear, packs, boots, food supplies and safety equipment is arranged on the floor as a system of resources. Additional sculptural models will be added with each successive expedition in the forthcoming exhibitions. The computer-fabricated models, PDA display and projection video is separated to form an isolated experience for the viewer. The entire area of the installation is approximately 1200-1500 sq. ft.

Entrance to the installation will include a projected video display of the network art media player interface. Here the audience can explore the rich media documentation from the expeditions through an interface that

uses GPS track logs to signify time and location in order to retrieve and view photographs, video, sound and text resources.

Installation aesthetics are simple and highly formal. The space is conceptualized as an opportunity for the audiences to both contemplate the details of the mapping and processing and to view the entire structure as an elaborate land art enterprise. It is therefore necessary to make it accessible at both a viewing distance where the entirety of the project can be understood and close up in order to appreciate the individual models, information displayed on the PDA's and the items comprising the expedition resources.

Feasibility

I am confident in my organizational skills to design and implement installation/performance works of large scale and to manage the necessary collaborators, resources and budgets. My past work has often focused on designing systems as artworks that have involved complex media resources and were informed by contemporary information science issues and methods. I often work with other individuals to orchestrate their involvement and contribution. In fact it would be impossible to achieve the works in any other way.

Summary

The shifting tectonic plates of the Pacific Rim-Ring of Fire contain regions of complex cultural identities shaped by imperialism, globalization and post-modernization. Each of the ten volcanoes included in *The Analogous Landscapes* project is associated with unique culture whose forms of ritual, exploration, mapping and navigational representations are unique. *The Analogous Landscape* project is committed to exploring an alternative to those descriptions. My objective is to address the land as expeditionary experience influenced by information mediation. I continue to ask myself how does one experience the landscape as a factor of database logic?

Budget

Analogous Landscapes
Joel Slayton

Administrative Costs			
	Telephone		300
	Mail and Shipping		200
Travel		8 trips at 900	7,200
Accommodations		8 trips @400	3,200
Expedition Resources			3,900
	Food	800	
	Gear	1000	
	Rentals	500	
	Guides	1600	
	Fees		
GPS	Replacements	2 at 380	760
CNC Fabrication		10 @ $1250	12,500
Metal Foundry		10 @ $250	2,500
Display Cases		10 @ $120	1,200
LCD Video Projector			3,240
Total			35,000

Joel Slayton

ACADEMIC

Professor of Art, Digital Media Art, School of Art and Design, San Jose State University. 1985-Present

Director, CADRE Laboratory for New Media, School of Art and Design, San Jose State University. 1988-Present

Visiting Assistant Professor, Center for Information and Communication Studies, California State University, Chico. 1984-85

Coordinator, Visible Language Workshop, School of Architecture, Massachusetts Institute of Technology. 1977-82

EDUCATION

Post Graduate, MIT VLW, Cambridge, 1976-1977
MA Photography and Cinema, Ohio State University 1976
BA Photography and Cinema, Ohio State University 1974

CURRENT PROFESSIONAL

Chair, International Symposium of Electronic Arts 2006 + Pacific Rim New Media Summit
Board of Governors, Leonardo/International Society of Electronic Arts
Chair and Editor, Leonardo MIT Press Book Series
Board of Directors, ZeroOne, Art and Technology Network
Executive Editor, SWITCH, On-Line Journal of New Media Discourse
Airport Master Plan Steering Committee, Office of Cultural Affairs San Jose, CA
Nominated 2003 World Technology Awards, World Technology Network

RESEARCH ART FOCUS

Social Software, Networks and Information Visualization
Collaborative Systems, Site Works, Public Art, Performance

C5 CORPORATION
www.c5corp.com

President and Founder, C5 Corporation
Established in 1998.

C5 Corporation explores the hybrid boundaries of art, business and research. It is the primary focus of my artistic, scholarly and creative activity.

C5 EXHIBITIONS

2005
The Landscape initiatives, San Francisco Camerawork, May 2005

2004 *Landscape Initiatives*, International Symposium on Interactive Media Design, Istanbul, Turkey

2003

2002
1:1, Whitney Biennale, Whitney Museum of American Art, New York City
SoftSub, Refresh: Art of the Screen Saver, Tate Museum, London.

2001
SoftSub, BorderHack Festival, Tijuana, Mexico.
YouDdon't See That You Don't See, Digital Secrets Symposium, Arizona State University
1:1, The New Museum, Altoids, NYC

2000
SoftSub, Refresh: Art of the Screen Saver, Cantor Center for Visual Arts, Stanford Univ.
SoftSub, Arts Entertainment Network, Walker Art Center, Minneapolis, MN

1999
SoftSub, Ars Electronica, Linz Austria
1:1, New Langton Arts, San Francisco, CA

1998
16 Sessions, Shock of the View, Walker Art Center, Minneapolis, MN
RCSP Project, ACM Siggraph, Orlando Florida
Field Mediation on Mingling Theory, The Tech Museum, of Innovation Gala, San Jose CA
Field Mediation on Data, San Jose Museum of Art, San Jose CA

EXHIBITIONS
PERFORMANCE
INSTALLATION

2004
Lost Chihuahua: CD release
SetexNfavoritos, Network Exhibition of Favorite Sites, San Paulo, Brazil

2003

Lost Chihuahua: Lost Chihuahua at the Las Vegeas Motor Speedway

The Analogous Landscape, Museo de BelleArtes, II International Bienale Buenos-Aires

2002
The Wedding Game, Las Vegas Motor Speedway, Las Vegas Nevada
Profiling the Presidents, Auckland University of Technology, Auckland New Zealand

2001
Cogitate, site specific performance, Cunningham Communications, Palo Alto, CA
The Chemistry of FEAR, Ford Ord Military Chapel, Monterey, CA

2000
High Touch/High Tech, Kala Institute, Berkeley CA
Profiling the Presidents, Novell Silicon Valley Conference Center, San Jose, CA

1999
Alternating Currents: American Art in the Age of Technology, San Jose Museum of Art in collaboration with the Whitney Museum of American Art, San Jose CA

1998
Alternating Currents: American Art in the Age of Technology, San Jose Museum of Art in collaboration with the Whitney Museum of American Art, San Jose CA

1997
Telepresent Surveillance, http://surveil. sjsu.edu
CADRESV1, A Prototype Satellite Design, http://cadre.sjsu.edu/CADRESV1
Landscape Painting As Counter-Surveillance of Area51, http://cadre.sjsu.edu/area210
Telepresent Surveillance, International Symposium on Electronic Arts, School of the Art Institute of Chicago, Chicago Il.

1996
Telepresent Surveillance, Art as Signal, Inside the Loop., The Krannert Museum of Art, IL
Pixel Perfect, San Jose Museum of Art, San Jose CA
Elastic Visions,, March Hicks Art Center, Bucks Community College, Newtown PA
Elastic Visions, The Art Center, Portsmouth, VA
dotCom Gallery, Connections: *An on-line exhibition of digital artists,* NY NY

1995
Pullit: An Audience Interactive Browser for the Internet, Digit ATM High Bandwidth Concert, Digital Media Institute, San Jose State University/CSU Monterey
Elastic Visions, Erie Art Museum, Erie PA
Elastic Visions,, Catherine Smith Gallery, Appalachian State University, Boone, NC
California Arts Council Digital Artists, Holmes Fine Art Gallery, San Jose CA.

1994
CONDUITS, A site specific media performance work, The city of Palo Alto Centennial -Celebration, Palo Alto, California
Elastic Visions,, Zoller Gallery, School of Visual Arts, Penn State, University Park, PA
Elastic Visions,, Erie Art Museum, Erie, PA
Instant Memories: Artist Polaroid's, Redding Art Museum, Redding, California

1993
The Third Annual Santa Fe Computer Graphics Art Show, Hand Gallery, *Sante* Fe, NM
Computer Artists, Mission College, San Jose, California

1992
DoWhatDo, A site specific multimedia performance work, San Jose Institute of Contemporary Art and the City of San Jose, San Jose, California
Computer Art From the Western States,, Brigham City Museum-Gallery, Brigham City, Utah
Truth or Dare, Images Center for Photography, Cincinnati, Ohio

1991
Invisible Site, George Coates Performance Works, Visual Coordinator, ACM Siggraph Electronic Theater, University of Nevada Las Vegas
The Computer Art Show, New Mexico State University Art Gallery, Las Cruces, New Mexico
Infinite Illusions The Smithsonian Institute, Washington D.C.
*Virtual Memories,,*Ansel Adams Center, Friends of Photography, San Francisco, California

1990
98.6 FM, A collaboration with the Tandy Beal Dance Company, Mayer Theater,

Santa Clara University, Santa Clara, California
The Architecture of Catastrophic Change, George Coates Performance Works, Visual Coordinator, San Francisco, CA
Flux 90,, Muskengon Museum of Art, Muskengon, Michigan
Electronic Expressions, Allegheny College Art Gallery, Allegheny, Pennsylvania
Structured Influences,, Craft Alliance, Saint Louis, Missouri
Border Axes: San Jose Connection, San Jose Institute of Contemporary Art, San Jose, California
Xherone 1.3, Triton Museum of Art, Santa Clara, California

1989
Electronic Print, Aronfilini Gallery, Bristol, England
Digitized Images, Orange Coast College Art Gallery, Los Angeles, California
Distinguished Artists Forum, San Francisco State University, San Francisco, California
HAND, Center for Art, Media and Technology, Utrecht Academy for the Arts, Holland

1988
Detour, California State University Summer Arts, Cal Poly, San Louis Obisbo, California
Digital Portraits, Frieghtdoor Gallery, Santa Clara University, Santa Clara, California
Human Animal Relationships, Gorman Museum, University of California Davis, California

1987
Detour, San Jose Museum of Art, San Jose, California, 1988
Art in the Computer Age, Everson Museum of Art, Brooklyn, New York
traveling Itinerary:
IBM Gallery of Science and Art, New York, New York
Cincinnati Contemporary Arts Center, Cincinnati, Ohio
The Dayton Art Institute, Dayton, Ohio
Is there Art, US Sprint Teleconferencing Center, Slayton, Truckenbrod, Klinkowstein,
Simulations/Dissimulations, School of the Art Institute of Chicago, Chicago, Illinois
Artist in the Computer Age, MIT Technology Museum, Cambridge, Massachusetts
Computer Artists in Germany, Galerie Der Kuenstler, Munich, Germany
ACM Sigrraph Traveling Exhibition, CSU Los Angeles Fine Arts Gallery, California

1986
Musik und Film, Theaterahaus Stuttgart, Stuttgart, Germany
Electronic and Other Real Musics, American Music Week, San Jose State University, California
Xherone, Durban International Film Festival, Durban, South Africa
Siggraph Art Exhibition, San Francisco Moscone Center, San Francisco, California
Artist in the Computer Age, Owens-Illinois Art Center, Toledo, Ohio
Selected Videos, Margaret Fort Trahern Gallery, Austin Peay State University, Memphis, TN
New Portraiture, San Jose Institute of Contemporary Art, San Jose, California

1985
Siggraph Art Exhibition, Dallas Convention Center, Dallas, Texas
Artists and the Computer II, Louisville Art Gallery, Louisville, Kentucky
traveling itinerary:
North Carolina A and T State University, Greensboro, North Carolina
Milledgeville Allied Arts, Milledgeville, Georgia
Children's Museum, OakRidge, Tennessee
Chattahoochee Valley Art Association, La Grange, Georgia
Creative Arts Guild, Dalton, Georgia
Stillman College, Tuscaloosa, Alabama
Augusta College, Augusta, Georgia
Georgia State University Art Gallery, Altanta, Georgia
Western KY University, Bowling Green, Kentucky
Masur Museum, Monroe, Louisiana
Singing Pines Museum Boca Raton, Florida
Selected Works, Computer Arts Institute, San Rafael, California
Alternative Process and Contemporary Issue Photography, 3rd Floor Gallery, Oakland, CA
Light Masters, Somar Gallery San Francisco, San Francisco, California

1984
Artists and Computers: A New Collaboration, San Francisco State University, California
Maestros de la Luz, Galeria Magali, Mexico City, Mexico
traveling itinerary:
Mexico Universidad Iberoamerican, Mexico City, Mexico
Centro de Investigacion Y Docencia Econmicas, Mexico City, Mexico
Galeria do Arte, Universidad Autonoma Metropolitan, Izxtapalapa, Mexico
CADRE 84, San Jose Institute of Contemporary Art, San Jose, California
Art and Technology, Northern Arizona University Art Gallery, Flagstaff, Arizona

1983
New Works, Go Gallery, University of California Los Angeles, Los Angeles, California
Artists from the VLW, Gallery of the Fantistik, New York, New York

Northern California Photographic Exhibition, Monterey Peninsula Museum of Art, California

1982
Siggraph Art Exhibition, Boston, Massachusetts
The Computer Image, Kennedy Gallery of the Polaroid Corporation, Cambridge, MA
Mid-south Small Press Design Exhibition, Margaret Fort Trahern Gallery, Austin Peay State University, Memphis, Tennessee
DATA Network, Kracker and Slayton, Sky Art Conference, MIT, Cambridge, Massachusetts

1981
Computer Art Exhibition, Leigh University Art Gallery, Maryland
High Art Technology, Electro Arts Gallery, San Francisco, California
traveling itinerary:
Siggraph Art Exhibition, Dallas, Texas
Library of congress, Washington D.C.
Toronto Computer Culture, Toronto, Canada
Computer Art, Institute of New Technical Forms, Darmstadt Germany
Re:Pages, Artists Books, Rhode Island School of Design, Hera Art Gallery, Providence, RI
traveling itinerary:
Bradford College Art Gallery, Wakefield, Rhode Island
Bridgeport Museum, Bridgeport, Connecticut
Smith College, Boston, Massachusetts
University of Massachusetts, Amherst, Massachusetts
Hampshire College, Amherst, Massachusetts
Franklin county Art Council, Greenfield Massachusetts
Southeastern Massachusetts University, N. Darmouth, Massachusetts
Berkshire Museum, Pittsfield, Massachusetts
Art Center at Hargate, Concord, New Hampshire
University of Southern Maine, Gorham, Maine

1980
US Eye, Winter Olympic Games, Visual Studies Workshop, Rochester New York
traveling itinerary:
Harnett Gallery, University of Rochester, Rochester, New York
Erie Public Museum, Erie, Pennsylvania
SUNY at Albany, New York
Myers Fine Art Gallery, SUNY at Plattsburg, New York

PUBLISHED PAPERS

Collaboration Models, Leonardo ISAST Journal, San Francisco 2003
Social Software, Transmediale, Berlin 2001
Social Software, Noema-Tecnologie & Societa, Bolonga Italy 2001
Social Software, Rhizome, New York City 2001
Entailment Mesh, ReDistributions Symposium, New York City 2001
The Ontology of Organization as System, File 2000, San Paulo, Brazil 2000
The Ontology of Organization as System, Visual 2000 Conference, Mexico City 1999
Re=purpose of Information: Networks as Art, International Symposium on Electronic Arts 1998
Experimental Public Performance and Interactive Installation, The Sixth International Symposium on Electronic Arts Proceedings, Montreal, Canada 1995
Design Considerations for Interactive Multi-Media, Gano, Becker, Slayton, National Computer Graphics Association Proceedings 1989
Towards a New Media Technology, Technological Horizons in Education 1988
Experimental Computer Media, National Computer Graphics Association Proceedings 1988
Making Art On and With Computers, National Computer Graphics Association Proceedings 1987
Computer Art: New Means/New Perception, NCGA Proceedings 1986

EDITORIAL LEONARDO BOOK SERIES MIT PRESS

The Language of New Media, Lev Manovich 2000
Metal and Flesh, Technology Takes Over, Olliver Dyens 2001
Information Arts: Art, Science, Technology and Theory, Steve Wilson 2001
History of Virtual Art and it's Future, Oliver Grau 2002
Windows and Mirrors, Diane Gromola and Jay Bolter
Women in Art and Technology, Judy Malloy 2002
Protocal:When Technology Takes Over, Alex Galloway 2003
Beyond Biology, Eduardo Kac
New Media Artists, Frank Popper 2003
At a Distance, Norie Neumark 2004
Digital Performance, Steve Dixon and Barry Smith 2005
Between Worlds, SETI, Douglas Vackoch 2005
CODE, Michael Century 2005
The Global Genome, Eugene Thacker 2005
Media Ecologies, Mathew Fuller 2006

All books include Forwards written.

SWITCH
switch.sjsu.edu

Interface: Software as Cultural Production
Collaboration
Social Networks
Database
Games
Virtual Reality
Artificial Life
Sound
Interactive Narrative
Art of the World Wide Web
Art and the Military
Electronic Gender
Network/Art
The Interview Issue
Games
Database
Institutions
Social Networks I
Social Networks II
Collaboration
Interface

PUBLISHED ART CATALOGS

Whitney Biennale, Whitney Museum of American Art 2002
The Age of Dataveillance, Steve Deitz, Camera Work: Journal of Photographic Arts, 1999
ACM Siggraph, Art Exhibition, Orlando, FL 1998
Envisioning Cyberspace: Peter Anders, Abrams, 1998
Dreamland, Phil Patton, Vantage, 1998
Xerox Parc Pair Program, Craig Harris: MIT Press/Leonardo Magazine, 1998
Telepresence and Robotics, Eduardo Kac, The Art Journal, 1998
Art as Signal: Inside the Loop, Krannert Museum of Art, University of Champaign, IL 1996
Telepresent Surveillance, Guy Marsden, Sculpture Magazine, 1996
Elastic Visions, Zoller Gallery School of Visual Arts, Penn. State University, PA 1994
Interactive Art, Educom Review, 1994
DoWhatDo, Leonardo Currents, 1994
LEA, Massachusetts Institute of Technology Press, 1993
VR Anthology, Carnegie Mellon University Press, 1993
Leonardo Fine Art, Science and Technology (FAST) Resource, MIT Press , 1993
CyberArts International, Technologies, Tomorrows Art, Los Angeles, CA 1992
DoWhatDo, Site Specific Multimedia Performance, San Jose CA 1992
Invisible Site, ACM Siggraph, 1992
Confetti, Randal Publishing Company, 1992
Photographic Possibilities, Focal Press , 1992
Mead Portfolio of Computer Artists, Mead Paper Corporation , 1992
Introduction to Multi-Media Design, Prentice Hall, 1992
SIGGRAPH 91 Electronic Theater, Los Vegas, NV 1991
Electronic Expressions, Allegheny College, Bowman, Penelec & Megahan Galleries, PA 1991
Flux 90: New Visions in Computer Art, Muskengon Museum of Art, MI 1990
Photography, Scott Foresman, Little Brown, 1990
Electronic Print, Arnofilini Gallery, Bristol, England 1 1989
Dimensions of Interactivity, CADRE Institute, San Jose, CA 1989
Digitized Images, Orange Coast Community College, Los Angeles, CA 1989
The Ninth Durban International Film Festival, University of Natal, South Africa 1988
Art In the Computer Age, Everson Museum of Art 1987
Artists in the Computer Age, Owns-Illinois Art Center, Toledo OH 1987
Silicon Valley Festival of Electronic Art, San Jose, CA 1987
Discoveries in Literature, Scott Foresman , 1987
Tage Fur Neue Musik, Musik Und Film, TheaterHaus, Stuttgart 1986
Bilder Images Digital, Computer Artists in Germany, Galerie Der Kuenstler, Munich , 1986
The Artist and the Computer, Louisville Art Gallery, KY 1986
Photography and the American Imagination, Harry Abrams Publisher, 1985
CADRE Conference, San Jose, CA1984
Creative Computer Graphics, Cambridge University Press, 1984
Digital Portfolio, Computer Graphics World, Penwell, 1983
Storing, Handling and Preserving Polaroid Photographs, Focal Press, 1983
Re:Pages, An Exhibition of Hand Made Books, Hera Foundation, RISD, Providence, RI 1982
Copy Art, Lambert Tegengosch, Oce-Nederland 198, Utrecht, Holland 1982
The Computer Image, The Polaroid Corporation, Addison Wesley, 1982
American Institute of Graphic Arts Annua, 1982

One Hundred and Thirty Years of Ohio Photography, Columbus Museum of Art, Columbus, OH 1982
Siggraph Art Show, ACM Siggraph Conference, 1981
Acquaintances, VLW Press, MIT, 1981
Quiver: Notation and Image, Tyler School of Art, Philadelphia, PA 1979

REVIEW BIBLIOGRAPHY

Database of Virtual Art, Humboldt University, Berlin 2003
Crumb, *Formal Research*, University of Sunderland, England 2003
ArtByte, CADRE Area 51, Tom Vanderbilt, Landscape Painting As Counter Surveillance 1999
ArtByte, C5/Sputnik. Mindtrends 1999
AfterImage, Vol 27 No 3, Building a Better Hothouse, Simon Niedenthal, Rochester, NY 1999
C5, *Interview with Sputnik*,Mary McGuiness, NY, NY 1998
C5, Interview with Wired Magazine, San Francisco 1998
C5, Interview with Artbyte, NY, NY 1998
C5, Interview with SJ Mercury News, Chris Nolan, San Jose CA 1998
Interview with Joel Slayton, Studio Notes, Mike Vitale, Benicia, CA 1997
Telepresent Surveillance, Leonardo Electronic Almanac, MIT Press, Cambridge, MA 1997
SJMA Exhibition: Nam June Paik, KQED Public Radio, Peter Jon Schuler, San Francisco, CA 1996
Telepresent Surveillance, Words on Works, Judy Molloy, Tucson, AZ 1995
Elastic Visions, Erie News Supplement, Showcase: Karen Merkle, Erie PA 1995
Conduits, San Jose Mercury News, Danielle Trosussant, San Jose, CA 1994
The Lure of Pixels, Sante Fe Reporter, Diane Armitage, Sante Fe, NM 1993
DoWhatDo, Art Week, San Francisco, CA 1992
DoWhatDo, Macworld, Ann Garrison, San Francisco, CA 1992
DoWhatDo, New Media Age, San Francisco, CA 1992
DoWhatDo, YLEM, Artists Using Science and Technology, Trudy Reagan, Orinda, CA 1992
DoWhatDo, Leonardo Currents, Craig Harris, ISAST, Berkeley, CA 1992
Those Who Can Do What, San Jose Mercury News, Katherine Maclay, San Jose, CA 1992
DoWhat DoWhat, Metro, Ann Elliot Sherman, San Jose, CA 1992
DoWhatDo does Downtown, City Times, Arts, Anne Gelhaus, San Jose, CA 1992
After Hours in San Jose, San Jose Mercury News, Leigh Weimers, San Jose, CA 1992
DoWhatDo: a Techno Drive-In, KQED Public Radio, Peter Jon Schuller, San Francisco, CA 1992
Techno-Theater, New Media Age, San Francisco, CA 1991
Virtual Memories: New Electronic Photography, Art Week, Jenkins, San Francisco, CA 1991
Virtual Memories: New Electronic Photography, ReView, Mandell, San Francisco, CA 1991
Computers in the Photography Lab, San Francisco Examiner, Russell Baker, SF, CA 1991
Artists Portrait, Leonardo Magazine, Bill Castell, Berkeley, CA 1991
The Future of Cinema, The Film Journal, 2 part interview, Brill, NY 1990
Xherone1.2, Triton Museum of Art, Santa Clara Tribune, Nash, Santa Clara, CA 1989
Digitized Images, Los Angeles Times, Vickie Krasel, Los Angeles, CA 1989
The Future of Interactive Media, KQED Public Radio, Peter Jon Schuller, San Francisco, 1989
Computer Art Special, Channel 54, Malone, San Jose, CA 1989
NCGA Arts Conference, San Jose Mercury News, an Jose, CA
Lets Get Digital, AfterImage, Visual Studies Workshop, Rochester, NY1989
Xherone, West German National Television, Stuttgart, Germany 1987
Artful Computing, Science News, Raloff, New York, Washington D.C. 1986
Computer Artists and Research, CBC, Robin Christmas, Toronto, Canada 1984

PRESENTATIONS

ISEA2006 Panel: GPS as Art, Helsinki 2004
San Francisco Art Institute, Art+ Technology Lecture Series 2004
Keynote Address, A Week with the Masters, Toons Animation Division, India 2003
Fellowship, Auckland University of Technology, Auckland New Zealand 2002
Invited Keynote: Interactive Arena Lecture Series, Canadian Film Centre, Toronto, Canada 2002
Panel: *Social Software*, Transmediale, Berlin Germany 2001
Panel: Pedagogy 4.0 is in Beta: Teaching in the New Media Studio
College Art Association, Chicago 2001
Panel: Art and the Entrepreneur, GroundZero/The Kitchen, Palo Alto, CA 2000
Panel: New Media Mavericks, High Tech/Hi Touch Symposium, Kala Institute, Berkeley, CA 1999
Lecture: *Systems Discourse*, San Jose Museum of Art, San Jose, CA 1998
Lecture: *Telepresence and Robotics*, Ylem Forum, San Francisco Exploratorium 1997
Panel: *Art as Signal: Inside the Loop*, University of IL. Champaign-Urbana 1995
Lecture: *Experimental Performance and Media Installation*, ISEA, Montreal, Canada *1995*
Visiting Artist: Department of Conceptual Design, San Francisco State University, CA 1995
Artist in Residence: *PAIR Program*, XeroxParc Research Center, Palo Alto, CA 1994
Visiting Artist:, Mesa College, Phoenix, AZ 1994
Visiting Artist:, Art and Technology Program, School of the Art Institute of Chicago, IL 1993
Panel: *Making Megamedia*, International CyberArts Conference, Pasadena, CA 1992
Panel: *International Interactive Communication Society*, Education Special Interest, SF, CA 1992
Visiting Artist, Department of Art and Art History, UCD, Davis, CA 1992
Lecture: *The Making of DoWhatDo*, San Jose Institute of Contemporary Art, San Jose, CA 1992
Panel: *Virtual Reality and the Arts*, San Francisco Exploratorium, San Francisco CA 1992
Panel: *Artists Experimentation With Interactive Multi-Media*, MacWorld, San Francisco, CA 1992
Visiting Artist: University Art Galleries, New Mexico State University, Las Cruces NM 1991
Visiting Artist: California College of Arts and Crafts, Oakland, CA 1991
Visiting Artist: Dept. Conceptual Design, San Francisco State University, San Francisco, CA 1991

Panel: *On The Bleeding Edge of Interactive Performance, International* CyberArts Conference, Los Angeles, CA 1990
Visiting Artist: Oberlin College, Oberlin, OH 1990
Panel: *The Impact of Computers on the Arts, SPE* Western Regional Conference, Los Angeles, CA
Lecture: Triton Museum of Art, Santa Clara, CA 1989
Panel: *The Dimensions of Interactivity*, NCGA Annual Conference, Anaheim, CA 1989
Visiting Artist: Mills College, Oakland, CA 1989
Artist in Residence, California State University Bakersfield, CA 1988
Lecture: *Interactive Virtual Environments*, First International Symposium on Electronic Art, Center for Art, Media And Technology of the Utrecht Academy of Arts, Holland 1988
Panel: *Computer Graphics and the Changing Methodology for Artists and Designers*, ACM Siggraph Conference on Computer Graphics and Interactive Techniques, GA 1988
Panel: *Arts in the Year 2020*, San Jose State University, San Jose, CA 1988
Panel: *YLEM*, San Francisco Exploratorium, San Francisco, CA 1988
Panel: *Experimental Computer Media*, NCGA Annual Conference, Los Angeles, CA 1988
Lecture: *The Interactive Image, Learning Environments, Appealing to the Senses*, Simulations/Dissimulations Conference, Chicago Museum of Science and Industry, IL 1987
Panel: *Digital Photography and Interactive Media*, Society for Photographic Education, Mid West Regional Conference, Los Angeles, CA 1987
Panel: *The Literacy of New Media Technology*, Art and Design Conference, School of the Art Institute of Chicago, Chicago, IL 1987
Panel: *Computers and Photography*, Society for Photographic Education Annual Conference, San Diego, CA 1987
Lecture: *The Making of XHERONE*, Tage fur Neue Musik: Musik und Film, TheaterHaus Stuttgart, Germany 1986
Panel: *Computer Arts*, Mid America CAA Conference, Memphis State University 1986
Panel: *Making Art On and With Computers*, NCGA Annual Conference, Los Angeles, CA 1986
Panel: *Art and Research*, Association for Computer Aided Design and Education Conference, Sheridan College, Toronto, Canada 1986
Visiting Artist: *Explorations 2*, Austin Peay State University, Memphis, TN 1986
Panel: *Digital Art, Ninth* Annual Colloquium on Empirical Aesthetics, UCSC, Santa Cruz, CA 1985
Panel: *Computers and Art*, Santa Rosa Junior College, Santa Rosa, CA 1985
Panel: *New Art/New Perception*, NCGA Annual Conference, Anaheim, CA 1985
Lecture: *Digital Imaging*, CADRE Conference, Mission College, San Jose, CA 1985
Lecture: *Creativity and the Computer*, International Summer Institute on Tele-Communications and New Information Media, California State University Chico, CA 1984
Panel: *Computers and Art*, NCGA Annual Conference, Los Angeles, CA 1984
Computer Art Workshop: Visual Studies Workshop, Summer Session, Rochester, NY
Lecture: *Computers and Creativity*, Northern Arizona State University, Flagstaff AZ 1984
Lecture: *Computer Imaging*, Western Education and Computing Conference, San Francisco, CA 1983
Lecture: *Computers, Color and Form*, Harvard University Environmental Design, Cambridge, MA
Lecture: *Alternative Imaging*, MIT Summer Session, Cambridge, MA 1982
Lecture: *Art and Technology*, Boston Visual Artists Union, Cambridge, MA 1082

CONSULTANCY
RESIDENCY
CURATION

Adobe Headquarters Public Art Review Panel, San Jose 2003
Curatorial, Vigil of Planetary NetArt, Chairetmetal.com 2001
California Arts Council Grant Review, Media Arts 2000
Consultant on Curriculum, College of Arts and Sciences, CSUB, 1998
Cultural Equity Grants Organizations Panel, City of San Francisco, 1997
Cultural Equity Grants Media Panel, City of San Francisco, 1996
Consultant, Omron Office Systems Research, Facial Recognition Software 1996
Guest Curator, Art and Technology Exhibition, Holmes Gallery, San Jose 1995
Artist in Residence, PAIR Program, XEROX Parc, Palo Alto, California 1993
Panel Jurist, Art and Technology Artist Grants, Santa Clara Arts Council 1993
Consultant, Computers in the Arts Program, UCSC 1992
Consultant, Computers in the Curriculum, San Jose Unified School District 1992
Board of Directors, Arias Compass Projects, Los Angeles 1990-1992
Consultant, California Alliance for Art Education 1989
Conference Director, The Dimensions of Interactivity, NCGA 1989
Executive Committee, NCGA Arts Section 1988-1989
Artist in Residence, Stellar Computer, Santa Clara, California 1988
Consultant, Computers in the Curricula, NJ Board of Higher Education 1988
Exhibition Jury , SUN Gallery, Hayward California 1988
Computer Graphics Workshop, CSU Professional Development Program 1988
Artist in Residence, NASA Ames Research Center 1987
Program Coordinator, The Computer Image, CSU Summer Arts 1987
Exhibitions Coordinator, Silicon Valley Festival of Electronic Arts 1986
Program Coordinator, International Summer Institute on Telecommunications and New Information Media, California State University, Chico 1984
Program Consultant, CADRE 84 Conference, San Jose State University 1984
Artist in Residence, Grinnell Systems, San Jose, CA 1983
Program Coordinator, Computers and Other Tools, MIT Summer Session 1981
Program Coordinator, Computer Design and Typography, MIT 1980

GRANTS

SJSU IRA, CADRE Artist in Residence/Switch Journal 42,500 2003

SJSU IRA, CADRE Artist in Residence/Switch Journal 42,500 2002
Silicon Graphics, RE2 donation, $150,000 2002
Graduate Studies and Research Award, SJSU $2000 2000
SJSU IRA, CADRE Artist in Residence/Switch Journal $34,500 2000
SJSU IR CADRE Artist in Residence/Switch Journal $34,500 1999
SJSU IRA CADRE Artist in Residence Program $34,000 1998
SJSU IRA CADRE Virtual Reality Laboratory $32,000 1997
SJSU RA, VR/High bandwidth Networking, $32,000 1996
CSU Lottery Grant, Networked Exhibitions Program, $32,000 1996
Silicon Graphics Inc., Workstations for VRML development. $30,000 1996
Alias/Wavefront SGI, Campus Partner Agreement, software licensing, $1,000,000 1995
SJSU IRA, Virtual Reality Laboratory, $34,000 1995
CSU Lottery Research Funds, Digital Video, $1500 1994
Arts Commission, CONDUITS, City of Palo Alto Centennial, $20,000, 1994
`Corporate Sponsorship of CONDUITS: $300,00 1994
-Silicon Graphics Inc. Riverview Systems Group.
-Supermac Technologies Pacific Bell
-Xerox Parc Frys Electronics
SJSU Instructional Resources Award, SWITCH the on-line Electronic Journal of the CADRE Institute, San Jose State University, $32,150 1994
SJSU IRA , Virtual Reality Laboratory Project, San Jose State University, $39,000 1993
California State University Faculty Research Award, Video Disk Production, $5000 1993
NEA Project Grant: DoWhatDo, A site specific multimedia performance sponsored by the San Jose Institute of Contemporary Art $15,000 1992
Corporate Sponsorship of DoWhatDo: $350,000 1992
Software Systems Inc., MultiGen Software Grant for Virtual Reality Research, $130,000 1992
SJSU IRA CADRE Student Exhibitions Program, $40,000 1992
Certificate of Appreciation, Smithsonian Institute, Recognition of Exceptional Service 1990
Alias Research, Software Grant for 3D Modeling and Computer Animation, $480,000 1990
CSU Lottery Grant, Digital Video Editing System, $48,000 1990
Meritorious Performance and Professional Promise Award, San Jose State University 1989
Chancellors Distinguished Artists Forum, San Francisco State University 1989
Sun Microsystems, Computer Donation, $120,000 19898
CSU Lottery Grant, Distinguished Visiting Artists and Scholars Lecture Series, $2000 1988
CSU Lottery Grant, Video Disk Design Workstation, $30,000 1988
California State University Summer Arts Program, $20,000 1988
Crystal Graphics, Software Grant for Computer Animation, $25,000 1987
CSU Lottery Grant, Distinguished Visiting Artists and Scholars Lecture Series, $7,000 1987
Meritorious Performance and Professional Promise Award, San Jose State University, $2000 1986
San Jose Fine Arts Commission, CADRE Performance Series, $5000 1986
Dean's Faculty Recognition Award, California State University Chico 1984
Commodore Computer Ltd., Equipment Grant, $5000 1983
American Institute of Graphic Arts: Design Leadership Award to VLW/MIT 1982
The Polaroid Corporation, Digital Portfolio Commission 1981

CURRICULUM

Graduate Coordinator MFA Program in Digital Media Arts

Graduate Seminar in Digital Media Art
Undergraduate Seminar in Digital Media Art
Art as System
The Human Machine Interface
Introduction to Digital Media
Advanced Projects in Digital Media Art