

Todd Margolis

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EDUCATION

M.F.A. 2004 Electronic Visualization University of Illinois at Chicago

B.F.A. 1998 Photo, Film, Electronic Visualization University of Illinois at Chicago

Areas of Specialization: Artificial Intelligence, Alternate Reality Games, Augmented Reality, Virtual Reality, 3D Fabrication, Telepresence Performance, Distributed Cinema, Networked Art

PROFESSIONAL EXPERIENCE

Qlik	10/14-present
<i>Sr. Director of Applied Research & Emerging Technologies</i>	Chicago, IL

Lead a team of ML engineers accelerating our long-term roadmap, defining strategy and developing new capabilities leveraging emerging media platforms. My deep empathy for customer and user needs paired with my passion for innovation drives my creative, yet data-driven approach to prioritization. I have extensive prototyping and presentation experience and enjoy providing thought leadership in executive briefings, conference keynotes and academic symposiums globally. At Qlik, I have previously held roles as Director of Product Management as well as a Sr. Solution Architect.

University of California, San Diego	11/12-10/14
<i>Assistant Project Scientist & Lecturer, Qualcomm Institute</i>	San Diego, CA

Researcher with the Qualcomm Institute at the California Institute for Telecommunications and Information Technology (Calit2) designing and developing immersive systems using VR and large-format tiled displays. Focus on leading interdisciplinary teams of academic and industry researchers to create discovery platforms for large-scale geospatial, metagenomics and healthcare data. Instructed on Digital Imaging, Collaborative Image production, Web 2.0 Interaction, Transmedia, Programming, Augmented Reality

University of California, San Diego	1/05-5/12
<i>Technical Director</i>	San Diego, CA

Provided organizational administration, research development, project management and grant writing for the Center for Research in Computing and the Arts. Created the design, specification, installation, configuration, operation, training and maintenance routine of CRCA's new 10,000 sq ft facilities including Virtual Reality, Spatialized Audio, Motion Capture, Gaming and Digital Cinema labs. Technical Director for dozens of interdisciplinary research projects that have been published and exhibited world-wide, as well as new products that have been brought to market.

Managed small to medium groups on short-term projects as well as long-term teams.

Rensselaer Polytechnic Institute	10/11-12/12
<i>Consultant</i>	Troy, NY

Provided technical expertise for building a Virtual Reality system for the new Emergent Reality Lab at RPI. This included space planning, CAD drawing, requirements assessment, system design, equipment specification and configuration of the immersive and interactive system.

Florida State University	11/11-6/12
<i>Consultant</i>	Tallahassee, FL

In preparation for constructing a new 50,000 sq. foot Transmedia Research Institute, I provided guidance on the building characterization and design. This included defining research activities, facility specification, space requirements, equipment classification and furnishing specifications.

University of Illinois at Chicago	8/98-1/05
<i>Visiting Research Programmer</i>	Chicago, IL

Co-invented new Virtual Reality hardware and software systems for the Electronic Visualization Laboratory. Senior developer on the auto-stereoscopic barrier strip display Varrier™ where I modeled and analyzed sub-pixel rendering techniques for a new VR system inside another CAVE VR system.

Columbia College Chicago	2/00-1/03
<i>Adjunct Faculty</i>	Chicago, IL

Instructor for Programming Web Databases (PHP/MySQL) and Introduction to Multimedia Programming (Macromedia Director/Lingo). Frequent guest lecturer for courses relating to art and technology in the Photography, Art History, Academic Computing and Interactive Multimedia departments.

School of the Art Institute of Chicago	1/99-1/03
<i>Instructor</i>	Chicago, IL

Taught graduate courses in Virtual Environments (Linux/C++/YG/OpenGL/Performer), Web Architecture (DHTML/Macromedia Flash) and Experimental Programming for the Web (DHTML/Macromedia Flash).

(art)n Laboratory	1/00-7/00
Artist-in-residence, Curator	Chicago, IL

Produced 3D artwork based on PHSCologram and ImmersaGram technology utilizing 3D modeling, programming and animation. Organized exhibition of 20 ImmersaGrams from international artists. Project lead for searchable image-database website. In charge of network systems and web server administration, web site design layout and programming.

University of Illinois at Chicago	8/98-9/00
<i>Lecturer / Lab Administrator</i>	Chicago, IL

Assisted instructor in guiding students in programming computer graphics utilizing C/C++, OpenGL and glut. Administered a computer lab that consisted of 12 SGI workstations. Installed and updated software, created and maintained user accounts, configured the network and assisted students with lab projects. Guest lecturer for several Virtual Reality art courses in the School of Art and Design.

NetSight	1/95-7/96
<i>Webmaster/Head of Internet Development</i>	Northbrook, IL

Developed new business areas for a local ISP to offer web hosting and design services. We specialized in providing some of the first 3D VRML websites for the Chicago area.

PROFESSIONAL ORGANIZATIONS

<u>Manifest.AR</u>	2011-2012
<i>Artist Member</i>	International Collective

Manifest.AR is an international artists collective working with emergent forms of augmented reality as interventionist public art. The group sees this medium as a way of transforming public space and institutions by installing virtual objects and artworks which respond to and overlay the configuration of located physical meaning.

<u>NVision</u>	2010-2012
<i>Honorary Board Member</i>	Northampton, UK

NVision is a state-of-the-art technology centre in Northampton, UK designed to bring 3D immersive stereo visualisation and high performance computing to the local University and wider community.

<u>Software Studies Initiative</u>	2008-2012
<i>Technical Director</i>	La Jolla, CA

The Software Studies Initiative was founded by Dr. Lev Manovich to develop projects, workshops, publications, and lectures conducted at UCSD and disseminated via the web and in hard copy publications. We aimed to disseminate the broad vision that software is a layer that permeates all areas of contemporary societies. Therefore, if we want to understand contemporary techniques of control, communication, representation, simulation, analysis, decision-making, memory, vision, writing, and interaction, our analysis can't be complete until we consider this software layer.

<u>Experimental Game Lab</u>	2005-2012
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<i>Technical Director</i>	La Jolla, CA
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Gaming is a defining cultural form of the 21st century. We provided innovative, multi-disciplinary expertise to push forward its technological and expressive fronts. Intersecting technologies from the leading edge of visualization research with extended game industry tools we created new cultural forms.

<u>Applied Interactives, N.F.P</u>	2001-2005
<i>Founding Member</i>	Chicago, IL

Non-profit organization with a mission to bring Virtual Reality to art museums and universities, as well as into the hands of individual creators. We maintained a highly collaborative organization of artists and engineers, resulting in several high-profile artworks and installations shown at venues such as Northwestern University, the Museum of Contemporary Art in Chicago and Art Basel Miami.

Sine::apsis Experiments	2000-2005
<i>Artist Member and past Director</i>	Chicago, IL

Founded in 1998, this Chicago-based 501(c)3 non-profit group of artists takes an unorthodox look at the role of technology in life and art. Sine::apsis was a collaborative group that organized exhibitions, lectures and workshops throughout the US on new media art. Sine::apsis has been in publications such as Information Arts, Leonardo, MIT's online journal, and YLEM.

GRANTS, GIFTS AND AWARDS

2011 Sony in-kind Donation
 2011 Intel in-kind Donation
 2010 National Science Foundation: EAGER *researcher*
 2010 National Science Foundation: IBIV *researcher*
 2010 National Endowment for the Humanities: Digital Humanities Start-Up Grants *researcher*
 2009 National Science Foundation: I/UCRC *researcher*
 2008 IBM in-kind Donation
 2008 National Science Foundation: SGER *researcher*
 2008 National Science Foundation: MRI *researcher*
 2007 Intel Cash Gift and in-kind Donation
 2006 VICON Cash Gift and in-kind Donation
 2004 IDEAS Festival 1st Place prize in Immersive and Interactive Media
 2003 IDEAS Festival 1st Place prize in Immersive and Interactive Media
 1998-2003 Electronic Visualization Laboratory Research Assistance Award, UIC
 2002 Canada Council for the Arts Grant *collaborator*
 2002 National Science Foundation: MRI *researcher*
 2000 Christian and Oline Larsen Scholarship for Electronic Visualization

Exhibitions

2017

Museum of Old and New Art, MONAFOMA Festival, Hobart, Tasmania, Australia. "ATLAS in silico" (VR)

2016

50th Anniversary Exhibition of Nine Evenings, 9e2, Seattle, WA. "ATLAS in silico" (Virtual Reality)

2015

Art of Analytics, Anaheim, CA. "Tree of Branch" (Visual Analytics)

National Academy of Sciences / Keck Futures Initiative Exhibition, Beckman Center, Irvine, CA. "ATLAS in silico" (Virtual Reality)

2014

Remembering/Forgetting, ICIDS 2014 Singapore. "Special Treatment" (Virtual Reality)

Wintermoot IV, Anchorage, AK. "Museum of Future Objects (MOFO)" (Augmented Reality)

2013

CineGrid 2013, La Jolla, CA. "TeleTaiko" (Telepresence Performance)

Museums and the Web, Portland, OR. "Museum of Future Objects (MOFO)" (Augmented Reality)

IDEAS, La Jolla, CA. "ESSAI" (Cinematic Performance)

Social Science, Perot Museum of Nature and Science Dallas, TX. "ATLAS in silico" (Virtual Reality)

2012

CineGrid 2012, La Jolla, CA. "Places and Perspectives" (Telecollaborative Digital Cinema)

Adler After Dark, Adler Planetarium Chicago, IL. "Moon Lust" (Augmented Reality)

The Periscope Project, San Diego, CA. "Out of the Box" (Augmented Reality, Alternate Reality Game)

LA Re.Play, Los Angeles, CA. "Money Grab" (Augmented Reality)

SPIE 2012, San Francisco, CA. "Out of the Box" (Augmented Reality, Alternate Reality Game)

2011

Art Basel Miami, Arts For A Better World - Miami Beach, FL. "Special Treatment" (Virtual Reality)

Occupy Campaign, NYC, Los Angeles, San Diego. "Money Grab" (Augmented Reality)

I Shall Please, Digital Arts Week - Victoria, British Columbia. "Money Grab", "Show Me" (Augmented Reality)

Distributed Collectives, Little Berlin - Philadelphia, PA. "Show Me" (Augmented Reality)

TeleMotions, Calit2 - La Jolla and Irvine, CA. "TeleMotions" (Telepresence Performance)

Things I Never Say & Outdoor Video Screenings, Art Produce Gallery - San Diego, CA. "Local AR" (Augmented Reality, Alternate Reality Game)

2010

Art in Virtual Reality 2010, IEEE VR - Waltham, MA. "Special Treatment" (Immersive Virtual Reality)

Art in Virtual Reality 2010, SPIE Electronic Imaging - San Jose, CA. "Special Treatment" (Immersive Virtual Reality)

Becoming Transreal: A mixed reality, biodigital performance, UCLA Freud Playhouse - Los Angeles, CA. "Becoming Transreal" (Augmented Reality)

Inspiraling: Telematic Jazz Explorations, UCSD, La Jolla, CA - NYU, New York City, NY. "Inspiraling" (Telepresence Performance)

SuperComputing 2010, New Orleans, LA. "HUVR" (Augmented Reality)

CineGrid 2010 Workshop, Calit2 - San Diego, CA. "CineGrid 3D 4K" (Distributed Cinema)

2009

Android Market: Lifestyle, Android Market. "Auradust" (Augmented Reality)

FILE 2009, FIESP - Sao Paulo, Brazil. "ATLAS in silico" (Immersive Virtual Reality)

FILE 2009, FIESP: Sao Paulo, Brazil; UCSD: La Jolla, California; Keio: Yokohama, Japan. "FILE 4K"

(Distributed Cinema)

FILE 2009, Oi Futura Cultural Center - Rio De Janeiro, Brazil. "Scalable City" (Immersive Virtual Reality)

Innovation Talks symposium, UN Headquarters, New York; CRCA, California; Banff, Canada; SARC, Northern Ireland; AIM/MARTE, South Korea. "ResoNations" (Telepresence Performance)

Scalable Relations, UCSB - Santa Barbara, CA. "Shape Grammar Objects" (Rapid Prototype)

SIGGRAPH 2009, New Orleans, LA. "ATLAS in silico" (Immersive Virtual Reality)

SIGGRAPH 2009, New Orleans, LA. "Shape Grammar Objects" (Rapid Prototype)

2008

Becoming Dragon, CRCA - San Diego, CA. "Becoming Dragon" (Augmented Reality)

CineGrid 2008 Workshop, Calit2 - San Diego, CA. "CineGrid 3D 4K" (Distributed Cinema)

Digital Eyes, Barnsdall Gallery - Los Angeles, CA. "Scalable City" (Immersive Virtual Reality)

Digital Eyes, Los Angeles Municipal Art Gallery - Los Angeles, CA. "ATLAS in silico" (Immersive Virtual Reality)

FILE 2008, FIESP - Sao Paulo, Brazil. "Scalable City" (Immersive Virtual Reality)

Ingenuity Festival, Cleveland, OH. "ATLAS in silico" (Immersive Virtual Reality)

Scalable City, gallery@calit2 - La Jolla, CA. "Scalable City" (Immersive Virtual Reality)

SOMETHING is HAPPENING, San Diego, CA. "Auradust" (Augmented Reality)

2007

SuperComputing 2007, Reno, NV. "Scalable City" (Distributed Cinema)

Animation: from the Avant-Garde to Popular Culture, Calit2 - San Diego, CA. "ATLAS in silico" (Immersive Virtual Reality)

SIGGRAPH 2007, San Diego, CA. "ATLAS in silico" (Immersive Virtual Reality)

SIGGRAPH 2007, San Diego, CA. "Scalable City" (Immersive Virtual Reality)

Streaming to 8 Megapixel Tiled Display, Waag Society - Amsterdam, Netherlands. "Scalable City" (Immersive Virtual Reality)

2006

121st Audio Engineering Society Convention, LucasFilm's Letterman Digital Arts Center - San Francisco, CA. "CineGrid@AES" (Distributed Cinema)

ISEA/Zero One Festival, Dr. Martin Luther King Jr. Library - San Jose, CA. "SPECFLIC" (Distributed Cinema)

2005

(Im)permanence: Cultures In/Out of Time, Center for the Arts in Society(CAS) at Carnegie Mellon University - Pittsburgh, PA. "Special Treatment" (Immersive Virtual Reality)

Calit2 Building Opening, Calit2 - La Jolla, CA. "Special Treatment" (Immersive Virtual Reality)

Calit2 Building Opening, Calit2 - La Jolla, CA. "SPECFLIC" (Distributed Cinema)

SIGGRAPH 2005, Los Angeles, CA. "Varrier" (Immersive Virtual Reality)

2004

IDEAS Festival, Bloomington, IN (1st Place prize in Immersive and Interactive Media). "Special Treatment" (Immersive Virtual Reality)

IEEE VR 2004, Chicago, IL. "Varrier" (Immersive Virtual Reality)

Special Treatment, (art)n Gallery - Chicago, IL. "Special Treatment" (Immersive Virtual Reality)

2003

IDEAS Festival, Bloomington, IN/Chicago, IL/Buffalo, NY (1st Place prize in Immersive and Interactive Media). "The Perfect Parlor" (Telematic Virtual Reality)

Stockholm Art Fair, Stockholm, Sweden. "Confluxus" (Telematic Virtual Reality)

The Perfect Parlor, Chicago, IL/Bloomington, IN/Buffalo, NY/Stockholm, Sweden/Amsterdam, Netherlands. "The Perfect Parlor" (Telematic Virtual Reality)

2002

2002 Symposium: Art, Technology and Spirituality, Block Museum - Evanston, IL. "Confluxus" (Telematic Virtual Reality)

2002 Symposium: Art, Technology and Spirituality, Block Museum - Evanston, IL. "Infinite Studio" (Telematic Virtual Reality)

beyond prototypes, Exhibition Studies Space - Chicago, IL. "Confluxus" (Telematic Virtual Reality)

Death Show, Bruner and Bay Gallery - Chicago, IL. "ImmersaGrams" (ImmersaGrams)

plugANDplay, Artswatch Gallery - Louisville, KY. "ImmersaGrams" (ImmersaGrams)

Version>02, Museum of Contemporary Art - Chicago, IL. "Confluxus" (Telematic Virtual Reality)

Version>02, Museum of Contemporary Art - Chicago, IL. "Infinite Studio" (Immersive Virtual Reality)

Who?, Indianapolis, IN. "Confluxus" (Telematic Virtual Reality)

Who?, Indianapolis, IN. "Infinite Studio" (Immersive Virtual Reality)

2001

Adventures of the CAVE, ICC - Tokyo, Japan. "Infinite Studio" (Immersive Virtual Reality)

Alternate Currents, EVL - Chicago, IL. "Confluxus" (Telematic Virtual Reality)

Alternate Currents, EVL - Chicago, IL. "Infinite Studio" (Telematic Virtual Reality)

Alternate Currents, EVL - Chicago, IL. "ImmersaGrams" (ImmersaGrams)

Ars Electronica Festival, Linz, Austria. "Confluxus" (Telematic Virtual Reality)

Ars Electronica Festival, Linz, Austria. "Infinite Studio" (Immersive Virtual Reality)

EVE5, EVL - Chicago, IL. "Infinite Studio" (Immersive Virtual Reality)

EVE5, EVL - Chicago, IL. "LOCKUP" (Immersive Virtual Reality)

EVE5, EVL - Chicago, IL. "ImmersaGrams" (ImmersaGrams)

Immedia1901, Ann Arbor, MI. "LOCKUP" (Immersive Virtual Reality)

Immersions Weekend, Block Museum, IL. "Infinite Studio" (Immersive Virtual Reality)

Permanent installation, Midway Airport - Chicago, IL. "PHSColograms" (PHSCologram)

SIGGRAPH 2001, Los Angeles, CA. "PHSColograms" (PHSCologram)

SPIE Photonics West '01, San Jose, CA. "Varrier" (Immersive Virtual Reality)

Stray Show, Chicago, IL. "Infinite Studio" (Immersive Virtual Reality)

2000

Art Chicago 2000, Jean Albano Gallery and Maya Polsky Gallery - Chicago, IL. "PHSColograms" (PHSCologram)

ImmersaGrams: Virtual Reality Snapshots, (art)n Gallery - Chicago, IL. "ImmersaGrams" (ImmersaGrams)

Self-Portrait, Galerie Darthea Speyer - Paris, France. "PHSColograms" (PHSCologram)

SIGGRAPH 2000, New Orleans, LA. "PHSColograms" (PHSCologram)

COLLECTIONS & COMMISSIONS

- Ars Electronica Center, "Infinite Studio" Linz, Austria (Immersive VR Artwork)
- Midway Airport, "Battle Of Midway Virtual Monument" Installed April 2001. Chicago, IL
Commissioned by the Mayor's Office of the City of Chicago (Permanent PHSCologram installation)
- Private collections in the US, Germany and UK

NET ART EXHIBITIONS

"Home Transfer"	www.hometransfer.org
	www.postmediamagazine.com
	www.rhizome.org
	www.sine.org/cam

"LOCKUP"	www.evl.uic.edu/todd/LOCKUPdoc/LOCKUP5.html
	www.uturn.org
	www.wigged.net
	www.sine.org/cam

"A.LIFE.CODE"	www.darkmode.net
	www.sine.org/cam

Press

Tony Ohlsson, Alexander Heidl, Christopher Hillman, "The Art of Analytics" Teradata, 2015
Patrick Lichty, "A report on Moon Lust: An Augmented Reality Art Exhibition at the Adler Planetarium in Chicago" MediaN Journal, 2012
Hayley Roberts, "Getting Creative with Flexible Virtual Reality" The Standard, 2012
Can Art Communicate Big Data at a Glance? The Chronicle of Higher Education. December 13, 2013, Pg. A10-11
S. Wildevuur, "Invisible Vision: Could Science learn from the Arts?" in Invisible Vision: Could Science learn from the Arts?, 2009
Patricia Dillard, "Crossroads between digital technology and new art forms" N Art Magazine KGTv, 2008
Kristin Sainani, PhD, "Sensational Sequences" Biomedical Computation Review, 2008
"Technorati", video of ATLAS in silico, 2008
Doug Ramsey, "ATLAS in silico - Part Deux" Calit2.Life, 2008
Rich Weiss, "Silico, at Last!" Cleveland Ex Machina, 2008
Dee Perry, "Around Noon" [WCPN](http://wcpn.org)/PBS, 2008
"Computer Graphics Spills From Milk To Medicine" ScienceDaily, 2007
Young Sun Hang, "Virtual Immersion: Getting Specical Treatment" F Newsmagazine, 2005
Jo-Anne Green, "Memory as Malleable Substance", Turbulence.org, 2005
Kim Sorese, Interview about SIGNAL:NOISE and plugANDplay, NPR, 2002
Leslie Millar, "Bringing in the Noise" LEO, Louisville Eccentric Observer, 2002
Dave Pape; Dan Sandin, "Alive On The Grid" SCI 2002, Orlando FL, 2002
Victoria Lautman, "Artbeat Chicago" WTTW-Channel 11, Chicago, IL, 2002
Susan Snodgrass, "Art Chicago and Beyond" Art In America, 2002
Maureen Murphy, "School News" Fnews, 2002
"Sensoring Art" New City, 2002

"Battle of Midway Memorial" CBS-Channel 2 Chicago, IL, 2001
"Battle of Midway Memorial" NBC-Channel 5 Chicago, IL, 2001
"Battle of Midway Memorial" ABC-Channel 7 Chicago, IL, 2001
"Battle of Midway Memorial" WTTW-Channel 11 Chicago, IL, 2001

PUBLICATIONS

Margolis T., "Immersive Art in Augmented Reality," in *Augmented Reality Art: From an Emerging Technology to a Novel Creative Medium*, ed. Vladimir Geroimenko (SpringerVerlag, 2014), ch. 8

West R., Margolis T., Prudhomme A., Schulze J., Mostafavi I., Lewis J., Gossmann J., Sing R., (2014) "Scalable metadata environments (MDE): artistically impelled immersive environments for largescale data exploration", *Proc. SPIE* 90124

Margolis T., (2014) "Gestural interfaces for immersive environments", *Proc. SPIE* 901216

Ohta N., Margolis T., Cornish T., Bhimani J., Almahr A., Shirai D., O'Hara D., McLemore W., (2013) "The Growing Documentary Project", In *Proceedings of OFC/NFOEC 2013*

Margolis T., Cornish T., (2013) "Vroom: Designing an augmented environment for remote collaboration in digital cinema production", *Proc. SPIE* 8649, 86490F

Lucas J.F., Cornish T., Margolis T., (2012) "To a cultural perspective of mixed reality events: a case study of event overflow in operas and concerts in mixed reality", *New Review of Hypermedia and Multimedia*. DOI: [10.1080/13614568.2012.746741](https://doi.org/10.1080/13614568.2012.746741)

Ushizima D., Manovich L., Margolis T., Douglass J., (2012) "Cultural Analytics of Large Datasets from Flickr" *Workshop on Social Media Visualization at ICWSM'12*

Margolis T., Cornish T., Berry R., DeFanti T., (2012) "Immersive realities: articulating the shift from VR to mobile AR through artistic practice", *Proc. SPIE* 8289, 82890F

Margolis T., DeFanti T., Dawe G., Prudhomme A., Schulze J., Cutchin S., (2011) "Low cost heads-up virtual reality (HUVR) with optical tracking and haptic feedback" In *Proceedings of SPIE Vol. 7864*

Margolis T., Brown S., Cornish T., Bracho H., Stanton M., Carvalho T., Redigolo F., Castro F., Kaneko K., de Almeida J., Inacio da Silva J., de Souza E., (2010) "Tri-continental premiere of 4K feature movie via network streaming at FILE 2009", *Future Generation Computer Systems*, In Press, Corrected Proof, Available online 5 December 2010

West R., Gossmann J., Margolis T., Schulze J.P., Lewis J.P., Hackbarth B., Mostafavi I., (2009)

"Sensate abstraction: hybrid strategies for multi-dimensional data in expressive virtual reality contexts" In Proceedings of SPIE Vol. 7238: The Engineering Reality of Virtual Reality 2009

West R., Lewis J.P., Margolis T., Schulze J.P., Gossmann J., Tenedorio D., Singh R., (2009) "Algorithmic Object as Natural Specimen: Meta Shape Grammar Objects From ATLAS in silico" Leonardo Special Issue, Creative Data, MIT Press.

Cárdenas M., Head C., Margolis T., Greco K., (2009) " Becoming Dragon: a mixed reality durational performance in Second Life" Proc. SPIE, Volume 7238, pp. 723807-723807-13

Gossman J., Hackbarth B., West R., with Margolis T., Lewis J.P., and Mostafavi I. (2008) "Scalable Auditory Data Signatures for Discovery Oriented Browsing in an Expressive Context" Proc. 14th International Conference on Auditory Display, Paris, France.

Sandin D., Margolis T., Ge J., Girado J., Peterka T., DeFanti T., "The Varrier™ autostereoscopic virtual reality display" (2005) ACM Transactions on Graphics, Proceedings of ACM SIGGRAPH 2005 24, no. 3: 894-903.

Ge J., Sandin D., Peterka T., Margolis T., DeFanti T., "Camera based automatic calibration for the Varrier™ system", (2005) Computer Vision and Pattern Recognition, 2005 IEEE Computer Society Conference. Volume 3 pg. 110.

Sandin D.J., Margolis, T., Dawe, G., Leigh, J., DeFanti, T.A., (2001) "The Varrier Auto-Stereographic Display " Proc. SPIE Vol. 4297, p. 204-211, Stereoscopic Displays and Virtual Reality Systems VIII, Andrew J. Woods; Mark T. Bolas; John O. Merritt; Stephen A. Benton; Eds.

CONFERENCES / SYMPOSIA

Qlik World 2023, Las Vegas, NV. Presentation: "Gen AI in Sense"

Qlik Qonnections 2019, Dallas, TX. Demonstration: "Emergency Response Drone"

Qlik Qonnections 2018, Orlando, FL. Demonstration: "Immersive Analytics" (Virtual Reality)

Qlik Qonnections 2017, Kissimmee, FL. Demonstration: "Insight Chatbot" (AI)

Qlik Qonnections 2016, Orlando, FL. Demonstration: "Day in the Life" (Augmented Reality)

IEEE VR2016, Greenville, SC. Paper: "Immersive Analytics: Building Virtual Data Worlds for Collaborative Decision Support"

Qlik Qonnections 2015, Dallas, TX. Demonstration: "Qlik Sense Gestural Interface"

6th Conference of the International Society for Gesture Studies 2014, La Jolla, CA.

Presentation: "Platforms for Collaboration"

Qlik Summit 2014, Orlando, FL. Demonstration: "Qlik Sense Gestural Interface"

RealComm 2014, Las Vegas, NV. Presentations: "Immersion and Interactivity" and "Visualization Preview"

CineGrid 2013 Workshop, La Jolla, CA. Presentation and Demonstration: "TeleTaiko for Teaching"

DMASM/ON*VECTOR 2013, La Jolla, CA. Director/Producer: "Terminating the GLIF"

Out of Egypt (2013), La Jolla, CA. Technical Director: "EX3: Exodus, Cyberarchaeology and the Future"

SPIE 2013, San Francisco, CA. Program Committee: "Engineering Reality of Virtual Reality"

CineGrid 2012 Workshop, La Jolla, CA. Presentation and Demonstration: "UserCentered Design for Remote Collaboration in Vroom"

DMASM/ON*VECTOR 2012, San Diego, CA. Technical Director: "Growing Documentary"

SPIE 2012, San Francisco, CA. Session Chair: "VR Hybrids: Augmented Reality"

CineGrid 2011, San Diego, CA. Technical Director: "Transmedia Storytelling"

AES 2011, San Diego, CA. Session Chair: "Networked Music Performances"

SC11, Seattle, WA. Demonstration: "Vroom"

Tokyo International Film Festival 2011, Tokyo, Japan. Demonstration: "CineGrid@TIFF"

SIGGRAPH 2011, Vancouver, CAN. Demonstration: "Vroom"

RPI GameFest 2011, Troy, New York. Panel: "Experimental game design & critique"

ImmersiveTech Summit 2010, Los Angeles, CA. Speaker "Immersive & interactive facilities & projects"

SPIE 2011, San Francisco, CA. Speaker : "Low cost Heads-up Virtual Reality (HUVR)"

CineGrid 2009 Workshop, La Jolla, CA. Moderator/Panelist: "CineGrid @ FILE 2009"

FILE 2009, Sao Paulo, Brazil. Panel: "4K Cinema"

CineGrid 2008 Workshop, La Jolla, CA. Panel: "Stereo 4K Projection"

FILE 2008, Sao Paulo, Brazil. Panel: "4K Cinema"

Institute for the Future 2007, La Jolla, CA. Panel: "Computing in 2012"

SIGGRAPH 2007, La Jolla, CA. Technical Director: Installations, performances and 4K screening

Music and Technology Incubator Conference 2007, La Jolla, CA. Panelist

AES 2006, San Francisco, CA. Demonstration: "CineGrid@AES"

WIRED NextFest 2005, San Diego, Ca/Chicago, IL. Tele-presentation: "Synthecology"

iGrid 2005, La Jolla, CA. Demonstration: "International Real-Time Streaming of 4K Digital Cinema"

IEEE VR 2004, Chicago, IL. Workshop presentation: "VR for Public Consumption"

Regional Mensa Conference, 2003, Arlington Heights, IL. Speaker: "The Perfect Parlor"

2002 Symposium: Art, Technology and Spirituality, Block Museum-Evanston, IL.Exhibit: "Shared Spaces"

SPIE Conference, 2001, San Jose, CA. Paper: "The Varrier Auto-Stereographic Display"

Immersive Art Symposium, 2001, Block Museum-Evanston, IL. Speaker: "Virtual Reality Hardcopy"

Chicago Artists' Month, 2001, Chicago, IL. Speaker: "New Media Aesthetic: Alternate Currents"

SIGGRAPH 2000 Conference, New Orleans, LA. Exhibition: " Townhouse Revisited "

Collaboration with

(art)n Laboratory.

VISITING ARTIST PRESENTATIONS / WORKSHOPS / GUEST LECTURER

2014 "OptiPortables" Big Data, Big Network 2, La Jolla, CA. (Presentation)
2013 "Growing Documentary" TEDx San Diego, La Jolla, CA. (Interstitial Presentation)
2013 "Stereoscopic 3D" UCSD Visual Arts, La Jolla, CA. (Guest Lecturer)
2013 "S3D Mashup" UCSD, La Jolla, CA. (Presentation)
2013 "Remote Collaboration for Digital Cinema Production" Keio University, Yokohama, Japan. (Workshop)
2012 "Immersive Realities" Visual Effects Society, Los Angeles, CA. (Presentation)
2012 "UserCentered Design for Remote Collaboration in Vroom" CineGrid 2012, La Jolla, CA. (presentation)
2012 Tokyo International Film Festival, Tokyo, Japan. (Remote Presentation)
2012 "Transmedia Gaming" USC Interactive Media Division, Los Angeles, CA. (Guest Lecturer)
2012 "Transmedia Art + Collaboration" Monash University, Melbourne, Australia. (Guest Lecturer)
2012 "New Media Platforms" University of South Australia, Adelaide, Australia. (Guest Lecturer)
2012 "CineSAGE" UCSD Visual Arts, San Diego, CA. (Guest Lecturer)
2012 "Stereoscopic 3D" UCSD Visual Arts, San Diego, CA. (Guest Lecturer)
2011 "[Visualization Tools to Bridge Gaps for Distributed Knowledge and Distance Collaboration](#)" NSF MSI-CIEC 2011, La Jolla, California. (workshop)
2011 "Participatory Cultures" USC Interactive Media Division, Los Angeles, CA. (Guest Lecturer)
2011 "S3D Artwork" TransISTor 2011, Prague, Czech Republic. (workshop)
2011 "Stereoscopic 3D" UCSD Visual Arts, San Diego, CA. (Guest Lecturer)
2011 "[Augmenting Alternate Reality](#)" AR DevCamp, San Diego, CA. (presentation)
2011 "The Artwork" Union College, Schenectady, New York. (presentation)
2011 "Digital Cinema" Union College, Schenectady, New York. (workshop)
2011 "The Art of Data Spatialization" CRCA Exchange, La Jolla, CA. (presentation)
2010 "ATLAS in silico" Dorkbot SoCal 39, Los Angeles, CA. (presentation)
2010 "Future Cinema" CHMPR NSF IAB, Baltimore, Maryland. (presentation)
2009 "CRCA Overview" Monash University, Melbourne, Australia. (HD Tele-presentation)
2009 "Inventing new art forms by creating new technologies" Northampton University, Northampton, UK. (presentation)
2008 "Documenting Digital and New Media Art" CRCA Lunchtime, La Jolla, CA. (presentation)
2008 "Collaborative Practice for Large Scale New Media Art Projects" USC IMD Forum (presentation)
2007 "VIS147A+B Exhibition" UCSD, La Jolla, CA. (guest critic)
2006 "VIS147a Exhibition" UCSD, La Jolla, CA. (guest critic)
2004 "Current Projects" Chicago Artist Coalition, Chicago, IL (presentation)
2004 "Current Projects" Interactive Multimedia, Columbia College Chicago, IL (presentation)
2004 "Web Art" Arts Reach, University of Illinois at Chicago, IL (workshop)
2004 "Web Art" EVL, University of Illinois at Chicago, IL (lecture)

2004 "EVL" Art & Tech-School of the Art Institute of Chicago, IL (presentation)
2003 "Applied Interactives" School of Art & Design, University of Illinois at Chicago, IL (presentation)
2003 "Immersive and Interactive Media" Plug-in, Basel, Switzerland (presentation)
2003 "Bad Blood", HyperWerk, Basel, Switzerland (workshop)
2003 "Virtual Reality Primer" Art History; Art & Tech-School of the Art Institute of Chicago (lecture)
2003 "Net Art" Photography; Academic Computing - Columbia College Chicago, IL (lecture)
2002 "Immersive and Interactive Media" Art & Design - University of Illinois at Chicago, IL (lecture)
2002 "Internet Database Art" Academic Computing - Columbia College Chicago, IL (lecture)
2002 "Virtual Reality Primer" Art History; Art & Tech-School of the Art Institute of Chicago (lecture)
2001 "EVL" Academic Computing-Columbia College Chicago, IL (lecture)
2000 "Sine::apsis Experiments" Art History-School of the Art Institute of Chicago (presentation)
2000 "Virtual Reality Primer" Art & Design – University of Illinois at Chicago, IL (lecture)

SKILLS

Specialties: Immersive and Interactive Content Creation, Virtual Reality System Design/Installation, Augmented Reality System Design/Installation, Mobile Application Development, Project Management and Leadership

Technical: User Interface Design, User Experience Design, Programming, Scripting, LAMP Development, Client/Server Internet Development, Database Development, UNIX System Integration and Administration

Programming Languages: HTML5, JavaScript, jQuery, CSS, Perl, PHP, SQL, C/C++, CAVELib, OpenGL, Performer, XP/YG, VRML, Lingo, XML, Python, Assembly, BASIC, Java, Lasso, Pascal, RT1

3D: SolidWorks, Rhino, MasterCAM, VICON iQ, 3D Studio Max, Maya, MotionBuilder, Google Earth, MeshLab, Poser, SceneVision3D
Image/Video: Photoshop, Illustrator, Gimp, Flash, Director, After Effects, Premiere, Final Cut Pro

Web Dev: MySQL, Apache, CVS/SVN, Google App Engine

Operating Systems: Linux, IRIX, Windows(all), Mac OS, OS/X, z/VM, Android

Network System Administration: Linux; SGI Indy, Impact, O2, Onyx2IRIX; Windows NT