

# Pamela L. Jennings, Ph.D.

Wilmington, North Carolina

[www.pamelajennings.org](http://www.pamelajennings.org) | [www.construkts.com](http://www.construkts.com)

## EDUCATION

Ph.D., Center for Advanced Inquiry in Integrative Arts (Planetary Collegium)  
School of Computing, Electronics and Mathematics, University of Plymouth (UK), (2006).

Master of Business Administration, Ross School of Business, University of Michigan (2013).

Master of Fine Arts, Computer Arts, School of Visual Arts, New York, (1996).

Master of Arts, Photography & Digital Media, New York University International Center of Photography, (1990).

Bachelor of Arts, Psychology with secondary Vocal Studies, Oberlin College & Conservatory, (1986).

## LIFELONG LEARNING

Academic Leadership Academy, Center for Study of Higher Education, Pennsylvania State University (2019).

Leadership Winston-Salem (2016).

Helping leaders serve the community better through collegial in-depth exploration of Winston-Salem, NC.

## EMPLOYMENT

Keynote Speaker: Disrupting Innovation Culture (current). Represented by: [Executive Speakers Bureau](#).

Topics: Igniting change, Inclusive cultures, and Integrative learning in education and industry.

CEO & Founder, CONSTRUKTS, Inc., Sparking the aha! in Learning, (2014 – current).

Incubating the NextGen mixed-reality EdTech platforms for K-16 STEM and non-STEM learning.

**Responsibilities:** Lead Design Engineer, team builder, fundraiser, and all around CONSTRUKTS cheerleader.

**Core Funders:** National Science Foundation; Alberta Informatics Circle of Research Excellence; Rockefeller Foundation.

**Partners:** Wolfram Research.; Microsoft HoloLens® for Academic Research initiative; Highway1.io Hardware Incubator (a PCH International Company); Daedalus Product Design; & San Juan Software.

Head Department of Art + Design, College of Design, North Carolina State University (2018-2020).

The department supports undergraduate and graduate programs in Art and Design and Design Studies.

**Statistics:** 12 TT and 10 NTT faculty; 365 students; two undergraduate degrees; one graduate degree; \$1.8M Budget.

**Responsibilities:** Aligned department programs to meet its mission with curriculum revision. Revised student admissions and faculty recruitment policies. Provided student and faculty advising/mentoring. Improved management tools for course scheduling, monitoring faculty teaching and service load. Revised department-level promotion, tenure, and review requirements. Instituted generally accepted accounting principles for budget management.

Executive Director, [Center for Design Innovation \(CDI\)](#), University of North Carolina System, (2014-2017).

A laboratory, workshop and convening space, CDI programs spanned from research in design and performance studies to youth MAKER, community entrepreneurship, and K-16 teacher professional development workshops.

**Statistics:** Building Budget \$10M; Operating Budget < \$400K; Research Grants \$2.9M; Resource Fundraising \$150K.

**University Partners:** Winston-Salem State University, UNC School of the Arts, Forsyth Technical Community College, Wake Forest Innovation Quarter, and a range of youth and economic development community organizations.

**Responsibilities:** Oversaw the construction completion of the 24,000 sq. ft facility. Realigned mission, vision, and goals to strategically leverage the new facility and shifting priorities of the Center's partners. Launched a development plan to address budget deficit. Broadened community engagement with over 7000 visitors in year one. Increased student engagement with all partners and other NC universities and high schools through new curriculum and internships.

Director, Shapiro Center for Research & Collaboration, School of the Art Institute of Chicago, (2012-14).

Providing faculty professional development and institute support for corporate and City of Chicago partnerships.

**Statistics:** Founding benefactor Gift \$5M; Faculty grants awarded \$75K (approx.).

**Responsibilities:** Led the development of a school-wide intellectual property policy. Negotiated corporate sponsorship contracts. Designed and managed faculty grant program modeled after the NSF EAGER. Mentored faculty on research and grant writing.

Program Director, National Science Foundation, Arlington, Virginia, (2009-2012).

Computer & Information Science & Engineering, Information & Intelligent Systems, Human Centered Computing.

**Statistics (CreativeIT 2006-2012):** 649 Proposals Submitted; 120 Proposal Awarded; \$46M total program awards.

**Statistics (HCC – FY10):** \$35M total program awards.

**Responsibilities:**

- Program Lead: CreativeIT, a cross-directorate initiative that funded research projects integrating the Arts, Design, Humanities and STEM in areas of creative cognition, creativity support tools, and STEAM learning. Supported the program through inter-agency co-funding with programs in CISE, SBE, and EHR directorates.
- Program Co-Manager: Human Centered Computing.
- Cognizant Program Officer: Cyberlearning Transforming Education and Computer Research Infrastructure.
- Program Advisor: Small Business Innovative Research (SBIR) for Learning Technologies.
- Program Advisor: Research Experiences for Undergraduates (REU).
- Federal Committee Assignments:
  - NSF agency delegate to the Federal Council on the Arts and Humanities;
  - NSF CISE delegate to the Networking & Information Technology Research and Development Alliance (NITRD) - Social, Economic and Workforce Group.

Director, Advanced Research Technology Lab Banff New Media Institute (BNMI), Canada (2008-2009).

Concurrent Positions: Research Chair, Alberta Informatics Circle of Research Excellence & Visiting Professor, Univ. of Calgary, Computer Science.

**Statistics:** \$250K grant awarded to support strategic plan.

**Responsibilities:** Rebuilt the BNMI lab after multiple years dormancy. Hired an international cohort of post-baccalaureate research associates in design, fine arts, and computer engineering from Canada, Austria, Colombia, Hong Kong, and the United States. Mentored and collaborated on research projects in virtual and augmented reality, multimodal interfaces, physical computing, 3D rapid prototyping, and creative software application development.

Assistant Professor, Carnegie Mellon University, Pittsburgh, PA (2001-2008).

Held the first joint appointment between the School of Art, College of Fine Arts and the Human Computer Interaction Institute, School of Computer Science in the history of the university.

**Responsibilities:** Developed and taught undergraduate and graduate integrative curriculum and student research in technology-based creative practices and human computer interaction, computer programming, physical computing (MAKING); interaction design, graphic design, and critical theories of technology.

Design Researcher, Center for Technology in Learning, SRI International, Menlo Park, CA (1998-2001).

**Responsibilities:** Learning design for a range of research projects applying learner-centered pedagogy at the core of knowledge-based systems, application prototypes for middle and high school math and science learning. Designed and developed games to test natural language processing speech recognition research for the SRI Science, Technology, & Research (STAR) lab. (The precursor to Apple SIRI). Provided web design services for national and international networks including the Center for Innovative Learning Technologies (CILT) and the OECD PCAST assessment team.

IBM Almaden Research Center, San Jose, CA (1996-1998)

Concurrent Positions: Design Researcher, User-System Ergonomics Research Lab & Senior Project Manager, IBM Advanced Internet Technology & Java Marketing Group.

**Research Responsibilities:** Collaborated on augmented workspaces, near field wireless human-to-human/machine communication, cognitive tutors research. Helped to plan and document the *New Paradigms for Using Computers* colloquium. **Project Management Responsibilities:** Lead designer for web product that connected IBM computer science research and 3rd party developers. Led team collaboration with external design agency for brand development.

## POLICY ADVISING, BOARDS & COMMUNITY ENGAGEMENT

### INTERNATIONAL

Organizational Management Consultant, Habitat for Humanity Hungary, (2013).

Led a University of Michigan Ross School of Business Executive MBA team to evaluate and recommend business strategies for long-term value and growth for the people and communities served. This U.S. based non-profit organization had unique opportunities and challenges operating in Eastern Europe. Our work helped the organization's leadership apply business strategies to strengthen their value proposition, program offerings, financial wellness, and leveraging government and private markets for the development of under-utilized housing assets in the region.

Co-Author, Helsinki Agenda: strategy on international development of new media culture policy, (2004).

Co-author of declaration written and presented to the Finnish Ministry of Culture in dialogue with international experts in new media cultural policy from the 12th International Symposium on Electronic Art, International Federation of Arts Councils and Culture Agencies (IFACC), Arts Council of Finland, and m-cult Centre for new media culture.

Organizational Management Consultant, Network Interface for Cultural Exchange, RIXC Center for New Media Arts, Riga, Latvia, (2001).

Co-led a business development and networking workshop for leaders of digital media community organizations in Northern and Eastern Europe. Introduced the findings for best practices in organizational sustainability from my commissioned *New Media Arts | New Funding Models* Rockefeller report.

Keynote Panel, The Association of Independent Colleges of Art & Design (AICAD) Consortium, (2012).

Lead Discussant, Remaking Research: The Political Economies of Art and Design Research, a conversation with Sara Diamond, former President of Ontario College of Art & Design, Emily Carr University, Canada.

### NATIONAL

Advisory Board, Media-N: Journal of New Media Caucus, (current).

Founded in 2005, Media-N: Journal of the New Media Caucus is a peer-reviewed, open-access journal (ISSN 1942-017X) dedicated to scholarly research and critical dialogue on new media art.

Founding Member Board of Directors, Nation of Makers, (2017-current).

Non-profit organization that continues President Obama's *Nation of Makers White House initiative*. The organization supports the Maker movement across the United States and other countries in the Americas and the Caribbean with a community-of-practice network that aggregates resource opportunities for institutions and communities that value the role of MAKING for cultural expression, creativity, and economic development.

Accreditation Leader, College of Computing & Digital Media, School of Design, DePaul University (2020).

Led the external ten-year academic program review to evaluate: 1) intellectual currency of the academic program; 2) quality of faculty and scholarship; 3) curriculum reform; and 4) resource allocations.

Report *New Media Arts | New Funding Models*, Rockefeller Foundation Creativity & Culture Division, (2000).

Author and Researcher, for the commissioned report identifying patterns for sustainability in organizational structures and philanthropic, federal, and corporate funding mechanisms for New Media Arts practices in the United States.

National Academies of Sciences (NAS) Engagements, Washington, D.C.

- **Committee Member:** The Integration of the Humanities and Arts with Sciences, Engineering, and Medicine: Branches from the Same Tree, National Academies of Sciences, Engineering, & Medicine (2016-2018). Overseen by the Board on Higher Education and Workforce (BHEW), this committee of leaders in higher education and industry produced a consensus report examining evidence that educational programs that mutually integrate learning experiences in the arts, humanities, and STEM lead to improved educational and career outcomes.
- **Keynote Speaker:** Arthur M. Sackler Colloquia Creativity & Collaboration: Revisiting Cybernetic Serendipity, Washington, DC., (2018).
- **Invited Colloquium:** National Academies of Sciences Keck Futures Initiative (NAKFI), Art, Design, Science, Engineering & Medicine Frontier Collaborations, University of California, Irvine. (2015).
- **Curator:** Speculative data and the creative imaginary: Shared visions between art and technology, DC, (2007).

## National Science Foundation Workshops & Advisory Boards

- Advisor, *Art of Science Learning*, NSF Advanced Informal Learning Sciences initiative, (2012-2013).
- Funder | Advisor, NSF Workshop, Network for Science, Engineering, Art, and Design Research, (SEAD), (2013).
- Funder | Presenter, NSF Workshop, *Media Systems Workshop*, University of California, Santa Cruz, (2012).
- Funder | Presenter, NSF Workshop, *Planning the Network for Science, Engineering, Art, and Design (SEAD)*, Maryland Institute College of Art, Baltimore, Maryland, (2011).
- Funder | Presenter, NSF Workshop, *Network for Science, Engineering, Art, and Design (SEAD)*, Center for Design Innovation, University of North Carolina, Winston-Salem, (2011).
- Funder | Co-chair, NSF Workshop, *Establishing a Network of Excellence for Art + Science +Technology*, Rensselaer Polytechnic Institute, Troy, N.Y., (2011).
- Funder, NSF Workshop, *Bridging STEM to STEAM: Developing New Frameworks for Art-Science-Design Pedagogy*, Rhode Island School of Design, (2011).
- Funder | Co-chair, RE/search: art, science, technology: Joint meeting between the National Science Foundation and the National Endowment for the Arts, Arlington, Virginia, (2010).
- Presenter, NSF CreativeIT Investigators Meeting, *Designing Critical Creative Technologies to Support Collaboration in Public Spaces and Speculative Data and the Creative Imaginary Exhibition at the National Academies of Sciences*, Arlington, Virginia. (2009).
- Presenter, NSF IGERT Workshop, MAST09 The Future of Interactive Media: Workshop on Media Arts, Science and Technology, University of California at Santa Barbara, (2009).
- Presenter, NSF Workshop, *Success factors in creativity in research and education*, Arizona State Univ., (2008).
- Presenter, NSF Workshop *Creativity in Information Technology for Science, Engineering and Design, Resources and Models for creative digital media research*, Washington D.C., (2006).
- Presenter, NSF Workshop, *Creativity Support Tools*, Washington D.C., (2005).
- Advisory Board, NSF Advanced Informal Learning Sciences initiative, *Attention, Emotion, and Judgment: how do minds figure out what to do?* Exploratorium: Museum of Science, Art, and Human Perception, (2004-2008).

## COMMUNITY ENGAGEMENT

### Winston-Salem, North Carolina, (2014-2017)

- Planning Committee, Leadership Winston-Salem Program.
- Board of Directors, Winston-Salem Chamber of Commerce.
- Board of Directors, Downtown Winston-Salem Partnership.
- Advisory Board, Winston-Salem Chamber of Commerce Technology Council.
- Advisory Board, Wake Forest Innovation Quarter Entrepreneurial Ecosystem Group.
- Board, Winston-Salem Black Theater Ensemble Hall of Fame Committee.
- Community Advisor, Wake Forest Innovation Quarter Discussion on Domestic Violence.

### Chicago, Pittsburgh, Silicon Valley, New York City

- Advisory Board, Museum of Science, and Industry Black Creativity Group, (2011-2013).
- Board of Directors, GLENDa Community Volunteer Organization, (2004-2005).
- Mentor at-risk students, *Realizing Intellect through Self-Empowerment*, Atherton-Menlo High School, CA, (2000).
- Board of Directors, New York Media Alliance for independent film and video makers, (1992-1996).
- Mentor at-risk students, New York University Stay in School Partnership Mentoring Program, (1987-1990).

## FELLOWSHIPS & ARTISTS' RESIDENCIES

- Fellowship, Carnegie Mellon University Wimmer Teaching Fellows, (2006).
- Fellowship & Artist-in-residence, STUDIO for Creative Inquiry, Carnegie Mellon University, (2001-2004).
- Fellowship & Artist-in-residence, The MacDowell Colony, Peterborough, New Hampshire, (1993).
- Artist-in-residence, *Dance and the Camera*, Banff Centre for the Arts, Banff, Canada, (1992).
- Artist-in-residence, Experimental Television Center, Owego, New York, (1992).
- Artist-in-residence, Banff Centre for the Arts, Visual Arts and Media Program, Canada, (1990).
- Artist-in-residence, *Women Make Movies*, Artist-In-Residence Program, New York, New York, (1990).

## AWARDED GRANTS (Total \$1,196M)

### Organizational & Professional Development (\$152K)

2018	VF Corporation for the NC State Art2Wear Production	20 (thousands)
2016	Winston-Salem Foundation Grant	36
2015	DataMax Foundation.	44
2007	NSF EAGER: Exhibition-Speculative data and the creative imaginary.	48
2006	Fellowship, Carnegie Mellon University Wimmer Teaching Fellows.	4

### Technology Research (\$879K)

2015	Facebook Research Oculus Rift Equipment Grant.	20 (value)
2015	Microsoft HoloLens ® for Academic Research Equipment and Training.	50 (value)
2015	National Science Foundation (NSF) EAGER Cybermanufacturing.	150
2014	Highway1 Hardware Business Start-up Accelerator (Convertible Note).	45
2013	NSF Small Business Innovative Research (SBIR) Phase 1.	150
2008	Research Chair, Alberta Informatics Circle of Research Excellence.	250
2007	NSF EAGER: Critical creative technologies for public spaces.	198
2006	Carnegie Mellon University Berkman Faculty Research Fund.	8
2004	Carnegie Mellon University Berkman Faculty Research Fund.	8

### Arts Funding (\$165K)

2005	Pennsylvania Council on the Arts.	5
2001	Rockefeller Foundation Creativity & Culture Division.	95
1999	Rockefeller Foundation, Commissioned Report.	20
1996	New York State Council on the Arts, Media Arts.	15
1994	New York State Council on the Arts, Media Arts.	15
1992	New York State Council on the Arts, Media Arts.	15

## REVIEW PANELS & JURIES: CONFERENCE, EXHIBITION & GRANTS

- Portfolio Reviews, Graduate Design + Technology program, Parsons School of Design, (2020).
- Reviewer, National Science Foundation, CISE grant program, (2015).
- Reviewer, School of the Art Institute of Chicago Faculty EAGER Research Grant Program, (2012).
- Reviewer, National Science Foundation, CISE grant program, (2012).
- Reviewer, National Science Foundation, CISE grant program, (2009).
- Reviewer, National Science Foundation, CISE grant program, (2007 x2).
- Programming Committee, ACM Tangible and Embedded Interaction conference, (2007).
- Portfolio Reviews, Graduate Digital Media program, Rhode Island School of Design, (2005 & 2006).
- Reviewer, ACM Computer Human Interface Conference (CHI) papers, (2006).
- Reviewer, ACM SIGGRAPH conference course proposals, (2004).
- Reviewer, Digital Boundaries, ACM Multimedia Conference exhibition program, Columbia University, (2004).
- Reviewer, Film/Video/Multimedia Fellowship Rockefeller Foundation, (2000).
- Reviewer, Computer Supported Collaborative Learning Conference papers, Stanford University., (1999).
- Reviewer, ACM Computer Human Interface Conference (CHI) papers, (1998 & 1999).
- Nominator, Rockefeller Foundation Media Fellowship Awards, (1998 & 1999).
- Jury, SIGGRAAPH Digital Salon Exhibition, New York, New York, (1996).
- Jury, International. New Festival for Film and Video at the New York Joseph Papp Theater, (1993, 1994, 1995).
- Panel, FIX-IT Women in the Arts, College Arts Association Women's Caucus, (1993).
- Reviewer, Experimental Television Center Finishing Funds Grant Program, Owego, New York, (1992).

## PRESS COVERAGE & INTERVIEWS

### Microsoft HoloLens for Academic Research

- WinBeta, Microsoft hands out first HoloLens academic research grants.
- Digital Trends, Microsoft issues \$100,000 and two HoloLens kits to five different schools nationwide.
- Yahoo Finance, Microsoft issues \$100,000 and two HoloLens kits to five different schools nationwide.
- Endgadget, Microsoft will hand out \$500K to these five HoloLens grant winners.

## CONSTRUKTS, Inc.

- Disruptor Daily, Top 10 Internet of Things Companies Disrupting Education, Disruptor Daily Blog.
- GigaOm, A connected grill, smart textiles and the perfect keyboard make up Highway1's latest startup class.
- Techcrunch, Hardware Accelerator Highway1's Second Batch.

## Center for Design Innovation

- Cross Currents Art + Learning Conference. *Interview for the Center for Design Innovation*, Winston-Salem, NC.
- Center for Design Innovation Promotes Makerspaces, Creativity, Collaborations, Univ. of North Carolina Blog.
- Center for Design Innovation opens new building in Winston-Salem, in the Winston-Salem Journal.
- Learn: Center for Design Innovation: Innovation Engine Joins the Wake Forest Innovation Quarter Community, Inside Innovation Quarter, Fall, 2015 Issue.
- Center for Design Innovation Celebrates Opening of New Facility in Wake Forest Innovation Quarter.
- Thriving at intersection of art and technology: CDI's Director is creating a mosaic of design, innovation entrepreneurship, in Triad Business Journal, July 24-30, 2015.
- Center for Design Innovation awarded HoloLens developer kits from Microsoft, to add hologram augmented reality to its line of research, published in Yes Weekly.

## National Academies of Sciences: Speculative Data and the Creative Imaginary Exhibition

- *Art meets tech*, Washington Post, August 4, 2007, Page C02.
- Best bet art: Speculative data and the creative imaginary: shared visions between art and technology, WETA Television Broadcasting for Greater Washington D.C.

## Print, TV, & Radio Interviews

- Dail, Whitney. *Art & Science Talk with Pamela L. Jennings*, NEA Art Works Blog, (February 7, 2013).
- Mirapaul P. *An electronic artist and his body of work*, New York Times: Cybertimes interview (1997).
- *Art as signal: Inside the loop exhibition catalog*, Krannert Art Museum, University of Illinois, (1996).
- The Townsend Report. Cinema verite and the sisterhood: Black women filmmaker's television interview, New York City Cable Television, (1991).
- CBC Radio Canada. This Week from the Banff Center Public Radio interview, Alberta Canada, (1990).

## PUBLICATIONS & CONFERENCE PAPERS

### ART ESSAYS & REVIEWS

Welbon Y., Juhasz A., (eds). Jennings P., et.al. (contributors) (2018). *Sisters in the Life: A History of African American Media-Making*, Duke University Press.

Hicks, Cinqué (2011). *Circuit Jamming: Artists doing digital media now*, *The International Review of African American Art*, Vol. 23, no. 3, Hampton University Press.

Jennings P. (2010). "Critical Creative Technology and the Tangible Social Interfaces", in, "Shared Encounters: Content Sharing as Social Glue in Public Places," (eds.) K. Willis, G. Roussos, M. Struppek, K. Chorianopoulos, Springer Press.

Jennings, P. (2007). *Speculative data and the creative imaginary: Shared visions between art and technology*, *Issues in Science and Technology*, Vol. 23(3), National Academies of Sciences & University of Texas at Dallas Press.

Jennings, P. (2007). Exhibition Catalog, "Speculative Data and the Creative Imaginary: shared visions between Art and Technology." National Academies of Sciences, National Science Foundation & ACM Creativity & Cognition conf.

Farrington, L. (2005). *Creating their own image: The history of African American women artists*, chapter *Post Black Art and the New Millennium*, pp. 283-284, Oxford University Press.

Alejandro J., Jennings, P., Ortega H., Tribe, M. Yang, C. (2004). *Digital Boundaries: ACM Multimedia Interactive Art Program exhibition*, *Multimedia IEEE*, Vol. 11(44), pp. 8-9, October-December 2004.

Jennings, P. (2001). *Poetics of Engagement, Convergence: The Journal of Research into New Media Technologies: Intelligent Environments*, Vol.7(2), pp. 102-111.

Mohammad, E. (2001). *Race in digital space: Conceptualizing the media project*, *Art Journal*, College Arts Assoc. V60(3).

Jennings, P. (2000). *New Media Arts | New Funding Models*, commissioned report for the Creativity and Culture division of the Rockefeller Foundation.

Mohammad, E. (1999). *Black high-tech documents*, (eds.) Phyllis R. Klotman and Janet K. Cutler, *Struggles for representation: African American documentary film and video*, Indiana University Press.

Jennings (1999). *Book Cover, Struggles for Representation: African American Documentary Film and Video*, (eds.) Phyllis R. Klotman and Janet K. Cutler, Indiana University Press.

Mohammad, E. (1998). *1997 Flaherty Seminar, AfterImage Journal*, Winter Volume 1998.

Jennings, P., et.al (1998). *Evolution 2.0 generative arts CD ROM*, Inter-Society for Electronic Arts (ISEA98), Liverpool, United Kingdom.

Jennings, P. (1996). *Narrative structures for new media*, *Leonardo Journal for Art and Science*, vol. 29(5), pp. 345-350.

Jennings, P. (1995). *Interpretation on the electronic landscape: A conversation with Toni Dove*, *Felix: a Journal of Media Arts and Communication*, Vol. 2(1), pp.266-278.

Jennings, P. (1995). *Frontier wanderings: Writings and computer-generated images*, *Felix: a Journal of Media Arts and Communication*, Vol. 2(1), pp. 291-293.

Jennings, P. (1995). *Image reproduction from "Solitaire: dream journal" CD ROM*, *Leonardo Journal for Art and Science*, vol. 28(5), p. 457.

Jennings P. (1991). *Photographs in Voices Newsletter*, Harlem School of the Arts, Vol. 2, No. 1.

Jennings (1983). *GRASP: World Trade Tower Assignments Essay*, *American Photographer Magazine*.

Jennings (1982). *Best Photography of the Year Annual*, *Photographer's Forum*.

## EDUCATION RESEARCH & TECHNICAL PAPERS

Shneiderman, B. Fischer, G., Czerwinski, M. Resnick, M. and Myers, B. (with contributions from Jennings, P. et. al) (2006). Creativity support tools: Report from a National Science Foundation sponsored workshop, International Journal of Human-Computer Interaction, 20(2), pp. 61-777, Lawrence Erlbaum Associates.

Jennings, P. and Giaccardi, E. (2005) Creativity Support Tools and the New Media Arts Community: NSF creativity support tools workshop white paper, National Science Foundation, Washington D.C.

Penuel, Michalchik, Daniels, Jennings, Stites, Yarnall, Kim (2001). Community technology centers case study report: Learning with technology in six communities, report for the US Dept. of Education.

Penuel, Kim, Barron, Coleman, Gray, Jennings, Michalchik, Shear (2000). Promising practices and organizational challenges in community technology centers, SRI International, Menlo Park, California.

Jennings P. (1999). Field Survey Research in Augmented Reality: the state of the art.

Hoffman F., Jennings P., Vogt F. (1998). Digital Coach: A Computerized Exercise System, IBM Almaden Research.

## CONFERENCE PAPERS

Jennings P. (2020). Grace Hopper Conference PitchER competition, virtual.

Jennings P. (2019). Building a Creative Computational Pedagogy from Bauhausian Foundations, New Media Caucus of the College Art Association, University of Michigan, Ann Arbor.

Jennings P., McGee J (2017). CONSTRUKTS Toolkit: Mixed Reality Construction Kit Interactive Demo, 2017 Wolfram Research Conference, Urbana-Champaign, Illinois.

Jennings, P., Castro Martinez, D. (2011). CONSTRUKTS Toolkit: 802.15.4 Wireless Construction Kit Interactive Demo, 2nd International Conference on Computation and Creativity, Mexico City.

Jennings, P., Castro Martinez, D. (2010). "CONSTRUKT/VizM: a framework for rendering tangible constructions", in SIGRADI 2010: XIV Congress of Iberoamerican Society of Digital Graphics, University of Los Andes, Colombia.

Jennings. P. (2010). CONSTRUKTS toolkit system architecture, Sketching in Hardware Colloquium, Art Centre College of Design, Pasadena, California.

Kirton, T., Jennings P., Ogawa, H. (2010). TextDraw: A prototype for gestural typesetting, ACM Tangible Embedded and Embodied Interaction, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Fischer, G., Jennings P., Maher, M., Resnick, M, Schneiderman, B., (2009). Creativity challenges and opportunities in social computing panel, ACM Computer Human Interaction Conference, Boston, MA.

Jennings. P. (2008). Prototyping for 802.15.4 wireless applications, Sketching in Hardware Colloquium, Rhode Island School of Design, Providence, Rhode Island.

Jennings, P. (2008). CONSTRUKTS, ACM Computer Human Interaction Interactivity program, Florence, Italy.

Jennings, P. (2008). Visual vectors and public interfacing, ACM Computer Human Interaction Urban Mixed Realities Workshop, Florence, Italy.

Jennings, P. (2007). Speculative data and the creative imaginary: Shared innovative visions between art and technology, ACM Creativity and Cognition Conference, Washington D.C.

Jennings, P. (2007). Engagement in the public sphere using tangible social interfaces, Shared encounters workshop ACM CHI conference, San Jose, California.

Jennings, P. (2007). Interdisciplinary methods for the design of tangible social interfaces, Tangible user interface in context and theory workshop ACM CHI conference, San Jose, California.



- Jennings, P. (2007). Interactive Technologies for the Public Sphere: towards a theory of critical creative technology, Planetary Collegiums “Review of the future” symposium, Montreal, Canada.
- Jennings, P. (2005). Tangible social interfaces: Critical theory, boundary objects and design methods, 2005 ACM Creativity and Cognition Conference, pp. 176-186, University of London Goldsmith.
- Jennings, P. (2005). Constructed Narratives, a tangible social interface, 2005 ACM Creativity and Cognition Conference, pp. 263-266, University of London Goldsmith.
- Jennings, P. (2005). Distributed Minds | Negotiated Spaces: Framework for designing tangible social interfaces for public dialogue, Human Computer Interaction Consortium, Winterpark, Colorado.
- Jennings, P. (2004). Constructed Narrative, Intersubjectivity and Interaction panel ISEA2004, Helsinki, Finland.
- Jennings, P., Jaime A. (2004). ACM multimedia interactive art program: An introduction to the Digital Boundaries exhibition, ACM International Multimedia Conference, pp. 979-980, Columbia Univ. New York City, ACM Press.
- Jennings, P. (2004). Crossing boundaries: Fostering interdisciplinary arts practice and human computer interaction research teams, Cross-dressing and border crossing: Exploring experience methods across disciplines workshop, ACM Computer Human Interaction conference, Vienna, Austria.
- Jennings, P. (2004). Teaching design to technologist; Teaching technology to designers and artists, Design and HCI Workshop, ACM CHI 2004 conference, Vienna, Austria.
- Jennings, P. (2004). Distributed Minds | Negotiated Spaces: Social interfaces for public spaces, Reflective HCI: Towards a critical technical practice workshop, ACM CHI 2004, Vienna, Austria.
- Jennings P., Scupelli P. (2003). Constructed Narratives: Using play to breakdown social barriers, Interactive Experience Forum Interact 2003 conference, Zurich, Switzerland.
- Jennings P. (2002). Social networks and social interfacing Consciousness Reframed: Fourth International CAiiA-STAR Research Conference, Curtin University of Technology, Perth, Australia.
- Anders P, Jennings P, Little G, Lichty P. (2000). Interrogation of Space in Three Acts: a Panel on Space, Architecture, and Electronic Arts, ISEA2000, Paris, France.
- Jennings P. (2000). Distributed Minds/Negotiated Spaces, Consciousness Reframed, Univ. of Wales College Newport.
- Jennings P. (2000). Distributed Minds/Negotiated Spaces: Framework for Mapping Interaction Patterns in an Augmented Environment, Towards a Science of Consciousness Conference poster, University of Arizona.
- Penuel, W. R., Coleman, E. B., Means, B., Fenton, J., Jennings, P., Murray, F. G., & Chung, M. (2000). Measuring students’ environmental awareness and skill in data analysis and interpretation: Designing Web-based assessment for the GLOBE program, AERA Conference, New Orleans, Louisiana.
- Jennings P. (1999). ART-I-TRONICS: Designing technologies for the post-structural age, International Workshop on Physicality and Tangibility in Interaction: Towards New Paradigms for Interaction Beyond the Desktop, I3net Annual Conference: New Visions of Information Technology Products in Everyday Life, Universita degli Studi di Siena, Italy; (eds.) D. Roy and M. Panayi, Southern Danish University.
- Jennings P. (1999). Building Blocks for Constructing Social Narratives: a Framework for Augmenting Physical Space with Distributed Intelligence, I3net Annual Conference: Community of the Future, (eds.) M. Caenepeel, D. Benyon, D. Smith, Human Communication Research Centre, Edinburgh.
- Jennings P. (1999). Smart art: The fusion of art and advanced computer science, Invencao: Thinking the Next Millennium, Sao Paulo, Brazil.
- Jennings P. (1999). ART-I-TRONICS: Designing technologies for the post-structural age, CADE99: Computers in Art and Design Education conference, University of Teesdale, Middlesbrough, England.

Jennings P. (1998) the book of ruins and desire Interactive Sculpture, Evolution 2.0 generative arts panel, ISEA98, UK.

Jennings P. (1997). Narrative structures for new media, Hypermedia and technology panel, ISEA97, Chicago.

## KEYNOTES, PANELS & CHAIRS

### KEYNOTE PRESENTATIONS

i-DAT Lecture, Igniting Change: asking ‘what if’ and ‘why not’ from the margins, University of Plymouth, 2021.

Media Art & Technology Seminar, Igniting Change: asking ‘what if’ and ‘why not’ from the margins, University of California, Santa Barbara, (2020).

College Art Association New Media Caucus Symposium: Border Control, plenary session, Building a Creative Computational Pedagogy from Bauhaus Foundations and artist talk, Speaks Volumes, Univ. of Michigan, (2019).

Dialog 2.0: Social Movements, Online Communication & Transformation Symposium, Communication Changes: Evolution, Update, & Experience panel, Department of Communication NC State, (2019).

Arthur M. Sackler Colloquia of the National Academies of Sciences: Creativity & Collaboration: Revisiting Cybernetic Serendipity, NAS committee on Integrative Learning Panel, Washington, DC, (2018).

Humanities & STEM at Duke: A Conversation on Teaching and Learning, Duke University NextEd Festival, Durham, North Carolina, (2018).

Forging Integrated Expertise in Graduate Education Symposium: Diverse Experiences, Workforce Needs, and the Way Forward, National Academies of Sciences Report Findings, Genetic Engineering & Society Center, North Carolina State University, (2018).

Duke University, Dept. of Art, Art History and Visual Studies, Lecture and Course Portfolio Critique, (2016).

Center for Design Innovation: DRIVE: Developing Research Center for Advanced Technology, Creativity and Design for the University of North Carolina System. (multiple keynotes 2014 - 2016).

Indiana University, School of Informatics and Computing, Keynote, Making Subjectivities: HCI formation of the User, Bloomington, Indiana, (2014).

Iowa State University, Human Computer Interaction Program Keynote, Emerging Technologies, (2014).

Maryland Institute College of Art, Lecture, Baltimore, Maryland, (2013).

National Academies of Science Art and Science Rendezvous, Lecture, Washington D.C., (2011).

School of the Art Institute of Chicago Lecture, Research at an Arts School, Chicago, Illinois, (2011).

Virginia Tech, Lecture, Learning in the Creative Sandbox, Blacksburg, Virginia, (2011).

Rensselaer Polytechnic Institute, EMPAC, Cybernetics: art, design & mathematics Conference, Presentation, CONSTRUKTS Toolkit, Troy, New York, (2010).

Banff New Media Institute, Symposium, Grounding open-source hardware, Canada, (2009).

Newcastle University, Culture Lab Symposium, Creative digital media research practice: Production through exhibition, United Kingdom, (2009).

Dartmouth College, Hanover, New Hampshire, (2008).

Banff New Media Institute, Alberta, Canada, (2007).

Arizona State University, Arts, Media and Engineering, Phoenix, Arizona. (2007).

Georgia Institute of Technology, Digital Media Program, Atlanta, Georgia, (2007).

Southern Graphics Council, Lecture, Points, Plots and ploys, Social Agency of Printmaking in Public Spaces, Kansas City, Missouri, (2007).

Simon Fraser University, School of Interactive Art and Technology, Vancouver, Canada, (2006).

Carnegie Mellon University, University College of Fine Arts Lecture, Pittsburgh, Pennsylvania, (2006).

Spelman College, Lecture, Reel Women Artist Lecture Series, Atlanta, Georgia, (2006).

Carnegie Mellon University, Lecture, Shape grammars and folded spaces, Computational Design Laboratory Lecture Series, School of Architecture, Pittsburgh, Pennsylvania, (2005).

CAIIA-STAR Hochschule für Gestaltung und Kunst, Lecture, Nomadic transitions: Dialogue on art and technology symposium, Zurich Switzerland, (2003).

Syracuse University, Media Arts Program, Syracuse, New York, (2002).

Curtin University of Technology, Lecture, Biennial of Electronic Arts, Perth, Australia, (2002).

CAIIA-STAR at University of Arizona, Lecture, NeuroNetworks, Tucson, Arizona, (2002).

CAIIA-STAR at Galleria Civica di Arte Moderna e Contemporanea, Lecture, E-NAISSANCE: New configurations of mind, body and space, Turin, Italy, (2001).

Arts Alliance Laboratory, Lecture, CriT 1.4, San Francisco, California, (2001).

CAIIA-STAR at Ecole National Supérieure des Beaux-Arts Lecture, Art in the Post-Biological Era Symposium, Paris, France, (2000).

Banff New Media Institute, Lecture, Living Architectures Summit, Banff, Canada, (2000).

CAIIA-STAR at Digital Arts Symposium University of Arizona, Lecture, Distributed Minds/Negotiated Spaces: A framework for mapping discursive interaction patterns in an augmented environment, Tucson, Arizona, (2000).

CAIIA-STAR at University of Wales College Newport, Lecture, Distributed Minds/Negotiated Spaces: A framework for mapping discursive interaction patterns in an augmented environment, Wales, UK, (1999).

Banff New Media Institute, Lecture, ART-I-TRONICS: Designing technologies for the post-structural age, Navigating Intelligence Summit, Banff, Alberta, (1999).

CAIIA-STAR at Universidade Federal do Rio de Janeiro, Lecture, Smart Art: The fusion of art and advanced computer science, Rio de Janeiro, Brazil, (1999).

CAIIA-STAR at C.Y.P.R.E.S. (Centre Interculturel de Pratiques Recherches et Echanges Transdisciplinaires), Lecture, ART-I-TRONICS: Designing technologies for the post-structural age, Marseilles, France and Le Grenier du Sol, Avignon, France, (1999).

Rensselaer Polytechnic Institute, Lecture, Retrospective, iEAR Studio, Troy, New York, (1995).

Rutgers University, Mason Gross School of Arts, New Brunswick, New Jersey, (1992).

## CONFERENCE PANELS

Society for Cinema and Media Studies, Sisters in the Life panel, Toronto, Canada, (2018).

University of Michigan, Alliance for the Arts in Research Universities, Keynote, Research Platforms for Arts and Sciences, Ann Arbor, Michigan, (2017).

National Academies of Sciences, The Faculty and Practitioner Perspective on Integration of Arts, Humanities, and STEMM, Panel Moderator, Arizona State University, (2017).

Venture Café - Entrepreneurship from the local to the global, Winston-Salem, North Carolina, (2017).

Wake Forest University, Center for Innovation, Creativity & Entrepreneurship, Course Capstone Review, (2016).

SXSW (South by South West), Panel, Elevate the Game, Blacks in Technology, Austin, Texas, 2013).

Ford Foundation Fellows Conference Panel, Working across disciplines: Crafting interdisciplinary projects, Newport Beach, California, (2010).

SIGGRAPH '10, Panel, Grand challenges in education, Los Angeles, California, (2010).

Museum of Modern Art Gramercy Theater, Digital Salon's International Digital Art and Culture Symposium, Panel, The artist as programmer, New York, New York, (2003).

Aspen Institute Experts Meeting: Interpreting culture and communication technologies: Potentials for new approaches, Aspen, Colorado, (2002).

National Association for Media Arts and Culture (NAMAC), Panel, Agents of Change Artists and Technology, Pull focus, pushing forward conference, Seattle, Washington, (2002).

Sony Wonder Technology Lab, Panel, Race in digital space, New York, New York, (2002).

SRI International, Panel, Redefining reach: Community models for art and technology, Art frontiers: Partnerships in Art and Industry Conference, Menlo Park, California, (2000).

IBM Palisades Conference Center, Panel, Creative Caveat, New York State Governor's Conference on Art and Technology, Palisades, New York, (1998).

National Museum of Women in the Arts, Panel, New forms of interactivity, Women and the Art of Multimedia conference, Washington D.C., (1997).

Swarthmore College, Lecture, Retrospective, 8th Annual Sager Symposium, Swarthmore, PA, (1996).

Women Make Movies, Panel, Emerging producers & directors' workshop, NY, New York, (1992).

### CONFERENCE WORKSHOP CHAIR

Co-chair, STUDIO program, Association for Computing Machinery (ACM) Tangible Embedded and Embodied Interfaces Conference, Massachusetts Institute of Technology, Cambridge, Massachusetts, (2010).

Co-chair, ACM Computer Human Interaction Conference Workshop, About Face: Interface: Creative engagement in new media arts and human computer interaction, Montreal, (2006).

Co-chair, ACM Multimedia Conference Interactive Art Exhibition, Columbia University, NYC, (2004).

### EXHIBITIONS

School of the Art Institute of Chicago, ArtWorks6, Staff Exhibition, (2013).

Telus Science World, ACM Multimedia Conference. Exhibition, Border Zones, Vancouver, Canada, (2008).

Spelman College Museum of Fine Arts Cinema Remixed and Reloaded: Black women artists and the moving image since 1970, Atlanta Georgia, (2008).

August Wilson African American Cultural Center. Future Tenant Gallery, Power, Pittsburgh, Pennsylvania, (2007).

National Academies of Sciences Rotunda Gallery, Speculative data and the creative imaginary: Shared visions between art

and technology, Washington D.C., (2007).

707 Contemporary Gallery, Crossing Lines: Art in an age of all, group exhibit with Pamela L. Jennings, Diane Samuels, Tony Oursler, and Chan Schatz, Santa Fe, New Mexico, (2006).

Fe Gallery Summer Solo Show, Extant Entities, Pittsburgh, Pennsylvania, (2006).

Parsons Design, Creating Their Own Image: A history of African American. Women Artists, New York City, (2005).

Kiasma Museum of Contemporary Art, Koodattu Kokemus (Wireless Experience), Inter- Society for Electronic Arts (ISEA) conference, Helsinki, Finland, (2004).

Studio Museum of Harlem, Authenticating Digital Art: Expression and cultural hybridity, New York, NY, (2002).

MIT List Center for the Visual Arts, Authenticating Digital Art: Expression and Cultural Hybridity, Race and Digital Space Conference, Cambridge, Massachusetts, (2001).

Carleton University, Art ex Machina Computer Art: 1970's-1999, Ottawa, Canada, (1999).

IBM Palisades Conference Center, NY State Governor's Conference on Art & Technology, Palisades, NY, (1998).

Cornell University, Flaherty Workshop on Independent Film, Ithaca, New York, (1997).

Goethe-Institut, Women and the art of multimedia, Washington D.C., (1997).

Rotunda Gallery, Luminous Bodies, Brooklyn, New York, (1996).

SIGGRAPH New York Digital Salon. School of Visual Arts, New York, NY, (1995 & 1996).

Joseph Papp Theater, International New Festival for Film and Video, New York, NY, (1991, 1993, & 1996).

Centre de Cultura Contemporania de Barcelona, 3rd Mostra de Video Independent, Spain, (1996).

School of Visual Arts SOHO Gallery, Magic\*Data, New York., New York, (1996).

Krannert Art Museum, University. of Illinois at Urbana-Champaign, Art as Signal: Inside the loop, (1995).

Colgate University, Multiple Mediations, Hamilton, New York, (1995).

Lincoln Center New York Film and Video Festival, New York., NY, (1995).

Anthology Film Archives, Mix Experimental Film Festival, New York., NY, (1994).

494 Gallery, Break Through: Stonewalls, New York, New York, (1994).

...those fluttering objects of desire installation collaboration produced by Shu Lea Cheang.

Whitney Biennial, ...those fluttering objects of desire, New York, New York, (1993).

Exit Art Gallery, ...those fluttering objects of desire, New York, NY, (1992).

Museum of Modern Art & American Federation of Arts, Video Art: The first 25 years, New York, NY, (1993).

Museum of Modern Art, Video Viewpoints, New York, New York, (1993).

Video Etc..., Montage 93 International Festival of the Image, Rochester, New York, (1993).

Artspace, Video Review, Wellington, New Zealand, (1993).

Herstory Archives, Imaginaries, New York., NY, (1993).

Outfest Film Festival, Los Angeles, California, (1992).

Frameline International Film Festival, San Francisco, California, (1992).

Randolf Street Gallery, In the Outdoor, Chicago, Illinois, (1992).

Black Filmworks Festival, Oakland, California, (1992).

Downtown Community Television, Look Out Festival, New York, NY, (1992).

Montreal International Festival of Women's Films and Videos, Silence Elles Tournent, (1991).

7th Annual International Women's Day Video Festival, Boston, Massachusetts, (1991).

St. Lawrence University, St. Lawrence Festival of the Arts - Out Art, Canton, New York, (1991).

Banff Centre for the Arts, Residency Show, Banff, Canada, (1990).

New York University, Media Alliance Conference, New York, NY, (1990).

Society of Photographic Education Exhibit, FIX -IT: The state of women in photography education, presented at Rochester Institute of Technology; Univ. of Minnesota; Univ. of California, Santa Cruz; and Rutgers Univ, (1989).  
Soho Photography Gallery. New York, NY, (1987).

Allen Art Museum Conservation Association Hall. Solo Show, Oberlin College, Oberlin, Ohio, (1986).