Matthew Lewis

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The Ohio State University
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Columbus, Ohio, 43210

Education

Ph.D. Computer and Information Science, The Ohio State University, 2001
M.S. Computer and Information Science, The Ohio State University, 1993
B.S.E. Computer Science Engineering, University of Pennsylvania, 1991
B.A. Philosophy, University of Pennsylvania, 1991

Academic Appointments

2024 – Present	Associate Professor The Ohio State University Department of Design Advanced Computing Center for the Arts and Design (ACCAD) Translational Data Analytics Institute (TDAI) Core Faculty
2017 – 2024	Assistant Professor The Ohio State University Department of Design Advanced Computing Center for the Arts and Design (ACCAD) Translational Data Analytics Institute (TDAI) Core Faculty

Other Appointments

1993 – 2017	Graphics Research Specialist The Ohio State University Advanced Computing Center for the Arts and Design (ACCAD)

Teaching

Current:

ACCAD 7104: Procedural Animation (2014, 2016, 2022 – 2024)
Design 6400: Graduate Design Studio (2017 – 2024)
Design 4650/5650: Collaborative Design Studio (2019 – 2025)
ACCAD 5102: Programming Concepts and Applications for Artists and Designers (2017 – 2025)

Previous:

ACCAD 4101/7101: Performance and Installation Technologies (2013 – 2018) w/Alex Oliszewski in 2013
Design 797: Designing Responsive Historical Environments (2011) w/J.Haase (Design) & D.Staley (History)
ARTSCOL 763: Procedural Animation (2009 – 2010, 2012)
ARTSCOL 694AZ/758: Performance and Installation Technologies (2004 – 2012)
Dance 692: New Ground (2006) with Norah Zuniga Shaw (Dance/ACCAD)
ARTSCOL 755: Advanced Digital Cinematography (2002 – 2003, 2005 – 2006)
ARTSCOL 762: Virtual Environments (1998 – 2002) with Peter Gerstmann 2002
Art 894.12: Digital Lighting (2000)
Art 752: Computer Animation (1997)
Art 894Z12: Procedural Animation (1994 – 1997)

Graduate Student supervision

Doctoral students (dissertation advisor)

Brent Haley. (Co-Advised, with Prof. Raghu Machiraju), Computer Science and Engineering. “A Pipeline for the Creation, Compression, and Display of Streamable 3D Motion Capture Based Skeletal Animation Data”, graduated: 2011.

Doctoral students (dissertation committee member)

Brian Strzempkowski, Educational Policy, Title: “An Exploration of the Policy Implications of Incorporating Virtual Reality Flight Simulation into a Collegiate Flight Education Curriculum”, graduated: 2025.

Jessica Pissini, Department of Arts Administration, Education and Policy. “Embodied by Design: Reconnecting Our Mind and Body Through Virtual Reality”, graduated: 2020.

Paul Kim, Computer Science and Engineering. “Intelligent Maze Generation”, graduated: 2019.

Di Cao, Computer Science and Engineering. “Physically Based Simulation of Various Fabric with Multi-Level Modeling”, graduated: 2017.

J Eisenmann, Computer Science and Engineering. “Interactive Evolutionary Design with Region-of-Interest Selection for Spatiotemporal Ideation & Generation”, graduated: 2014.

Benjamin Schroeder, Computer Science and Engineering. “Computer Languages for Physically Based Sound Synthesis”, left program: 2014.

Amod Damle, Integrated Systems Engineering. “Influence of Design Tools on Design Problem Solving”, graduated: 2008.

Katherine Whitlock, Department of Theatre. “Theatre and the Video Game: Beauty and the Beast”, graduated: 2004.

MFA students (thesis advisor):

Amarth Chen, Thesis Title: “A Framework for Imaging System Simulation”, Department of Design, expected graduation: 2026.

Juan Diego Torres Brenes LaRoche, Thesis Title: “Themed Entertainment and Immersive Design Methods: Developing a Framework for Improving the Sense of Presence in Immersive Experiences”, Department of Design, graduated: 2024.

Mila Gajić, Thesis Title: “Affordances of Immersive Virtual Environments as a Medium for Representing an Inquiry Process”, Department of Design, graduated: 2024.

Heran Zhao, Thesis Title: “Invigorate a Vital Part of the Digital World: Designing Play Activities with Digital Animals”, Department of Design, graduated: 2022.

Jiaxing Gao, Thesis Title: “Prevent Childhood Trauma: Using a Psychological Horror Game to Arouse Empathy”, Department of Design, graduated: 2022.

MFA students (thesis committee participation):

Priyanka Chowdhury, MFA, Department of Design, Thesis Title: “Urban Technology and Perception of Safety: A Co-Design Exploration among gender identities in University District.”, graduated: 2025.

James Paskett, MFA, Department of Design, Thesis Title: “Design for Intelligence: Design Research and Development of Next Generation AI Capabilities”, graduated: 2025.

John Brett, MS, School of Environment and Natural Resources, Thesis Title: “Comparison of LiDAR, Allometry, and Photogrammetry Structural Measurements of Northern Red Oaks in Columbus, Ohio”, graduated: 2023.

Hsi-Yuan Chu, MFA, Department of Design, Thesis Title: “Designing Diegetic Cues to Guide Users’ Attention toward Interactive Components in a VR Experience”, graduated: 2023.

Sara Caudill, MFA, Department of Design, Thesis Title: “Greater Heights: An Intern’s Field Guide to Design Storytelling at NASA”, graduated: 2021.

Yiting Wang, MFA, Department of Design, Thesis Title: “Co-designing with Older Adults for Voice Assistive Technology”, graduated: 2020.

Sana Behnam, MFA, Department of Design, Thesis Title: “Designing for Breast Cancer Survivors’ Empowerment: Integration of Technology for Self-management Promotion through Participatory Design”, graduated: 2020.

Taylor Olsen, MFA, Department of Design, Thesis Title: “Animation as an Instrument: Designing a *Visual-Audioizer* Prototype”, graduated: 2020.

Kevin Bruggeman, MFA, Department of Design, Thesis Title: “Creating Biofeedback-Based Virtual Reality Applications to Enhance Coherence of Mindfulness Practice”, graduated: 2019.

Austin Stewart, MFA, Department of Art, Thesis Title: “The Militant Gardener”, graduated: 2012.

Madhavi Marigold Muppala, MS, Computer Science and Engineering, Thesis Title: “Personality and Posture”, graduated: 2008**.**

Domin Lee, MS, Computer Science and Engineering, Thesis Title: “Using Global Objectives to Control Behaviors in Crowds”, graduated: 2007.

Cara Ann Christeson, MFA, Department of Design, Thesis Title: “Combining Methodologies for Generating Innovative Solutions in 3D Animated Character Setups”, graduated: 2007.

Ran Emanuel Berdichesky, MFA, Department of Art, Thesis Title: “My Little Coffee Shop”, graduated: 2007.

Joseph Leslie Harmon, MFA, Department of Design, Thesis Title: “The Real Time Art Production Pipeline: An Examination of Modeling for Surfacing as Used by Professionals from Electronic Arts Tiburon”, graduated: 2006.

Kap-Dae Lim, MFA, Department of Design, Thesis Title: “Increasing Art Museums’ Revenue Through Virtual Exhibitions”, graduated: 2005.

Scott Shelton, MFA, Department of Art, Thesis Title: “Personal Data”, graduated: 2005.

Carrie R. Wilson, MFA, Department of Design, Thesis Title: “Sleep Deprivation Chamber: Developing a Pre-production Process for Digital Performance Design”, graduated: 2004.

Selim Gencoglu, MFA, Department of Design, Thesis Title: “Design Exploration of Wireless and Wearable Communication Devices Applied Toward a Scenario-based Search and Rescue Situation for Firefighters”, graduated: 2004.

Timothy Peterson Daoust, MS, Computer and Information Science, Thesis Title: “A System for Performance and Key Frame Animation Using Virtual Reality and Motion Capture”, graduated: 2004.

Marlon Barrios Solano, MFA, Department of Dance, Thesis Title: “Towards an Aesthetics of Cognitive Systems: a Post-humanist Perspective for Cognitive Studies of Improvisational Dance within Dynamic Real-time Multimedia Environments”, graduated: 2004.

Brent Mark Watkins, MS, Computer and Information Science, Thesis Title: “Automatic Creation of Real-time Muscle Systems”, graduated: 2004.

MFA students (non-thesis committee participation):

Muhammad F. Chen Yang, MFA, Department of Design, Project Title: “Exploring the User Experience of Virtual Reality in Design Research and Education”, graduated: 2021

Rashana Smith, MFA, Department of Dance, Thesis Title: “The Temporality of Installation Performance”, graduated: 2012.

Julie Cruse, MFA, Department of Dance, Thesis Title: “The VICKI Project: Diversity and Sustainability in Dance & Society”, graduated: 2010.

Lise Worthen-Chaudhari, MFA, Department of Dance, Thesis Title: “Scattering of Lights”, graduated: 2010.

Melissa Quintanilha, MFA, Department of Design, Project Title: “BuddyWall”, graduated: 2008.

Brian C. Sheppard, MFA, Department of Design, Project Title: “Animated Visual Explanations as Aids to Teaching Perspective Drawing Theory”, graduated: 2008.

Michael G. Altman, MFA, Department of Design, Project Title: “The Film Look: Achieving a Classical 1950s Cinematic Look for 3D Rendered Imagery”, graduated: 2004.

Undergraduate Research Mentoring

Nathan Bourgeois, Computer Science Engineering, visualizing wireless signals using AR, 2022-2023

Skylar Wurster, Computer Science Engineering, AR frameworks, mobile apps, locative media, 2017

Ziyu Li, Computer Science Engineering, AR frameworks, mobile apps, 3D graphics, 2015

Extension and Continuing Education Instruction

MA Design, Columbus OH (and online to Cincinnati office), Invited guest presentation: “Emerging trends in AI as they relate to design”, 2023.

Graduate Student Mentoring

Liz Hejny, Department of Arts Administration, Education and Policy, 2025 – 2026

Longyue Qin, Department of Design, 2024 – 2025

Pinjia Chen, Department of Design, 2024 – 2025

Josh Antolovic, Department of Design, 2023 – 2024

Guoping (Amarth) Chen, Department of Design, 2023 – 2024

Mila Gajic, Department of Design, 2021 – 2022

Juan Diego Torres Brenes LaRoche, Department of Design, 2021 – 2022

Leigh Mordant, Department of Design, 2021

Hsi-Yuan Chu, Department of Design, 2020 – 2021

Kenneth Olsen, Department of Design, 2019 – 2021

Jiaxing Gao, Department of Design, 2019 – 2020

Muhammad F. Chen Yang, Department of Design, 2018 – 2019

Luiza Souza Correa, Department of Design, 2018 – 2019

Victoria Campbell, Department of Design, 2017 – 2018

Research

Chapters in Edited Books

Lewis, M. (2008). Evolutionary visual art and design. In J. Romero & P. Machado (Eds.), *The art of artificial evolution: A handbook on evolutionary art and music* (pp. 3–37). Springer.

Lewis, M. (2006). Randomness, chance, process: The infinity series. In J. Glowski (Ed.), *Charles A. Csuri beyond boundaries, 1963—Present*. The Ohio State University College of Arts.

Lewis, M (2001). Overview of virtual human representation. In Parent, R. *Computer animation algorithms and techniques*, Morgan Kaufmann. (draft for section “Overview of Virtual Human Representation” in the chapter on modeling and animating humans).

Technical Reports

Lewis, M., & Parent, R. (2001). *A comparison of parametric contour spaces for interactive genetic algorithms* [White paper]. Advanced Computing Center for the Arts and Design, The Ohio State University. OSU-ACCAD-6/01-TR1

Lewis, M. (2000). *An implicit surface prototype for evolving human figure geometry* [White paper]. Advanced Computing Center for the Arts and Design, The Ohio State University. OSU-ACCAD- 11/00-TR2

Lewis, M. (2000). *Evolving human figure geometry* [White paper]. Advanced Computing Center for the Arts and Design, The Ohio State University. OSU-ACCAD-5/00-TR1

Lewis, M. (1997). *Sanbaso: A web-based VRML humanoid animation tool* [White paper]. Advanced Computing Center for the Arts and Design, The Ohio State University. OSU-ACCAD-10/97-TR1

Peer-Reviewed Journal Articles

Lewis, M. (2024). Silent Films and Augmented Reality. *The Journal of e-Media Studies,* 7 (1), doi: 10.1349/PS1.1938-6060.A.496

Eisenmann, J.; Lewis, M.; Parent, R. (2016). Spatiotemporal ideation & generation with interactive evolutionary design. *Leonardo, 49* (3), 246-250. doi:10.1162/LEON_a_01102

Zuniga Shaw, N.; Lewis, M. (2006). Inflecting Particles: Locating generative indexes for performance in the interstices of dance and computer science. *Performance Research, 11*, 75-86. doi:10.1080/13528160600810657

Lewis, M.; Ruston, K. (2005). Aesthetic geometry evolution in a generic interactive evolutionary design framework. *New Generation Computing, 23* (2), 171-179. doi:10.1007/BF03037493

Abstract and Short Entries

Palazzi, M., Shaw, N. Z., Forsythe, W., Lewis, M., Albright, B., Andereck, M., Bhatawadekar, S., Ban, H., Calhoun, A., Drozd, J., Fry, J., Quintanilha, M., Reed, A., Schroeder, B., Skove, L., Thorndike, A., Twohig, M., Ahlqvist, O., Chan, P., Noe, A. (2009). Synchronous Objects for One Flat Thing, reproduced. *ACM SIGGRAPH 2009 Art Gallery*.

Lewis, M. (2003). Bowen virtual theater. *ACM SIGGRAPH 2003 Web Graphics*.

Papers in Proceedings

Lewis, M. (2024) Learning Complex System Strategies in Design Technology Studios, *AMPS Proceedings Series 33.2, Applying Education in a Complex World*, Sheridan College, Toronto, Canada.

Lewis, M. (2023). Experiencing layered contexts between virtual and physical spaces, *AMPS Proceedings Series 32, Representing Pasts – Visioning Futures*, Queen's University Belfast, Cape Peninsula University of Technology, National University of Singapore.

Lewis, M. (2023). Emerging technology collaborative design studio, *AMPS Proceedings Series 31, Transformative Teaching: Focus on Pedagogy*, Florida State University, University of Dundee, Zayed University.

Lewis, M. (2021). Data spaces in new places. *Human-data interaction workshop*, IEEE VIS 2021, New Orleans, United States.

Lewis, M. (2020). Emerging technology system evolution. *SPECIES EvoMUSART: 9th international conference on artificial intelligence in music, sound, art and design*, Seville, Spain.

Lewis, M. (2019). A framework for introducing emerging technologies in design studio classes. In Almendra, R.; Ferreira, J. (Eds.), *Research & education in design: People & processes & products & philosophy*, May 2020. *Research & education in design conference (REDES 2019)*, *Lisbon School of Architecture, University of Lisbon*, Lisbon, Portugal.

Eisenmann, J.; Lewis, M.R.; Parent, R. (2014). Probabilistic decision making for interactive evolution with sensitivity analysis. In Romero, J.; McDermott, J.; Correia, J. (Eds.), *International conference on evolutionary and biologically inspired music and art, EvoNet EvoMUSART 2014*. Berlin, Germany.

Eisenmann, J.; Lewis, M.; Parent, R. (2013). Inverse mapping with sensitivity analysis for partial selection in interactive evolution. In *Evolutionary and biologically inspired music, sound, art and design (Lecture notes in computer science) Volume 7834*, 72-84. EvoNet EvoMUSART: 2nd international conference on evolutionary and biologically inspired music, sound, art and design, Vienna, Austria.

Eisenmann, J.; Lewis, M.; Parent, R. (2013). Trace selection for interactive evolutionary algorithms. In *Proceedings of ACM SIGEVO GECCO: Genetic and evolutionary computation conference*, Amsterdam, The Netherlands.

Eisenmann, J.; Schroeder, B.; Lewis, M.; Parent, R. (2011). Creating choreography with interactive evolutionary algorithms. In *Proceedings of the 2011 international conference on applications of evolutionary computation, EvoNet EvoMUSART*, Turin, Italy.

Eisenmann J., Lewis M., Cline B. (2011) Interactive evolution for designing motion variants. In Madani K., Correia A.D., Rosa A., Filipe J. (Eds.), *Computational intelligence: Revised and selected papers of the international joint conference IJCCI 2009 held in Funchal-Madeira, Portugal, October 2009, Vol. 343*, INSTICC.

Eisenmann, J.; Lewis, M. and Cline, B. (2009). Interactive evolutionary design of motion variants. *Proceedings of the international joint conference on computational intelligence - Volume 1: ICEC, (INSTICC IJCCI 2009)* Funchal-Madeira, Portugal.

Lewis, M.R. (2009). Casually evolving creative technology systems. In Boden, M.; D'Inverno, M.; McCormack, J. (Eds.), *Computational creativity: An interdisciplinary approach*, Schloss Dagstuhl, Wadern, Germany.

Bezirtzis, B.; Lewis, M.; Cline, B. (2007). Visual strategies for parametric modeling in interactive evolutionary design. *GRCAO EuropIA'11: 11th international conference on design sciences and technology*, University of Montreal, Montreal, Canada.

Bezirtzis, B. G., Lewis, M., & Christeson, C. (2007). Interactive evolution for industrial design. *Proceedings of the 6th ACM SIGCHI conference on creativity & cognition*, Washington, DC, United States.

Lewis, M. (2006). Procedural shading for architecture: Adoption, fabrication, and implications. In Soddu, C. (Ed.), *Proceedings of generative art conference*, Politecnico di Milano, Milan, Italy.

Dehlinger, H.; Lewis, M. (2004). Selective extraction of point sets from photographs as starting events of generative-art line drawings. In: Soddu, C. (Ed.), *Proceedings of generative art conference*, Politecnico di Milano, Milan, Italy.

Lewis, M. (2004). Aesthetic video filter evolution in an interactive real-time framework. In G. R. Raidl, S. Cagnoni, J. Branke, D. W. Corne, R. Drechsler, Y. Jin, C. G. Johnson, P. Machado, E. Marchiori, F. Rothlauf, G. D. Smith, & G. Squillero (Eds.), *EvoNet EvoWorkshops 2004: Applications of evolutionary computing*, Coimbra, Portugal.

Lewis, M.; Parent, R. (2002). Interactively evolving virtual environment maps with continuous layered pattern functions. *Proceedings of computer animation 2002 (CA 2002)*, IEEE, Geneva, Switzerland.

Lewis, M. (2000). Aesthetic evolutionary design with data flow networks. In: Soddu, C. (Ed) *Proceedings of generative art conference*, Politecnico di Milano, Milan, Italy.

Unpublished Scholarly Presentations

Lewis, M. (2024, June 21). Generative Art and Design Work [Seminar presentation]. IAGAN: Artificial Intelligence and Generativity in Digital Art, Paris 8 University, Paris, France.

Lewis,M.; Kaetz, A. (2024, February 14). *Digital Humanities and Emerging Technologies: Collaboration, Vision, and the Future* [Online presentation]. Association of Southeastern Research Libraries (ASERL), Robert W. Woodruff Library, Atlanta, GA, United States.

Lewis, M. (2023, April 26). *Learning complex system strategies in design technology studios* [Conference presentation]. AMPS Applying Education in a Complex World, Sheridan College, Toronto, Canada.

Lewis, M. (2023, April 19). *Future of digital humanities: prototyping infrastructure* [Online presentation]. Libraries Digital Scholarship Community of Interest Group at The Ohio State University, Columbus, OH, United States.

Lewis, M. (2022, December 1). *Experiencing layered contexts between virtual and physical spaces* [Conference presentation]. AMPS Representing Pasts – Visioning Futures, Queen's University Belfast, Cape Peninsula University of Technology, National University of Singapore, Virtual.

Lewis, M. (2022, November 15). *Emerging technology collaborative design studio* [Conference presentation]. AMPS Transformative Teaching: Focus on Pedagogy 2022, Florida State University, University of Dundee, Zayed University, Virtual.

Lewis, M. (2022, October 31). *XR and digital humanities* [Workshop presentation] AI @ OSU Retreat, Columbus, OH, United States.

Lewis, M. (2022, June 3). *Transforming silent film frames into 3d scenes for augmented reality* [Workshop presentation]. Digital Humanities Workshop #1: Media Ecology Project, Women and the Silent Screen XI, Columbia University, New York, NY, United States.

Lewis, M. (2021, November 5). *Creating immersive environments from silent film frames* [Class presentation]. Film Studies 20: Film History 1 class, Dartmouth College, Hanover, NH, United States.

Lewis, M. (2021, April 15). *Emerging applications and challenges for virtual campus spaces* [Conference presentation]. Beyond Zoom: Promise and Reality of XR, Dartmouth College, Hanover, NH, United States.

Lewis, M. (2020, August 7). *Technology prototyping in virtual campus environments* [Conference presentation]. Beyond Zoom: XR for Teaching and Research in the COVID-19 Era, Dartmouth College, Hanover, NH, United States.

Lewis, M. (2018, June 12). *3d printing to facilitate interdisciplinary discussion* [Short talk]. Workshop on the Convergence of Materials Research and Multi-Sensory Data Science, Bear Creek Mountain Resort, Macungie, PA, United States.

Lewis, M. (2018, May 31). *3d interactive systems research overview* [Lecture presentation]. Technology 4 Mental Health Research Group, Department of Electrical & Computer Engineering at The Ohio State University, Columbus, OH, United States.

Lewis, M. (2011, May 21). *3d modeling, mapping and altering spaces* [Conference presentation]. The Camouflage Project Symposium, The Mershon Center for International Security Studies at The Ohio State University, Columbus, OH, United States.

Lewis, M. (2010, February 27). *Evolving gesture technology* [Conference presentation]. Gesture at Large: an Interdisciplinary Conference on Gesture, The Wexner Center at The Ohio State University, Columbus, OH, United States.

Lewis, M. (2006, December 4-6). *Procedural shading* [Workshop]. University of Applied Arts, Vienna, Austria.

Lewis, M.; Palazzi, M.; Parent, R; Tarantino, R.; Zuniga-Shaw, N. (2006, August 2). *Designing collaborative interdisciplinary cg experiences in the curriculum* [Panel discussion]. ACM SIGGRAPH 2006 Conference, Boston, MA, United States.

Lewis, M. (2002, March 18). *Online virtual environment technology for education and visualization* [Lecture presentation]. Technology Enhanced Learning and Research (TELR) Presentation at The Ohio State University, Columbus, OH, United States.

Gigliotti, C. & Lewis, M. (1997, February 13). *Creativity, evolution, and ethics: Concerning artificial life applications for the arts* [Conference co-presentation]. "The Artificial Life Class". Session Chair: Roy Ascott. College Art Association, New York, NY, United States.

Creative Works

Images

2016 Image “Sketch” (1998) used and discussed in the book “Artificial Aesthetics” by Miguel Carvalhais, U.Porto

2016 Image “Difference Forms” (2008) used as the cover image of the book “Transmission in Motion: The Technologizing of Dance” edited by Maaike Bleeker, Routledge

2003 “Red Image Population”, Focus magazine, Italy, November 2003 issue

2002 “Human Figure Population”, poster, book cover, website, EvoNet EvoGP 2002, European Conference on Genetic Programming, Kinsale, Ireland

1999 Procedural animation images and descriptions, CAD & Graphics magazine, Korea, November 1999 issue

1997 Image from animation “Burn”, Leonardo (cover) Journal of the International Society for the Arts, Sciences and Technology, Volume 30, Number 5, 1997

1997 Image from animation “Burn”. In “Procedural Animation” article by D. Mahoney, in Computer Graphics World Magazine, May 1997 issue

Exhibitions

2024 “Project Space Probes”, Realtime video installation, Department of Design 2024 Faculty Exhibition: “with_”, Urban Arts Space, Columbus, OH

2016 “Woven Text”, 3D printed sculpture in the Department of Design’s 2016 Faculty Exhibition: “Research through Making” at Urban Arts Space, Columbus, OH (with Peter Chan)

2014 “3D Printed Data Sculpture”, Lumos Gallery, Columbus, OH. (with David Staley)
Also presented by David Staley at the “Return to the Material” conference at the University of Kansas Institute for Digital Research in the Humanities, on 9/14/2013 as "The Florida Historical Quarterly: A macro-scale reading of the journal as a 3-D sculpture".

2010 “Gesture Map”, 3D printed sculpture in Gesture (inclusive) exhibition, Hopkins Hall Gallery, Ohio State University, Columbus, OH. A photo of this work was used as the visual representation for 3D printing on the front page of the website for the Digital Lab for Manufacturing, one of two national manufacturing hubs being created in the US.

2004 Plotter drawings, Generative Art Conference, Politecnico di Milano University, Milan, Italy (with Hans Dehlinger)

2000 Prints and software, Ohm, three-person show at Nexus Foundation for Today’s Art, curated by Chris Garvin, Philadelphia (reviewed in Philadelphia Inquirer 1/23/00, p.I04)

Moving Images

2009 Animations for Synchronous Objects for One Flat Thing, reproduced, (w/M. Palazzi, N. Zuniga-Shaw, W. Forsythe)

- The Centre Pompidou, Musée National d’art Moderne, Paris, June to August 2018
- Contemporary Art Museum, Raleigh, NC, September 23, 2011 - January 2, 2012
- Taipei Arts Festival, Taiwan, China July 28 – September 4, 2011
- HOW Design Conference Exhibit, Chicago, IL, June 24-27, 2010

- 2010 I.D. Annual Design Review Exhibit, AIGA National Design Center, New York, NY, August 30 – September 10, 2010
- 16th International Symposium on Electronic Art, Essen, Germany, August 20-29, 2010
- SIGGRAPH Information Aesthetics Showcase, New Orleans, August 3-7, 2009
- Wexner Center, Columbus, OH, April-July 2009

1997 Animation "Burn", School of Visual Arts' Fifth Annual New York Digital Salon, Visual Arts Museum, New York

Multimedia / Database / Websites

2014 "3D Printing Resources at OSU", Website, database, and interactive graph visualization of all 3D printing resources on the Ohio State University campus.

2003 "Wander", virtual environment, ACM SIGGRAPH Web3D Symposium Art Show, St. Malo, France
Traveling exhibit: Manchester (Cornerhouse Contemporary Art Center); London (ICA London Media Centre); Bristol (Watershed); Huddersfield, UK (Media Centre, Media Lounge); Lancaster (Folly Gallery); Adelaide, Australia (Experimental Art Foundation); Skopje, Macedonia (Center of Contemporary Art).

2002 "Visual Aesthetic Evolutionary Design Links" webpage included on CD included in Creative Evolutionary Systems book, eds. Peter J. Bentley and David W. Corne, eds. Morgan Kaufmann, 2002.

1997 "Conversation and other Noises at Global Zero", Virtual Environment, Art on the Net, Machida City Museum of Graphic Arts, Tokyo, Japan

1995 "Abulafia Gallery: Dennett's Dream" website

- Dream Science '96 Computer Graphics Grand Prix, STEC, Tokyo ("Special Prize")
- *Creating Killer Web Sites*, book by David Siegel, Hayden Books, 1996
- "The Virtual Reality Modeling Language in Art and Design Higher Education", Neal Ashdown, 1996
- The VRML Sourcebook, Andrea L. Ames, David R. Nadeau, John L. Moreland, John Wiley & Sons, 1995
- "Local Angle", Bradford Era newspaper, 11/10/95, p.1
- "On-line museums are state-of-the-art sites", USA Today, October 16, 1995, p. 5D
- NCSA "What's New: June 1995" website

Other Creative Works

2016 Interactive installation for "Torrence 6-36-86" immersive dance theatre performance, directed by Rashana Perks Smith, Columbus, OH

2014 Interactive Software Design for "One Way: A Telematic Trio", with Stephen Koplowitz, et al., as part of "Sullivant's Travels" dance events, Ohio State University, Columbus, OH, September 20, 2014.
The software was then also used in a creative research laboratory at La Mama's CultureHub studio, New York in 2016.

2014 Projection mapped sculptures for "The Camouflage Project" devised theater performance and exhibition at The Ohio State University, Columbus, OH. Software development (with Ben Schroeder) and Digital/Physical fabrication (with Carla Chaffin). Digital assets by Vita Berezina-Blackburn, Jeremy Baker, Jane Drozd, Thomas Heban, Nikki Lemon, Zachary Maynard, and Cheng Zhang.

2012 Interactive video installations, Columbus Historical Society, COSI, Columbus, OH (w/D.Staley, J.Haase, J.Eisenmann, and M.Duellman)

2007 “Murmur”, Tracking and motion software for dance. Dragonfly Neo-V Gallery. Columbus, OH (with Norah Zuniga-Shaw and Marc Ainger). The software was also used at the ICMA International Music Conference (ICMC) 2007 in Copenhagen.

2004 “Scrambled Bites / Art’s Birthday” Interactive video installation, Hopkins Hall, Ohio State University, Columbus, OH (with Daniel Jolliffe and Western Front)

2003 “Lethe”, Interactive Video Installation, Sullivant Gallery, Ohio State University, Columbus, OH

2003 Director of Technology and Computer Control, “Sleep Deprivation Chamber”, play directed by Lesley Ferris, May 7-23, 2003, The Ohio State University, Columbus, OH

Research Funding

“Accelerating the Generation of Three-Dimensional Urban Models from Historical Maps” (2025)
Harvey J Miller, (Geography), Ningchuan Xiao (Geography), **Matthew Lewis** (Design/ACCAD)
Funding: NSF Human-Environment and Geographical Sciences Program: $450,819

“Computer Art: Communicating Human Imagination and Intelligence through Art, Technology, and Science” (2023)
Terron Banner, PhD (UAS, AAEP) / Lisa Florman (OAA) / Maria Palazzi (ACCAD, Design) / Janice Glowski (Art historian, Csuri scholar) / Shadrick Addy (ACCAD, Design) / **Matt Lewis** (ACCAD, Design) / Kris Paulsen (History of Art) / Rajiv Ramnath (CSE, ECE, ISE courtesy) / Richard Samuels (Philosophy) / Steven Bibyk (ECE, OHI/O, Steam Factory, STEP) / Monica Stigler (OSU CEC)
Funding: OSU ASC and Engineering seed grants for “Artificial Intelligence in the Arts, Humanities, and Engineering: Interdisciplinary Collaborations Round Two”: $41,975

“All the Shades of Variation: AI, Material Culture, and Punk Preservation” (2022)
Jeremy Patterson, Sr. Graphics Researcher (ACCAD), **Matt Lewis**, Assistant Professor (Design / ACCAD / TDAI core faculty), Thomas Davis, Associate Professor (English, Affiliated Faculty, Sustainability Institute), Mirkamil Mierkamili, Ph.D. Candidate (CSE), Vincent Fiorello, M.Ed., Co-Founder and Chief Marketing Officer (Punk Rock Museum)
Funding: OSU ASC and Engineering seed grants for “Artificial Intelligence in the Arts, Humanities, and Engineering: Interdisciplinary Collaborations”: $24,200

“Computer Art: Communicating Human Imagination and Intelligence through Art, Technology, and Science” (2022)
Terron Banner, PhD (UAS, AAEP) / Lisa Florman (OAA) / Maria Palazzi (ACCAD, Design) / Janice Glowski (Art historian, Csuri scholar) / Kameron Caminiti (AAEP) / Shadrick Addy (ACCAD, Design) / **Matt Lewis** (ACCAD, Design) / Kris Paulsen (History of Art) / Rajiv Ramnath (CSE, ECE, ISE courtesy) / Richard Samuels(Philosophy)
Funding: OSU ASC and Engineering seed grants for “Artificial Intelligence in the Arts, Humanities, and Engineering: Interdisciplinary Collaborations”: $25,000

“A Fundamental Shift in Thinking About Trees” (2021)
Steve Lyons (School of Environment and Natural Resources), Kerry Ard (School of Environment and Natural Resources), **Matthew Lewis** (Design/ACCAD)
Funding: BETHA: $59,563

“TDAI Data Art” (2021)
Matthew Lewis (PI)
Funding: Translational Data Analytics Institute (TDAI): $46,695.90

“Towards a Digital Humanities Support Network” (2020)
Maria Palazzi (Director - ACCAD | Faculty - Design); David Staley (Director – Humanities Institute | Faculty – History); Leigh Bonds (Assistant Professor, Digital Humanities Librarian - University Libraries); **Matt Lewis** (Assistant Professor– Design/ACCAD | TDAI Core Faculty)
Funding: GAHDT Centers and Institutes Grant: $50,000

"Arts Creation Proposal" (2019)
Matthew Lewis (PI)
Funding: Livable Futures Discovery Theme: $1500

"Adaptive Ambience Technology in the Preschool Classroom for Children Exposed to Trauma" (2019)
Kevin Passino (ECE), Abel Koury (EHE), Kelly Boone (EHE), Anneliese Johnson (EHE), Oliva Diaz Melgarejo (Crane Center), Emre Ertin (ECE), **Matthew Lewis** (Design/ACCAD), Shelby Spare Werner (Bethel Olentangy Psychological Services)
Funding: BETHA: $60,000

Service

Professional Societies / Journals / Conferences / Reviewer

Program Committee: EvoNet/SPECIES EvoMUSART, International Conference on Artificial Intelligence in Music, Sound, Art and Design, 2012 – present

Program Committee: ACM SIGEVO Genetic and Evolutionary Computation Conference (GECCO), Digital Entertainment Technology and Arts (DETA) Track, 2011 – 2017

Program Committee: ACM Virtual Reality International Conference (VRIC), 2009 – 2016

Paper reviewer, ACM SIGGRAPH Asia Symposium on Education, 2015

Paper reviewer, Artificial Life journal, special issue on Artificial Life, Art, Creativity and Culture, 2013

Program committee, International Conference on Virtual Worlds, 2012

Juror: ACM SIGEVO Genetic and Evolutionary Computation Conference (GECCO), Evolutionary Art Competition, 2011

Paper reviewer, Journal of Mathematics and the Arts (JMA), 2007 & 2011

Paper reviewer: ACM SIGGRAPH Art Papers, 2011

Paper reviewer, International Journal of Arts and Technology (IJART), 2005 & 2011

Program Committee: EvoNet EvoMUSART, European Event on Evolutionary and Biologically Inspired Music, Sound, Art and Design, 2004 - 2011

Program Committee: Australian Conference on Artificial Life, 2009

Program Committee: ACM SIGCHI Creativity and Cognition, 2009

Paper reviewer: ACM SIGGRAPH Technical Papers, 2006

ACM Web3D Symposium paper reviewer, 2002 – 2003

ACM SIGGRAPH Courses media review, 1996 – 2004

Addison-Wesley: Computer and Engineering Publishing Group, 1998

National Cancer Institute, National Institute of Health, SBIR Phase I & II, 1994 – 1995

Academic Unit Committees

Design XMD Major Faculty Committee (2024 – present)

Design Department Graduate Studies committee (2021 – present)

ACCAD Center Advisory Committee (2017 – present)

Digital Animation and Interactive Media (DAIM) graduate track committee (2017 – present)

Design PhD Degree Exploration Committee (2023 – 2025)

Design+CS Degree Exploration Committee (2023 – 2025)

ACCAD Sim Lab Committee (2023 – 2024)

Design Department Technology and Academic Facility Committee (2020 – 2022, 2023 – 2025), chair: 2021 – 2022

ACCAD MFA Program Exploration Committee (2023 – 2024), chair: Fall 2023

XMD Undergraduate Major Proposal Development Committee (2017 – 2023)

Graduating Student Exhibition Committee (2017 – 2020), chair: 2019 – 2020

Reinhart Butter Design Affair Event Planning Committee (2018 – 2020)

College or University Committees

ASC Technology Faculty Advisory Committee (2023 – 2025)

Urban Arts Space Exhibition Proposal Review Committee (2023 – 2025)

ASC Science Sundays Committee (2022 – 2025)

Arts and Humanities Honors Committee (2018 – 2025)

Hybrid Arts Lab Advisory Committee (2020 – 2023)

TDAI Art and Data GADHT Post-MFA/Postdoctoral search committee (2021 – 2022)

TDAI Art and Data discussion group (2020 – 2021)

Office of Research's Futures Workshop on "Anticipation of the Unforeseen Consequences of Technology" (2020)

Ad hoc university committee for "Software Development at Ohio State" (2019)

Arts and Humanities Responsible Conduct of Research (RCR) Task Force (2018)

Smart Campus Strategic Planning: Smart Mobility work group (2018)

College of Arts and Sciences Strategic Plan Cyber-Enabled Discovery Implementation Group (2012 – 2013)

College of the Arts Faculty Technology Committee (2006 – 2007)

Wexner Center for the Arts Design Committee for "The Fold" website (1997 – 1999)