

Stephen Miles Uzzo, PhD

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Education

- **PhD in Interdisciplinary Studies.** Concentration in Arts and Sciences; Specialization in Network Theory and Environmental Studies Union Institute, School of Interdisciplinary Studies, Cincinnati, OH. Thesis: *Network Theory and the Environment: Understanding Human Connections to Nature*. Rita Arditti, Advisor
- **Bachelor of Music Education.** Long Island University, Greenvale, NY

Appointments

- 2018-Present: Woods Hole Institute, Director
- 2022-2025: National Museum of Mathematics, Chief Technology Officer (short term)
- 2006-2021: New York Institute of Technology, Adjunct Assistant Professor, Graduate School of Education
- 2015-2022: The New York Hall of Science, Chief Scientist
 - 2009-2015: Vice President for Science and Technology
 - 2004-2009: Director of Technology
 - 1999-2004: Technical and Graphics Manager for TryScience
- 1996-1999: The Castilleja School Foundation, Director of Information Resources
- 1992-1996: Bay Shore Union Free School District, Bay Shore, New York, District Technology Director
- 1990-1992: Rainbow Network Communications, Director of Engineering: Broadcast Business Development and Operations
- 1984-1990: New York Institute of Technology Computer Graphics Laboratories/Video Center, Manager of Engineering

Recent Courses, Workshops, Symposia and Lectures

2025

- *Sixteenth International Conference on Complex Networks (CompleNet):* Fortaleza, Brazil (program/steering committees)
- *Fourteenth Network Science and Education Symposium:* Maastricht, The Netherlands (co-organizer)
- *International Conference on Complex Systems Modeling, Analysis & Applications:* Christ University, Pune Lavasa, India & Binghamton University, Binghamton, USA (program committee)
- *DataJam Jordan:* Herbert Wertheim School of Public Health, UC San Diego, Pittsburgh Dataworks, Climate Action Network Jordan (Judge for high school research team competition)

2024

- *24 Hour "Multiscale Human" Event: Let's map the human body across scales! Panel: Science Museums.* Indiana University and the Canadian Institute for Advanced Research (panel organizer/convener/speaker)
- *Thirteenth Network Science and Education Symposium:* Quebec City, Canada (co-organizer/speaker)
- *Thirteenth Annual International Conference on Complex Networks and their Applications:* Istanbul, Turkey (program committee)
- *The Challenger Conversations 2023-2024, Conversation #6: Art and Data Visualization:*

Scottish Association for Marine Science and University of Illinois Urbana-Champaign. (co-organizer/moderator)

- *Fifteenth International Conference on Complex Networks (CompleNet)*: Exeter, U.K. (program/steering committees)

2023

- *24 Hour - Around the World - Macroscopes: Interactive Data Visualizations Event*: Indiana University (panelist)
- *Twelfth Network Science and Education Symposium*: Vienna, Austria (organizer)
- *Analyzing Youth's Problem-Solving in Computational Making Through a Community-Engaged Maker Program*: in session: Purpose, Aspirations, and Well-Being: Holistic Adolescent Development. American Educational Research Association, Annual Meeting (co-author paper)
- *Fourteenth International Workshop on Complex Networks*: University of Aveiro, Aveiro, Portugal (steering/program committee)
- *Twelfth Annual International Conference on Complex Networks and their Applications*: Menton Riviera, France (program committee)
- *Enhancing middle school physical science lessons with embodied learning*: 2023 National Association for Research in Science Teaching Annual International Conference, Roundtable Strand 12: Technology for Teaching, Learning, and Research (co-author/panelist)

2022

- *24 Hour Human Reference Atlas Event: Let's map the human body at single-cell resolution! Panel on Human Atlas Exhibits*: Ideation panel on developing a public experience on the human body atlas. Indiana University and National Institutes of Health (panel organizer/facilitator)
- *Where and How is Data Science Happening?* Workshop on Foundations of Data Science for Students in Grades K-12. National Academies of Science, Engineering, and Medicine, Washington D.C. (invited panelist)
- *Eleventh Network Science and Education Symposium*: online (co-organizer)
- *Eleventh Annual International Conference on Complex Networks and their Applications*: Palermo, Italy (program committee)
- *Supporting Youth Engagement in Online Maker Education Workshops: Pandemic Lessons, Future Potentials*. In Session: Braving the Challenges of the Pandemic: Research on Navigating Learning Environments in Times of Emergency. AERA Annual Meeting, April 21, 2022, San Diego, CA (co-author)
- *Thirteenth International Workshop on Complex Networks*, online (steering/program committee)
- *DataWise*. Workshop series for K-12 teachers to integrate data science into science teaching practice. In collaboration with STEM Teachers NYC (co-designer/co-facilitator)
- *NSF/TERC STEM for All Video Showcase*: online (facilitator)

2021

- *How Virtual Networking Events Can Catalyze Convergence*: American Geophysical Union Fall Meeting, New Orleans, LA (co-author poster)
- *Studying Shared Regulation in Immersive Learning Environments*: 15th International Conference of the Learning Sciences (co-author short paper)
- *Studying Collective Problem-Solving Regulation in an Immersive Open-Ended Museum Exhibit*: American Educational Research Association, Annual Meeting. (co-author poster)
- *The Network for Earth-space Research Education and Innovation with Data*: 237th Meeting of the American Astronomical Society, Webinar (co-author/speaker)
- *Tenth Network Science and Education Symposium*: online (co-organizer)

- *Twelfth International Workshop on Complex Networks*: online (steering/program committee)
- *Tenth Annual International Conference on Complex Networks and their Applications*: Madrid, Spain (program committee)
- *NSF/TERC STEM for All Video Showcase*: online (facilitator)
- *Math, Science and Technology in Education II*, New York Institute of Technology, Old Westbury, NY (instructor)

2020

- *The Pack: Using Game-based Learning to Infuse Computational Thinking into Science Teaching and Learning*: New Frontiers in K12 CS Education, U.S. Department of Education Webinar (invited speaker)
- *Formative Fugues: Helping Learners Understand Complex Systems through Causal Inference and Lag Sequential Analysis*. The Fifth CCS Satellite Symposium on Complex Systems and Education: Research and Practice Conference on Complex Systems (co-author contributed paper)
- *Ninth Network Science and Education Symposium*: online (co-organizer)
- *Measuring STEM and Computational Thinking Outcomes*: Education Innovation and Research Project Directors and Evaluators Technical Assistance Meeting, online, U.S. Dept of Education (invited speaker)
- *Summer of COVID-19 - Kids Online?*: Institute of Digital Media and Child Development, New York (invited panelist)
- *Data Science for All: Designing the Successful Inclusion of Data Science in High School Computer Science*, New York Hall of Science and Columbia University, Cornell Tech, New York, NY (co-organizer)
- *Eleventh International Workshop on Complex Networks*: online (steering/program committees)
- *Ninth Annual International Conference on Complex Networks and their Applications*: Online (program committee)
- *Accelerating Convergence of Earth and Space Data in Teaching and Learning Through Participatory Design*, Earth Science Information Partnership Federation Winter Meeting, Bethesda, MD (panelist)
- *Network for Earth-space Research Education and Innovation with Data: NEREID*, Earth Science Information Partnership Federation Winter Meeting, Bethesda, MD (co-author poster)
- *Math, Science and Technology in Education II*, New York Institute of Technology, Old Westbury, NY (instructor)

2019

- *Connected Worlds: Sustainability Science and Learning*: Stanford Research Institute, International, Menlo Park, CA (invited speaker)
- *Network for Earth-space Research, Education and Innovation with Data (NEREID): Building Convergence and Capacity Across Earth, Space, and Data Sciences*: in session: Communities, Tools, and Policies That Enable Integration of Earth, Space, and Environmental Science Data and Cyberinfrastructures II: Tools and Policies, American Geophysical Union Fall Meeting, San Francisco, CA (co-panelist)
- *Network for Earth-space Research, Education and Innovation with Data (NEREID): Collaboration for Earth-Space Data Science Education and Practice*: in session: Reaching the Researcher: Collaborations Between Educators, Scientists, and the Public for the Advancement of STEM and Geosciences II, American Geophysical Union Fall Meeting, San Francisco, CA (co-author poster)
- *NEREID Earth-Space Data Convergence Accelerator Workshop*, Associated Universities, Inc. Green Bank Observatory, Green Bank, WV (co-organizer)

- *Make-A-Vis: Come Build a Data Visualization from the Ground Up*: Association for Science-Technology Centres Annual Conference (Pre-Conference Workshop), Toronto, ON, Canada (panelist)
- *Making a Difference: Engaging Young People in Engineering and Computer Science through Computational Making and Social Entrepreneurship*, 2019 Maker Educator Convening, Pittsburgh, PA (co-author/speaker)
- *Connect-to-Connected Worlds: Data-Driven Reflection Tools for an Open-Ended Simulation at a Museum*: Association of Science-Technology Centers Annual Conference, Toronto, Canada (speaker/panelist)
- *Math, Science and Technology in Education II*, New York Institute of Technology, Old Westbury, NY (instructor)
- *Network for Earth-space Research Education and Innovation with Data*: Earth Science Information Partners Summer Meeting, Tacoma, WA (co-author poster)
- *Ways of Developing Literacies – Inspiration: Successes of Literacy Projects Networks and Data*, International Society of for Systems Science Conference, University of Oregon, Corvallis, OR (invited speaker)
- *Eighth Network Science and Education Symposium*, International Workshop & Conference on Network Science University of Vermont, Burlington, VT (co-organizer/co-convener)
- *Eighth Annual International Conference on Complex Networks and their Applications*: Lisbon, Portugal (program committee)
- *Media Impact Screening Toolkit Retreat*, Institute of Digital Media and Child Development, Setauket, NY (facilitator)
- *Tenth International Workshop on Complex Networks*: Universidad Rovira i Virgili, Tarragona, Spain (steering/program committee)
- *Partnering for the Future: Opportunities and Challenges for Advancing Science and Technology*, Huston-Tillotson University International Alumni Association, Austin, TX (invited keynote speaker)
- *Design for Understanding*, Princeton University, Princeton, NJ (invited speaker)
- *Data Literacy in Communities*, Columbia University/New York Hall of Science (host/organizer)
- *Interdisciplinarity and Design: Opportunities in science and learning*, Clarkson University School of Arts and Sciences, David A. Walsh Seminar, Potsdam, NY (invited speaker)

2018

- *Panel on Non-Traditional Educational Tools, A Visionary Resource for Instilling Fundamental Principles of Rigorous Neuroscience Research Workshop*: National Institutes of Health/National Institute of Neurological Disorders and Stroke, Bethesda, MD (invited panelist/speaker)
- *Interdisciplinary workshop on research and screening methods*: Digital Media and Developing Minds Second National Congress, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY (organizer/facilitator)
- *Math, Science and Technology in Education II*, New York Institute of Technology, Old Westbury, NY (instructor)
- *Meeting of the Minds: CubeSats, Aerospace, Education and STEM*: U.S. Department of Education/Luminary Labs, New York, NY (invited domain expert)
- *LabVenture Re-launch* Fall 2018 - Gulf of Maine Research Institute/NASA, Portland, ME (invited panelist/speaker/ advisor)
- *Community Challenges with Data Workshop: Addressing Community Challenges with Data-Driven Solutions*_Data for Good Exchange, Bloomberg Finance LLP, New York City, NY (invited speaker/facilitator)

- *Data Science for All: Democratizing data for a global citizenry*: Data for Good Exchange, Bloomberg Finance LLP, New York, NY (co-author poster)
- *Complex Systems: Literacy and Learning*: International Conference on Complex Systems, New England Complex Systems Institute/Massachusetts Institute of Technology, Cambridge, MA (co-organizer, speaker)
- *Science Media Awards and Summit*: Jackson Hole Wildlife Film Festival and WGBH, Boston, MA (judge)
- *Seventh Network Science and Education Symposium*: Institut des Systèmes Complexes de Paris, France (co-organizer)
- *Shaping the Pack: Using Design-Based Research to Instill Empathy in a Computational Problem-Solving Game*: Community for Advancing Discovery Research in Education, National Science Foundation Principal Investigator Meeting, Washington, DC (co-author poster)
- *Science and The Public Interest Roundtable*: Washington University/Dilenschneider Group, New York, NY (invited speaker)
- *Hudson River Estuarium: Making the Invisible Visible*, Hudson River Symposium, State University of New York at New Paltz, NY (co-author poster)
- *Advancing Data Literacy*: Oregon State University, Corvallis, OR (invited speaker)
- *Northeast Regional Conference on Complex Systems*, Binghamton University, Center for Collective Dynamics of Complex Systems, Binghamton, NY (invited panelist, Young Researchers Preconference event)
- *U.S. Science and Engineering Festival - The Pack*, National Science Foundation, Washington, DC (invited presenter)
- *Northeast Big Data Innovation Hub - 2018 Summit*, Columbia University, New York, NY (steering committee/workshop co-organizer)
- *Ninth International Workshop on Complex Networks*, Northeastern University, Boston, MA (steering/program committee)
- *Seventh Annual International Conference on Complex Networks and their Applications*: Cambridge, U.K. (program committee)
- *Cultivating Tipping Points: Network Science in Teaching* 9th International Workshop on Complex Networks, Northeastern University, Boston, MA (co-author poster)
- *International Big Cats Film Festival*, Jackson Hole Wildlife Film Festival Conservation Summit, Jackson Hole, WY (judge)

2017

- *The Third Task: Adventures in Complexity Literacy and Learning*: Binghamton University Center for Collective Dynamics of Complex Systems and Evolutionary Studies Program Seminar Series, Binghamton, NY (invited speaker)
- *Evolution of NYSCI and Connected Worlds, Panel Discussion*, The Panasonic Experience, Powered by InfoComm, New York Hall of Science, Corona, NY (invited panelist)
- *Sixth International Workshop on Complex Networks and their Applications*: Université de Lyon, France (program committee)
- *Sixth Annual International Conference on Complex Networks and their Applications*: Lyon, France (program committee)
- *Data Modeling with Young Learners and their Families*: in Panel Visualizing STEAM Data in Support of Smart Decision Making, Science Centre World Summit, Tokyo, Japan (invited panelist)
- *Wicked Problems: Opportunities for the science museum community to address society's biggest challenges*: Association of Science-Technology Centers Annual Conference, Montreal, Canada

(panel organizer/convener/speaker)

- *Math, Science and Technology in Education II*, New York Institute of Technology, Old Westbury, NY (instructor)
- *Alternative Institutional and Educational Mechanisms*: Panel on Informal Data Science Education National Academies of Sciences, Engineering and Medicine, Board on Mathematical Sciences and Analytics. Roundtable on Data Science Postsecondary Education Meeting #4, Northeastern University, Evanston, IL (invited panelist/domain expert)
- *Keeping Data Science Broad: Alternative Avenues for Development of Data Science Education Capacity*: South Big Data Hub, Georgia Institute of Technology, Atlanta, GA (webinar, invited speaker)
- *Big Data and the 95% Solution: Looking for Learning in All the Wrong Places*: Data for Good Exchange. Bloomberg Finance, LLP, New York, NY (co-author/speaker)
- *Computational Thinking Summit*: Educational Development Corporation, Newton, MA (invited participant)
- *Enaction: The Role of Embodiment in the Cultivation of Understanding Resilience in the Coupling of Human and Natural Systems*: American Cybernetics Society Annual Conference, Salem, MA (facilitator/instructor/guest lecturer)
- *Networks in Classroom Education*: U.S. Military Academy, West Point, NY (facilitator/speaker)
- *Jackson Hole Wildlife Film Festival*: Jackson Hole, WY (judge)
- *Institute in Education: Art Integration to Deepen Interdisciplinary Learning*, New York Institute of Technology, Old Westbury, NY (course creator, instructor)
- *Sixth Network Science and Education Symposium*, International Workshop & Conference on Network Science Indiana University, Network Science Institute, Indianapolis, IN (co-organizer)
- *Highlighting Network Literacy Opportunities in NGSS: Pathways connecting essential concepts with disciplinary core ideas*, *Sixth Network Science and Education Symposium*: International Workshop & Conference on Network Science, Network Science Institute, Indiana University, Indianapolis, IN (speaker)
- *Consortium for the Society of Young Network Scientists Symposium*, *Sixth Network Science and Education Symposium*, International Workshop & Conference on Network Science, Network Science Institute, Indiana University, Indianapolis, IN (facilitator)
- *Macrosopes for Making Sense of Science and Technology*, International Workshop & Conference on Network Science, Network Science Institute, Indiana University, Indianapolis, IN (speaker)
- *Applied Research in Immersive Environments for Learning*: American Educational Research Association Annual Meeting, San Antonio, TX (co-author/presenter)
- *Engaging Complex Social and Scientific Issues in Informal Learning Spaces*: American Educational Research Association Annual Meeting, San Antonio, TX (panelist)
- *Big Data Literacy: Building Capacity for Regional Collaboration in Closing the Big Data Divide*: New York Hall of Science and Columbia University, Corona, NY (co-organizer, host)
- *Data Driven STEM: Opportunities and challenges for science learning and literacy*: Associated Universities Incorporated, Washington, DC (invited speaker)
- *Big Data Literacy*: NSF BIGDATA Joint PI Meeting_National Science Foundation, DC: (speaker)
- *Big Data Literacy*, Columbia University: Annual Workshop of the Northeast Big Data Innovation Hub, New York, NY (invited speaker)
- *Eighth International Workshop on Complex Networks*: Dubrovnik, Croatia (steering/program committee)
- *STEM+C for Environmental Education*, Harvard Graduate School of Education, Cambridge, MA (invited speaker)

- *Play Data Consortium*, Massachusetts Institute of Technology, Cambridge, MA: (invited collaborator)

2016

- *Submerge NYC*: New York Hall of Science and Hudson River Park Trust, New York, NY (Co-host and Co-organizer for annual marine science festival on Pier 26)
- *The 5th International Workshop on Complex Networks and their Applications*: Università degli Studi di Milano, Milan, Italy (program committee)
- *NetSciEd: Teaching Networks to Everyone*: Satellite Symposium on Complex Systems in Education: Questions, Methods and Implications for Practice, Conference on Complex Systems, Amsterdam, The Netherlands (co-organizer)
- *Connected Worlds: Connecting the Public with Complex Environmental Systems*: American Geophysical Union Fall Meeting, San Francisco, CA: (speaker/panelist)
- *From Wow! to Why?: Building Science Literacy with Data Visualization*: Visitor Studies Association Annual Conference, Boston, MA (invited panelist)
- *Art Integration to Deepen Interdisciplinary Learning*, Institute in Education, New York Institute of Technology, Old Westbury, NY (instructor)
- *Open Education Resources Research Convening*: National Science Foundation, Arlington, VA (invited domain expert)
- *Tracing Learning Across Time and Space*: Cyberlearning 2016: Designing for Deeper, Broader, and More Equitable Learning, SRI International and National Science Foundation, University of Wisconsin, Madison, WI (co-author/speaker)
- *Fifth Network Science and Education Symposium*: International School & Conference on Network Science, Advanced Institute of Science and Technology, Seoul, Korea (co-organizer)
- *Enaction: Embodied Interfaces for Learning*, Culture Analytics Workshop II: Cultural Analytics and User Experience Design, Institute for Pure and Applied Mathematics, University of California, Los Angeles, CA (invited speaker)
- *Teaching and Learning About Networks: A Metacognitive Dilemma*: International Network for Social Network Analysis: Sunbelt 36 Conference, Newport Beach, CA: (co-author/speaker)
- *Crowdsourcing Network Literacy: A Grassroots Story*, International Network for Social Network Analysis: Sunbelt 36 Conference, Newport Beach, CA (co-author/speaker)
- *Teaching Network Science to University Undergraduates*: International Network for Social Network Analysis: Sunbelt 36 Conference, Newport Beach, CA (panelist)
- *Seventh International Workshop on Complex Networks*: Université de Bourgogne, Dijon, France (steering/program committee)
- *IEEE Integrated STEM Education Conference*: Princeton University, Princeton, NJ (co-organizer for NetSci High school student poster presenters)
- *Complex Systems in Education Symposium*: Georgia Institute of Technology, Atlanta, GA (invited panelist/ speaker/moderator)
- *Connected Worlds: Pathways to Engaging the Public in Sustainability Science*: Cary Institute of Ecosystems Study, Millbrook, NY (invited speaker)
- *The Genome Revolution: Understanding and Teaching DNA Sequencing*: New York Hall of Science President's Council Event, New York Genome Center, New York, NY (invited panelist)
- *Biochemistry Science Outreach Panel*: Albert Einstein College of Medicine, Montefiore Medical Center, Bronx, NY (invited panelist)

2015

- *Education Connector Workshop for Northeast Big Data Innovation Hub*: Columbia University,

New York, NY (co-organizer)

- *STEM Integration & 21st Century Learning: Bringing Authenticity to K-12 Teaching and Learning*: The Challenge of STEM Education Symposium: International Perspectives, Academia Brasileira de Ciências, Rio de Janeiro, Brazil (invited speaker)
- *Supersizing Science: The Present and Future of Embodied Learning Through Technology*, Association of Science-Technology Centers Annual Conference, Montréal, Canada (panel organizer/speaker)
- *Submerge NYC*, New York Hall of Science and Hudson River Park Trust, New York, NY (Co-host and Co-organizer for annual marine science festival on Pier 26)
- *Math, Science and Technology in Education II*, New York Institute of Technology, Old Westbury, NY (instructor);
- *Sackler Colloquium: Children and Screens*, National Academies of Science, Irvine, CA. (invited domain expert);
- *Sixth Annual PostDoc Symposium*: Icahn School of Medicine, Mt. Sinai Hospital, New York, NY (invited panelist/domain expert)
- *Tracing Learning Through Time and Space*: New York Hall of Science, Corona, NY (co-PI/co-organizer);
- *The Extended Mind: How Doing Makes You Smarter*: Beacon Institute for Rivers and Estuaries: Third Thursday Public Lecture, Beacon, NY (invited lecturer)
- *Fourth Symposium on Network Science and Education*: International School & Conference on Network Science, Universidad de Zaragoza, Zaragoza, Spain (co-organizer)
- *Data Visualization Literacy of Youth and Adult Science Museum Visitors*: American Educational Research Association Annual Meeting, Chicago, IL (co-author/presenter)
- *Sixth International Workshop on Complex Networks*: New York Hall of Science, Corona, NY (chair/host/co-organizer/program committee)
- *STEM Engagement and Learning Technology Leadership Forum*: New York Institute of Technology (invited speaker)
- *Cyberlearning 2015: Connect, Collaborate, and Create the Future*: SRI International and National Science Foundation, Arlington, VA (program committee, invited speaker)

2014

- *Network Science for the Next Generation Summer Workshop*: Boston University (co-PI/co-organizer)
- *Third Symposium on Network Science and Education*: International School & Conference on Network Science, U.C. Berkeley, Berkeley, CA (co-organizer/speaker)
- *Big Data and the Legible City: Connected Worlds*, Science Centre World Summit, Technopolis, Mechelen, Belgium (invited panelist)
- *Math, Science and Technology in Education II*, New York Institute of Technology, Old Westbury, NY (instructor)
- *New Technologies for Learning and Engagement*, Science Centre World Summit, Technopolis, Mechelen, Belgium (co-author)
- *Toward a Network Model of Learning*: Fifth International Workshop on Complex Networks, Università di Bologna, Bologna, Italy (invited speaker)
- *Submerge NYC*: New York Hall of Science and Hudson River Park Trust, New York, NY (Co-host and Co-organizer for annual marine science festival on Pier 26)

2013

- *The 4th Paradigm: Connecting Visitors to Complex Science*: Association of Science-Technology Centers Annual Conference: Albuquerque, NM (panel organizer/speaker)

- *Network Science for the Next Generation Summer Workshop*: Boston University, Boston, MA (co-PI/co-organizer)
- *Second Symposium on Network Science and Education*: International School & Conference on Network Science, Danmarks Tekniske Universitet and Det Kongelige Bibliotek, Copenhagen, Denmark (co-organizer/speaker)
- *The Fourth Paradigm: Connecting Learners to Complex Science*: National Socio-Environmental Synthesis Center, Annapolis, MD (invited speaker)
- *Sensor Networks and Social Networks: Effective Strategies for Education and Outreach*: American Society for Limnology and Oceanography Aquatic Sciences Meeting, New Orleans, LA (co-author)
- *Fourth International Workshop on Complex Networks*: Freie Universität Berlin, Germany (program committee)
- *Collaboration+Metrics=Funding*: Jackson Hole Wildlife Film Festival Symposium, Denver, CO (invited panelist)
- *Deconstructed: Connected Worlds*, Jackson Hole Wildlife Film Festival Symposium, Denver, CO (invited speaker)
- *Network Science for the Next Generation Summer Workshop*: Boston University, MA (co-PI/co-organizer)
- *Symposium on Network Science and Education*: International School & Conference on Network Science, Northwestern University, Evanston, IL (organizer/speaker)
- *Math, Science and Technology in Education II*: New York Institute of Technology, Old Westbury, NY (instructor)
- *Evaluating Meaning and the Visitor Experience*: Metropolitan Museum of Art, New York, NY (invited speaker)
- *Third International Workshop on Complex Networks*: Massachusetts Institute of Technology/Florida Institute of Technology, Melbourne, FL (program committee/ co-author poster)

Other Courses, Workshops, and Lectures

- *Authentic Data Workshop*: National Academies of Science, National Board on Science Education, Irvine, CA (invited panelist/domain expert)
- *Modeling and Mapping Science Workshop*: Indiana University, Bloomington, IN (invited panelist)
- *Mapping the Structure and Evolution of Sustainability Science*: American Association for the Advancement of Science, Washington, DC (invited panelist)
- *Network Paradigms for STEM Learning*: International School & Conference on Network Science, Massachusetts Institute of Technology, Cambridge, MA (speaker)
- *National STEM Education Exchange Working Group*: White House Office of Science and Technology Policy, Washington, DC (domain expert/invited panelist)
- *The Right Approach: Methods for Computational Thinking both Formally and Informally*: National Academies of Science/National Research Council, Washington, DC (invited panelist/domain expert)
- *NSF Workshop on How to Measure, Map and Dramatize Science*: Indiana University, Bloomington, IN (host/co-organizer)
- *20/20 Vision: Next Generation of STEM Learning Research*: Institute for Learning Innovation, Oregon State University, Corvallis, OR: (invited speaker)
- *The Seen and the Unseen: from Scientific Visualization to Data Visualization and its Impact on the Understanding of Science*: Gordon Research Conference on Scientific Visualization and Education, Magdalen School, Oxford University, Oxford, UK (invited speaker)

- *Connections: The Nature of Networks*: International School & Conference on Network Science, University of East Anglia, Norwich, UK: (invited convener/plenary speaker)
- *NSF Workshop on Knowledge Management & Visualization Tools in Support of Discovery*: New York Hall of Science, Corona, NY and National Science Foundation, Arlington, VA (co-organizer/co-facilitator/host)
- *International School & Conference on Network Science*: Notre Dame University, Harvard Medical School and New York Hall of Science, Corona, NY (co-PI/host/co-organizer)
- *Image and Meaning 2*: Massachusetts Institute of Technology and J. Paul Getty Museum, Los Angeles, CA (session collaborator)
- *Exhibits and Expansion in the 21st Century*: National Association of Museum Exhibition and Association of Science-Technology Centers Roundtable for the Advancement of Professionals, Jersey City, NJ (invited panelist)
- *Learning Design and Technology Master's Program*: Stanford University, Stanford, CA (presenter, advisor and mentor);
- *Using Emerging Technologies in Classroom Teaching*: Castilleja School Foundation, Palo Alto, CA (curriculum developer/instructor)
- *Models for Successful Faculty Development Integrating Technology*: National Coalition of Girls Schools, National Conference, San Francisco, CA (invited speaker)
- *Teaching Secondary French with Multimedia*: California Language Teaching Association Annual Conference, San Francisco, CA (lecturer)
- *MST Pre-service Faculty Preparation Standards Workgroup*: State University of New York, Stony Brook, NY (invited domain expert)
- *Technologies and Applications for K-12 Assessment*: New York State Board of Regents, New York City Schools Under Registration Review Annual Conference, New York, NY (invited speaker)
- *Applied Science Workshop in Math Science, and Technology for Environmental and Marine Sciences*: Mid-Suffolk Tech Prep Consortium (invited speaker)
- *Seals of Blackfish Rock*: Group for the South Fork, Bridgehampton, NY (program leader/instructor)
- *Telecommunications with a Costa Rican Rain Forest*: National Science Teaching Association: National Convention, Boston, MA (lecturer)
- *Marine Science and Fisheries Program*: Roskilde Universitet, New York, NY (advisor/host)
- *Sachem's Neck in Winter*: The Nature Conservancy, South Fork Shelter Island Chapter, Shelter Island, NY (program leader/instructor)
- *Imaging in Extreme Environments*: International Design for Extreme Environments Assembly Two, Growth and Environment: Challenging Extreme Frontiers, McGill University Center for Northern Studies and Research, Montreal, Canada (panelist/lecturer)
- *The Tombolo of Upper Beach, Shoreline Morphology of Shelter Island*: Group for the South Fork, Bridgehampton, NY (program leader/instructor)
- *Discrepancies in Color Reproduction Technology*: Association for Computing Machinery Special Interest Group on Computer Graphics and Interactive Techniques Annual Conference, Boston, MA (course developer/instructor)
- *Use of Electronic Bluescreen Traveling Mattes in Live Distance Learning and Professional Development Program*: J.C. Penney Corporation, New York, NY (invited speaker)

Honors and Awards

- Sigma Xi Science Research Honor Society, 2023
- International Serious Play Silver Award, The Pack, 2020
- American Alliance of Museums Media and Technology MUSE Gold Award, Connected Worlds,

2017

- Jackson Hole Science Media Award, Interactive Category, Connected Worlds, 2016
- Science and Practice of Ecology and Society Award, Puntacana Ecological Foundation and the Scaling of Sustainable Tourism Development, 2013
- Summit International Creative Award, Photovoltaic Exhibit, 2011

Funded Research & Program Development (PI/Co-PI)

- *Conference on Human-Centered Approaches to Artificial Intelligence Literacy in Informal Learning*, New York Hall of Science / NSF, 2022
- *QuEST: Quantum Education for Students and Teachers*, State University of New York, Stony Brook, New York Hall of Science / NSF, 2018-2022
- *DataJam: Scaleup of Data Science High School Research Program*, New York Hall of Science, Pittsburgh Supercomputer Center/ Columbia University, Northeast Big Data Innovation Hub, 2021 – 2022
- *Applying Game Design Principles for Supporting Computational Literacy Experiences in Museum Exhibits*, New York Hall of Science / University of Wisconsin / NSF, 2021 – 2022
- *Playground Physics: Scaling and Sustaining a Technology-Enhanced Middle-School Physics Program*, New York Hall of Science / U.S. Department of Education, 2020 – 2022
- *Empowering Environmental Resilience Through Community Design*, New York Hall of Science / JPB Foundation, 2019 – 2022
- *The Pack: Using Game-based Learning to Infuse Computational Thinking into Science Teaching and Learning*, New York Hall of Science / U.S. Department of Education, 2019 – 2022
- *Data-Driven, Human-in-the-Loop Support for Facilitating Participatory Learning Activities*, New York Hall of Science / NSF, 2018 – 2022
- *Network for Earth-space Research, Education and Innovation with Data*, Associated Universities Incorporated / NSF, 2019 – 2023
- *NYIT Robert Noyce Teacher Scholarship Program*, New York Hall of Science, New York Institute of Technology / NSF, 2019– 2022
- *Making a Difference: Engaging Young People in Engineering and Computer Science through Computational Making and Social Entrepreneurship*, New York Hall of Science / NSF, 2018 – 2022
- *Understanding and Improving Data Visualization Literacy: Research and Tool Development to Empower General Audiences to Read and Make Data Visualizations*, Indiana University / NSF, 2017 – 2023
- *Big Data Literacy: Building Capacity for Regional Collaboration in Closing the Big Data Divide* Northeast Big Data Innovation Hub, Columbia University / NSF, 2016 – 2022
- *Hudson River Estuarium*, York Hall of Science/Clarkson University / New York State Dept. of State and Dept. of Environmental Conservation, 2015 – 2019
- *Computational Thinking in Ecosystems: A-Program-to-Play Approach to Infusing Computational Thinking into Environmental Science Learning*, New York Hall of Science, Columbia University, Design I/O, NSF & JPB Foundation, 2015 – 2019
- *Data Modeling with Young Learners and Their Families*, New York Hall of Science/NSF. 2016 – 2018
- *Learning Everywhere*, Concord Consortium /New York Hall of Science / Bowes Foundation, 2016 – 2018
- *Innovating Data-driven Methodologies for Documenting and Studying Informal Learning*, New York Hall of Science / NSF, 2015 – 2018
- *Innovation Institute: from Problem to Product*, New York Hall of Science / NSF, 2014 – 2017

- *Mathematics and Science Teacher Education Residency*, City University of New York/New York Hall of Science/ New York City Department of Education / New Visions for Public Schools / NSF, 2013 – 2018
- *Network Science for the Next Generation*, SUNY Binghamton/Boston University/New York Hall of Science / NSF, 2011- 2017
- *Ocean Communities in Education and Social Networks* - University of Massachusetts / New York Hall of Science / Boston Public Schools / Association for the Sciences of Limnology and Oceanography / Centers for Ocean Science Education Excellence / NSF, 2010 – 2016
- *Connected Worlds*, New York Hall of Science / Columbia University / Design I/O / New York University / Yale University / NSF / JPB Foundation / Google / Carnegie / NASDAQ / Xylem Corporation, 2009 – 2015
- *Pathways: Sensemaking of Big Data*, New York Hall of Science / Indiana University / NSF, 2012 – 2014
- *CS-STEM*, Topcoder / New York Hall of Science / DARPA, 2010 – 2012
- *Teachers TryScience*, IBM/New York Hall of Science, 2009 – 2011
- *Literacy Evaluation and Assessment Program* - Bay Shore School District, 1995-1996
- *Sciences of the Environment and Advanced Technology Education Consortium* - State University of New York, Brookhaven National Laboratory, Suffolk Board of Cooperative Educational Services, Bay Shore UFSD, 1994 – 1996
- *Computer Integration into Restructured Collaborative Learning Environments* - Bay Shore School District, 1992 – 1995

Other Funded Research & Program Development

- *THINK Exhibit iPad App Curriculum* for THINK pop-up exhibit at New York's Lincoln Center, New York Hall of Science/IBM (project director), 2012
- *Connections: The Nature of Networks*, New York Hall of Science/NSF (exhibit and program developer/researcher for the first museum exhibit and programs on the science of complex networks), 2000 – 2004
- *TryScience*, IBM/New York Hall of Science/Association of Science-Technology Centers/European Collaborative for Science, Industry and Technology Exhibitions (technical and content manager for \$50M global website for science center content and programs for 800 ASTC and ECSITE member museums), 1999 – 2008
- *Technical Education and Mentoring Program*, Castilleja School Foundation/AAUW/Silicon Graphics, Inc./Stanford University (supervisor/evaluator), 1996 – 1999
- *Program for the Twenty-First Century* - Castilleja School Foundation: (director of information resources for program and capital development project to provide new STEM teaching facilities, programs and professional development), 1996 – 1999
- *MST Integrated Program for Physical Science* - Bay Shore School District: (curriculum and technical coordinator for program to team teach high school science, math technology and literacy), 1995-1996
- *Long Range Plan for Technology* - Bay Shore School District: (project director/facilitator), 1993 – 1995
- *Rainbow Networks Consolidation Project* - Rainbow Programming Enterprises: (project director for \$20M capital project to build a new network operation and studio facility to consolidate existing operations), 1990 - 1992
- *Joint Center for Computers, Learning, and Technology* - New York Institute of Technology/Howard University (director of engineering), 1988 – 1990
- *Interaction of Color* - NYIT, Pratt Institute, Apple Computer, The Albers Foundation, and Yale

University Press (engineer in charge of production), 1987 – 1988

Publications

- Mallavarapu, A., Walker, E., Kelley, C., Gardner, S., Roschelle, J., & Uzzo, S. (2023, November). Network Based Methodology for Characterizing Interdisciplinary Expertise in Emerging Research. In International Conference on Complex Networks and Their Applications (pp. 121-132). Cham: Springer Nature Switzerland.
- National Academies of Sciences, Engineering, and Medicine. (2023). Current Landscape of Data Science Education. In *Foundations of data science for students in grades K-12: Proceedings of a workshop*.
- Bennett, D., Brunner, C., Hartmann, N., & Uzzo, S. (2023). Using Open-World Games to Support Inclusive Approaches to Computational Thinking. *Connected Science Learning*, 5(1), 12318625.
- Bastón, R., Cramer, C., Daly, A. J., Hudson, F. D., Liou, Y. H., Naum, K., Thompson, W, Umer L. & Uzzo, S. (2023). An Investigation of the Northeast Big Data Innovation Hub through Social Network Analysis. In: *The Social Leader: Catalyzing Networks for Educational Change* (C., Daly & Liou, Y., Eds.). Bloomsbury Publishing. 230.
- Mallavarapu, A., Lyons, L., & Uzzo, S. (2022). Exploring the utility of social-network-derived collaborative opportunity temperature readings for informing design and research of large-group immersive learning environments. *Journal of learning analytics*, 9(1). 53-76.
- Cohen, R. L., Mallavarapu, A., Lyons, L., & Uzzo, S. (2021). Studying shared regulation in immersive learning environments. In *Proceedings of the 14th International Conference on Computer-Supported Collaborative Learning-CSCCL 2021*. International Society of the Learning Sciences.
- Browne, D. T., May, S. S., Colucci, L., Hurst-Della Pietra, P., Christakis, D., Asamoah, T., Hale, L., Delrahim-Howlett, K., Emond, J., Fiks, A., Madigan, S., Perlman, G., Rumpf, H.-J., Thompson, D., Uzzo, S., Stapleton, J., Neville, R. & Prime, H. (2021). From screen time to the digital level of analysis: a scoping review of measures for digital media use in children and adolescents. *BMJ open*, 11(5), e046367.
- Stella, M., Kapuza, A., Cramer, C., & Uzzo, S. (2021). Mapping computational thinking mindsets between educational levels with cognitive network science. *Journal of Complex Networks*, 9(6), cnab020.
- Mallavarapu, A., Lyons, L., & Uzzo, S. (2021). Formative Fugues: Reconceptualizing Formative Feedback for Complex Systems Learning Environments. *International journal of complexity in education*, 2(2).
- Uzzo, S. M., Cramer, C. B., Sayama, H., & Faux, R. (2021). NetSci High: Bringing Agency to Diverse Teens Through the Science of Connected Systems. *Northeast Journal of Complex Systems (NEJCS)*, 3(2), 2.
- Mallavarapu, A., Lyons, L. & Uzzo, S. (2020) Formative Fugues: Helping Learners Understand Complex Systems through Causal Inference and Lag Sequential Analysis. In Argyrakis Panos. CCS2020 - Conference on Complex System 2020 - Book of Abstracts. Presented at the Conference on Complex Systems 2020 (CCS2020), online: Zenodo. <http://doi.org/10.5281/zenodo.4427919>.
- Beheshti, E., Lyons, L., Mallavarapu, A., Thompson, W., Wallingford, B., & Uzzo, S. (2021). Co-Designing Learning Dashboards for Informal Educators. In *Design Make Play for Equity, Inclusion, and Agency* (pp. 61-79). Routledge.
- Lyons, L., Uzzo, S., Ba, H., & Thompson, W. (2021). The Pack: Playfully Embodying Computational and Systems Thinking. In *Design Make Play for Equity, Inclusion, and Agency* (pp. 208-225). Routledge.

- Beheshti, E., Lyons, L., Mallavarapu, A., Wallingford, B., & Uzzo, S. (2020, April). Design considerations for data-driven dashboards: Supporting facilitation tasks for open-ended learning. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-9).
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- Letourneau, S. M., Liu, C. J., Donnelly, K., Meza, D., Uzzo, S., & Culp, K. M. (2020). Museum makers: Family explorations of data science through making and exhibit design. *Curator: The Museum Journal*, 63(1), DOI:10.1111/cura.12348. 131-145.
- Browne, D. T., May, S., Hurst-Della Pietra, P., Christakis, D., Asamoah, T., Hale, L., Delrahim-Howlett, K., Emond, J., Fiks, A., Madigan, S., Perlman, G., Rumpf, H.-J., Thompson, D., Uzzo, S., Stapleton, J., Prime, H. & Neville, R. (2019). From ‘screen time’ to the digital level of analysis: protocol for a scoping review of digital media use in children and adolescents. *BMJ open*, 9(11), e032184.
- Uzzo, S. M., & Cramer, C. B. (2019). Networks and Data: Adventures in Literacy and Learning. In *Proceedings of the 63rd Annual Meeting of the ISSS-2019* Corvallis, OR, USA.
- Mallavarapu, A., Lyons, L., Uzzo, S., Thompson, W., Levy-Cohen, R., & Slattery, B. (2019, May). Connect-to-connected worlds: Piloting a mobile, data-driven reflection tool for an open-ended simulation at a museum. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (pp. 1-14).
- Cramer, C., Gera, R., Panagakou, E., Porter, M. A., Sayama, H., Sheetz, L., M. Stella, M. & Uzzo, S. (2018). Proceedings of NetSciEd 2018. The NetSci Satellite Symposium on Network Science and Education at the International Workshop & Conference on Network Science, Institut des Systèmes Complexes de Paris.
- Towlson, E. K., Sheetz, L., Gera, R., Roginski, J., Cramer, C., Uzzo, S., & Sayama, H. (2018). Networks in Classroom Education (NiCE) Teacher Workshop: Engaging K-12 Teachers in the Development of Curricular Materials That Utilize Complex Networks Concepts. *Complicity: International Journal of Complexity in Education*, Vol. 15, No. 1. Edmonton: University of Alberta. 5.
- Cramer, C., Porter, M. A., Sayama, H., Sheetz, L., & Uzzo, S. M. (Eds.). (2018). *Network Science in Education: Transformational Approaches in Teaching and Learning*. Edited Volume. Springer.

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- Uzzo, S. M., Graves, S. B., Shay, E., Harford, M., & Thompson, R. (2018). *Pedagogical content knowledge in STEM: Research to Practice*. Edited Volume. Switzerland: Springer International Publishing AG.
- Uzzo, S. M., Ba, H., & Umer, L. (2018). Collaborative PCK in practice: Bringing together secondary, tertiary, and informal learning in a stem residency program. In *Pedagogical Content Knowledge in STEM: Research to Practice* Edited by Uzzo, S. M., Graves, S. B., Shay, E., Harford, M., & Thompson, R. Springer. 215-239.
- Cramer, C., Gera, R., Labriole, M., Sayama, H., Sheetz, L., Towlson, E., & Uzzo, S. (2018). Cultivating tipping points: Network science in teaching. In *Complex Networks IX: Proceedings of the 9th Conference on Complex Networks CompleNet 2018* Cornelius, S., Coronges, K., Gonçalves, B., Sinatra, R., Vespignani, A. (Eds.) Springer International Publishing. 175-183.
- Lyons, L. & Uzzo S. (2017) *Big Data and the 95% Solution: Looking for Learning in All the Wrong Places*, In *Proceedings for the Data for Good Exchange*, New York: Bloomberg Finance, LLP.
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- Sayama, H., Cramer, C., Sheetz, L., & Uzzo, S. (2017). NetSciEd: network science and education for the interconnected world. *Complicity: International Journal of Complexity in Education*, Vol. 14, No 2. (2017) <https://journals.library.ualberta.ca/complicity/index.php/complicity/article/view/29339>.
- Uzzo, S. (2017) *STEM Integration & 21st Century Learning: Bringing Authenticity to K-12 Teaching and Learning*. In *Proceedings: Challenges for STEM Education in Brazil symposium*. Brazilian Academy of Sciences, Rio de Janeiro, Brazil.
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- Borner, K., Maltese, A., Balliet, R., Heimlich, J. E. & Uzzo, S. (2015) *Data Visualization Literacy of Youth and Adult Science Museum Visitors* AERA Conference Paper. 2015.
- Mangioni, G., Simini, F., Uzzo, S. & Wang, D. (2015) *Complex Networks VI: Proceedings of the 6th Workshop on Complex Networks CompleNet 2015*. In Series: Studies in Computational Intelligence, Vol. 597. Springer Science & Business Media.

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- Boyle, P., Breslin, V., Brisson, L. C., Fraser, J., Friedman, A. J., Gardner, K., Schoedinger, S., Jerry Schubel, J., Uzzo, S. & Yalowitz, S. (2014). *COSEE OCEAN Inquiry Group Report: Opportunities for Creating Lifelong Ocean Science Literacy*. Boston, MA: School for the Environment, University of Massachusetts, Boston.
- Uzzo, S. (2013) Puntacana Ecological Foundation and the Scaling of Sustainable Tourism Development. *Ecology and Society*, Vol. 18 No. 4. Resilience Alliance.
- Chen, R., Cramer, C., DiBona, P., Faux, R., & Uzzo, S. (2013). Ripple Effects: Small-Scale Investigations into the Sustainability of Ocean Science Education Networks. In *Complex Networks, Studies in Computational Intelligence*. A. Evsukoff, M. González, R. Menezes, (Eds). Berlin: Springer Publishing Company. 424.
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- Uzzo, S., & Siegel, E. (2010). Connections: The Nature of Networks, Communicating Complex and Emerging Science. In *Science Exhibitions, Communication and Evaluation*. Edited by Anastasia Filippoupoliti. Edinburgh: MuseumsEtc.
- Börner, K., Bettencourt, L. M., Gerstein, M., & Uzzo, S. M. (2009). *Knowledge management and visualization tools in support of discovery NSF Workshop Report*. Indiana University, Los Alamos National Laboratory, Yale University, and New York Hall of Science.
- Börner, K., Palmer, F., Davis, J. M., Hardy, E., Uzzo, S. M., & Hook, B. J. (2009). Teaching children the structure of science. In *Visualization and Data Analysis 2009 (Vol. 7243, pp. 36-49)*. International Society for Optics and Photonics.
- Uzzo, S. (2004) The Man Who Spoke to Stones. In *Terra Nova – Writing the Future: Progress and Evolution*, Rothenberg, D., & Pryor, W. J. (Eds.). Massachusetts Institute of Technology Press, Cambridge, MA.
- Uzzo, S. (1993) Light and Imaging in Extreme Environments. In *Proceedings, 2nd International Design for Extreme Environments Assembly*. McGill University, Centre for Northern Studies, Montreal, PQ.
- Uzzo, S. (1989) Computer Output Technology. In *Perceptual Discrepancies in Color Reproduction Technology: (Published Notes for Course #1)*, Association for Computing Machinery, SIGGRAPH Conference, Boston, MA.

Advisory Councils and Boards

(Current)

- *Hudson Canyon Sanctuary Advisory Council* National Oceanographic and Atmospheric Administration, U.S. Department of Commerce (member Science and Research Working Group)
- *EDU Core Research Hub*. American Institutes of Research/ National Science Foundation /Georgia State University/Morgan State University/Northwestern University (advisor)
- *Advancing Methods and Synthesizing Research in STEM Education* American Institutes of Research/National Science Foundation (advisor)
- *Artificial Intelligence Incubator* Center for Integrative Research in Computing and Learning Sciences, National Science Foundation/Digital Promise/Education Development Center/Stanford Research International/University of Pittsburgh (team member)
- *WaterSIMmersive: Designing and assessing a mixed-reality water sustainability educational game and museum exhibit for communities in the Desert Southwest*, National Science Foundation,

Arizona State University (advisor)

- *International Conference on Complex Networks, Complenet* (Steering Committee member/organizer)
- *Places and Spaces Science Mapping Exhibition*. Luddy School of Informatics, Computing, and Engineering, Indiana University/National Science Foundation/Bill & Melinda Gates Foundation/National Institutes of Health/National Endowment for the Humanities/James S. McDonnell Foundation (Curatorial Advisory Board member)
- *Salonga Wetlands, Advocacy Network* (board member, secretary)
- *Art+Tech Committee*. National Arts Club (committee member)
- *Network Science Society* (board member)

(Previous)

- *Infectious: Stay Away!* L'Institut national de la santé et de la recherche médicale/Trinity College, Dublin/Science Gallery (advisor)
- *Institute of Digital Media and Child Development* (advisor)
- *Learning Design and Technology (MS) Program*, Stanford Graduate School of Education, Stanford University (advisor)
- *Real World, Real Science: Labventure*. Gulf of Maine Research Institute/NASA/Education Development Center (advisor)
- *Redes Y Conexiones (Networks and Connections)* Museo Laberinto de La Ciencias y Las Artes (advisor)
- *Why Zoos and Aquariums Matter, STEM Matters: Investigating the Confluence of Visitor and Institutional Learning Agendas*, National Science Foundation /Knology/ Center for Research and Evaluation at COSI/Oregon State University Center for Research on Lifelong STEM Learning/Association of Zoos and Aquariums (advisor)
- *Advisory Committee for Long-Range Information Technology Plan* Northport-East Northport Schools (advisor)
- *Amgen Biotech Experience* Amgen Foundation/Education Development Center (advisor)
- *Local Image Processing and Storage Network* Blue Sky Productions (consultant)
- *Brooklyn Children's Museum Expansion Project* City of New York/Carnegie Corporation/Michael Bloomberg (technical advisor)
- *CIS-Lunar Teleoperations Simulation Project* Princeton Space Studies Institute (advisor)
- *Communication Arts Department Advisory Committee*, Dutchess County Community College (advisory board member)
- *Concept Web Alliance* Netherlands Bioinformatics Centre (trustee)
- *Connected: The Power of Six Degrees* Real Pictures, Pty (advisor)
- *Education and Public Outreach Advisory Council* Associated Universities Incorporated (member Advisory Council)
- *Stuyvesant Square Park Neighborhood Association* (board member)
- *Technology Plan* Lawrence Hall of Science (advisor)

Peer Review

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| • American Association for the Advancement of Science | • Ecological Society of America |
| • Canadian Society for Ecology and Evolution | • Ecology and Society |
| • Cultural Data Analytics Open Lab Tallinn University | • Frontiers Marine Science |
| | • Institute of Museum and Library Services |
| | • <i>International Conference on Complex Systems</i> |

Modeling, Analysis & Applications

- International Conference on Complex Networks and Applications
- International Conference on Complex Networks
- Jackson Hole Wildlife Film Festival
- Complexity: John Wiley and Sons
- National Aeronautics and Space Administration
- National Oceanographic and Atmospheric Administration
- National Science Foundation
- Northeast Journal on Complex Systems
- Northeast Regional Conference on Complex Systems
- Sloan Foundation
- Springer Nature

Membership

(Current)

- American Association for the Advancement of Science
- American Society for Cybernetics
- American Geophysical Union
- Association of Computing Machinery & ACM Special Interest group on Computer graphics and Multimedia (SIGGRAPH)
- Complex Systems Society
- Ecological Society of America
- International Network for Social Network Analysis
- International Society for Systems Science
- National Arts Club
- Network Science Society
- Society for Industrial and Applied Mathematics

(Previous)

- Academy of Television Arts & Sciences
- American Society for Photogrammetry and Remote Sensing
- Association for the Development of Computer-Based Instructional Systems
- Association for Supervision and Curriculum Development
- Human Factors Society
- Institute of Electrical and Electronic Engineers/IEEE Computer Society
- Instructional Television Association
- International Society for Technology in Education
- National Science Teaching Association
- Society for Information Display
- Society of Motion Picture and Television Engineers