

Teaching & Learning Statement

Teaching in the 21st century requires cultivating students as Media Arts & Science researchers and New Media Architect(s) in industry roles as experience designers and creative technologists, able to navigate and synthesize complex data available within AI-enhanced, interactive immersive environments. My teaching approach is rooted in fostering an environment where students and teachers collaboratively engage in project-based learning, co-creating embodied and participatory experiences across spatial computing systems, interactive media, and sensory design.

Integrating light, sound, movement, and data-driven interaction as an experimental art form of research is a process of analytical critique, practical dialogue, and knowledge creation through experimentation. This perspective is informed by my own educational trajectory, transitioning through mentorship in analog/manual creation, digital generative making through coding, and current AI-supported leveraging in co-creative teaching practices.

Throughout the technological shifts I have experienced within arts and design—from pre-internet analog practices to web-based systems and now AI-augmented creation—my teaching philosophy has centered on exposing students to new ideas and preparing them to design meaningful experiences that shape perception, presence, play, and participation. I approach emerging media not simply as tools, but as systems of thought that influence how we inhabit space, interact with one another, and construct creative narratives.

In my courses, history, theory, and studio practice function as an integrated, cohesive design process for problem-solving and research. Students are encouraged to investigate art, architecture, performance, and interactive media, translating these references into project-based experimentation. Iterative prototyping as art-making emphasizes testing ideas through embodied interactive learning, user-centered experience design, and spatial computing systems for sensory meaning-making.

My goal is to inspire fearless experimentation grounded in open, expansive imagination. Students learn to move with agility between conceptual frameworks and technical execution, acquiring liberal arts inquiry alongside computational, design, and engineering methodologies. Research becomes performative: an iterative creative studio practice where inquiry leads to embodied exploration and reflective critique. Teaching becomes a dynamic process of guiding students to filter, analyze, and synthesize information into actionable insights, transforming both student and instructor perspectives through the shared construction of experiential systems as creative works.

Teaching Methods

My teaching methods are shaped by experience across academia, nonprofit leadership, and interdisciplinary research labs, and are grounded in project-based studio learning. Whether in physical studios, immersive labs, or online environments, I structure courses around iterative design cycles: research, concept development, rapid prototyping, testing, critique, and refinement of an art/design work. Students work individually and in teams to design interactive systems that explore worldbuilding as an architectural language, a spatial embodied experience, and participatory media.

Drawing from my work in research-intensive R1 lab environments, students learn to deconstruct complex experiential challenges into actionable stages, moving from concept to functional works. Emphasis is placed on a New Media Architectures (NMA) experimental approach exploring responsive environments through interface, interaction, and space design. Sharing this approach allows students to engage with interdisciplinary methods that combine technical, theoretical, and creative perspectives. I encourage students to individualize their own curiosities, leading to engaged learning and project testing. By situating studio practice within broader cultural, technological, and performative contexts, existing cultural narratives inspire new artistic experiences.

Assessment of Learning

Assessment in my courses is structured around clearly defined learning outcomes that integrate conceptual rigor, technical proficiency, and experiential impact. Students are evaluated not only on final works but on their iterative process—research development, creative assignments, prototyping stages, responsiveness to critique, and refinement through testing. I encourage students to develop a self-evaluative instinct through open studio dialogue. Sharing professional experience in studios focused on immersive and interactive environments provides evaluative criteria to test how perception, presence, and participation are shaped.

Critiques are structured in phases: concept review, prototype creation, and final art/design prototype presentation. Students engage in research assignments, artistic explorations, and written reflections throughout the term. Public-facing final presentations encourage metacognitive awareness, helping students articulate their intentions and assess their growth. Portfolio development as a self-assessment tool guides students to curate and present projects suitable for museum exhibitions. Getting to know students' inner creative worlds is a central objective, placing points of entry for artistic exploration. Aligning analysis, evaluation, and research with real-world professional standards in emerging media arts/design ensures students leave courses equipped to apply new tools insightfully to future challenges.

Creating an inclusive and supportive studio environment is foundational to my teaching, facilitating dynamic potential for growth. In the experience of design and worldbuilding, diversity is central to participatory systems. I encourage students to design interactive immersive environments and perceptual architectures for universal audiences, moving beyond the Western canon to consider accessibility, context, and cultural inclusivity. Students research global challenges and find personal connections to proactively engage with community, fostering belonging through collaborative problem-solving and exploration of artistic creation. My work with international organizations such as ACM SIGGRAPH, Leonardo/ISAST, and DigitalFUTURES informs my ability to address diverse voices. I provide opportunities to participate in exhibitions, panels, talks, and workshops, and listen deeply to students' perspectives to imagine new methods of group learning. Ownership of ideas and respect within the group encourages creative risk-taking, leadership, and technical confidence.

My teaching is informed by engagement in large-scale immersive and interactive productions through my work with the AlloSphere Research Group at the California NanoSystems Institute and my collaborations within international media arts communities such as ACM SIGGRAPH, Leonardo/ISAST, and DigitalFUTURES. For example, in the Synaptic Time Tunnel project presented at ACM SIGGRAPH 2023 and sponsored by Autodesk, I contributed to the development, coordination, and production of an interdisciplinary immersive environment with two 150-ft long by 20-ft wide projection screens, built in two days and active for four, involving multiple international research teams. The project required the integration of spatial computing systems,

real-time rendering, sound design, and embodied audience interaction. My role included supporting production workflows, facilitating communication across technical and artistic teams, integrating onsite design and technology, and helping secure primary funding—experience that directly informs how I structure collaborative studio environments for students working on complex interactive systems as architectural design engineering works.

Similarly, the Sensorium installation for the Getty Foundation's Pacific Standard Time (PST ART) initiative involved designing and realizing an ecologically focused immersive virtual environment in the AlloSphere. The project integrated climate data (NASA), architectural designs for UCI, hardware systems, and software frameworks (AlloLib, Unity, and Unreal) into a cohesive experiential instrument. At TED Vancouver, our IVE research was encapsulated into a large single screen, dark room, with interactive, full stereo spatial content, inspiring dialogue and research exposure. These IVE installation experiences serve as prototypes for artistic media research, which I share with students to ground learning, grow trust, and convey real-world research challenges. Through iterative prototyping and testing, installations engaged public audiences in embodied interaction with environmental data. I translate these production experiences into coursework teaching students to move from conceptual research to technically realized, audience-centered immersive environments. Sharing both successes and constraints prepares students to navigate ambitious installation design while maintaining conceptual rigor.

I view teaching as a continuous journey of discovery, shaped by the interplay between studio/lab experimentation, research inquiry, and artistic practice. My trajectory began with curiosity to explore technology through art and architectural design, evolving into broader exploration of media arts research to immersive systems development—mediating materials as informational form from data, and shapes as space. As technologies evolve, so must the frameworks of thought guiding student design of meaningful experiences.

Recently, including my co-development of the “Virtual Reality & Digital Spaces + Lab” online course, I refined pedagogical models integrating spatial computing, real-time media systems, and collaboration. Leveraging online networks, I reimagined contemporary educational assets and informational frameworks as part of a larger worldmaking paradigm. This iterative curriculum-building process strengthens my ability to design courses balancing conceptual depth with technical fluency and embodied experimentation.

Looking forward, I aim to continue advancing New Media Architectures (NMA) as an art practice, research framework, and studio methodology. This vision includes creating a comprehensive knowledge base and combining collaborative networks. Within an interdisciplinary center dedicated to immersive storytelling and innovation, I am particularly interested in collaborating across film, theatre, music, and computational disciplines to expand how students design participatory and sensory-driven environments.

I aim to meaningfully empower students and colleagues to explore creative boundaries, fostering curiosity, critical thinking, and collaborative engagement necessary to shape the future of emerging media and the tools that define our cultural moment.