

More than just “well-roundedness”: the vital case for the

ARTS AND HUMANITIES IN TECHNOLOGICAL PRACTICE

Sketch Model at Olin College was a lively, evolving set of **activities** designed to awaken the political and cultural contexts for technology, both on our lab school campus for engineering education and for like-minded counterparts who are also seeking a probing, critical engagement with technology. The Sketch Model team—a mixed group of faculty and staff—designed, enabled, and invested in programming for members of the Olin community and our larger network, including educators, artists, and organizations. This report highlights these years of work: building **avenues** for the arts and humanities to intersect in provocative, convivial ways with our small undergraduate engineering college. We see our work as a test case in raising a very broad tent for the domain of technology, including acting on our belief that the arts and humanities are central to the capacity of engineering education to contribute to a civic vision of desirable futures.

Sketch models are **early ventures** into building what’s to come—research-led, “looks-like” or “works-like” prototypes made of readily available resources. An idea that is made concrete but remains rough around the edges immediately communicates what’s key and simultaneously invites tinkering, testing, and redesign, in ways both focused and playful. The first years of Sketch Model enacted a set of **experimental approaches** that embody the exploratory spirit of ideas-under-construction inherent in its name.

What you’ll glimpse here is the **blossoming** of that spirit. This report captures just a few of the many dimensions that made up Sketch Model, including our creative residency program, summer fellowships, and partnerships with practicing artists. More information, including a companion audio series about the ideas behind our work, can be found at www.olin.edu/sketchmodel.

Sketch Model at Olin College of Engineering was funded by a grant from the Andrew W. Mellon Foundation.



CREATIVE-IN-REFERENCE PROGRAM



We hosted three creative residents on the Olin College campus, each for a full year: artists Mimi Ọnụọha, Tom Pearson, and Arlene Keizer. They taught classes; mentored small groups in creative practices including data exploration, zine production, theater production, and weaving; involved students in exhibition or performance work; and more. Rather than being “in residence,” wherein artists find a temporary and often cloistered space in which to work, the experience was framed with a more outward disposition. We wanted to encourage a series of encounters, in which students might see the work practices and habits of mind of artists on campus as a resource, a reference by which they might measure their own choices and pathways in technology. How have these artists charted their own routes to make a life in creative practice, both through ideas and through very real pragmatic constraints? What connections might be found to engineering practices and spaces—prototyping, testing and failure, and how lab and studio environments compare?

MIMI ỌNỤỌHA



Project | IMPOSSIBLE MAPS

"Data-driven systems have a churning logic of their own that stems from data's ability to stand in for so much more: truth, certainty, insights, power."

Mimi Ọnụọha (resident in 2018-2019) is an artist whose multimedia practice uses print, code, installation and video to make sense of the power dynamics that result in disenfranchised communities' different relationships to systems that are digital, cultural, historical, and ecological. In spring 2019, a group of students partnered with Ọnụọha, Boston's Isabella Stewart Gardner Museum, and local community youth organizations to create pieces that consider the intersection of art, data, and space in new ways. Students gathered creative datasets about Boston and collectively made a series of maps, models and manifestations that were shared with and presented at the Gardner. These pieces served as a form of research, visual inspiration, and raw material for the museum's exhibition, *Big Plans: Picturing Social Reform*.



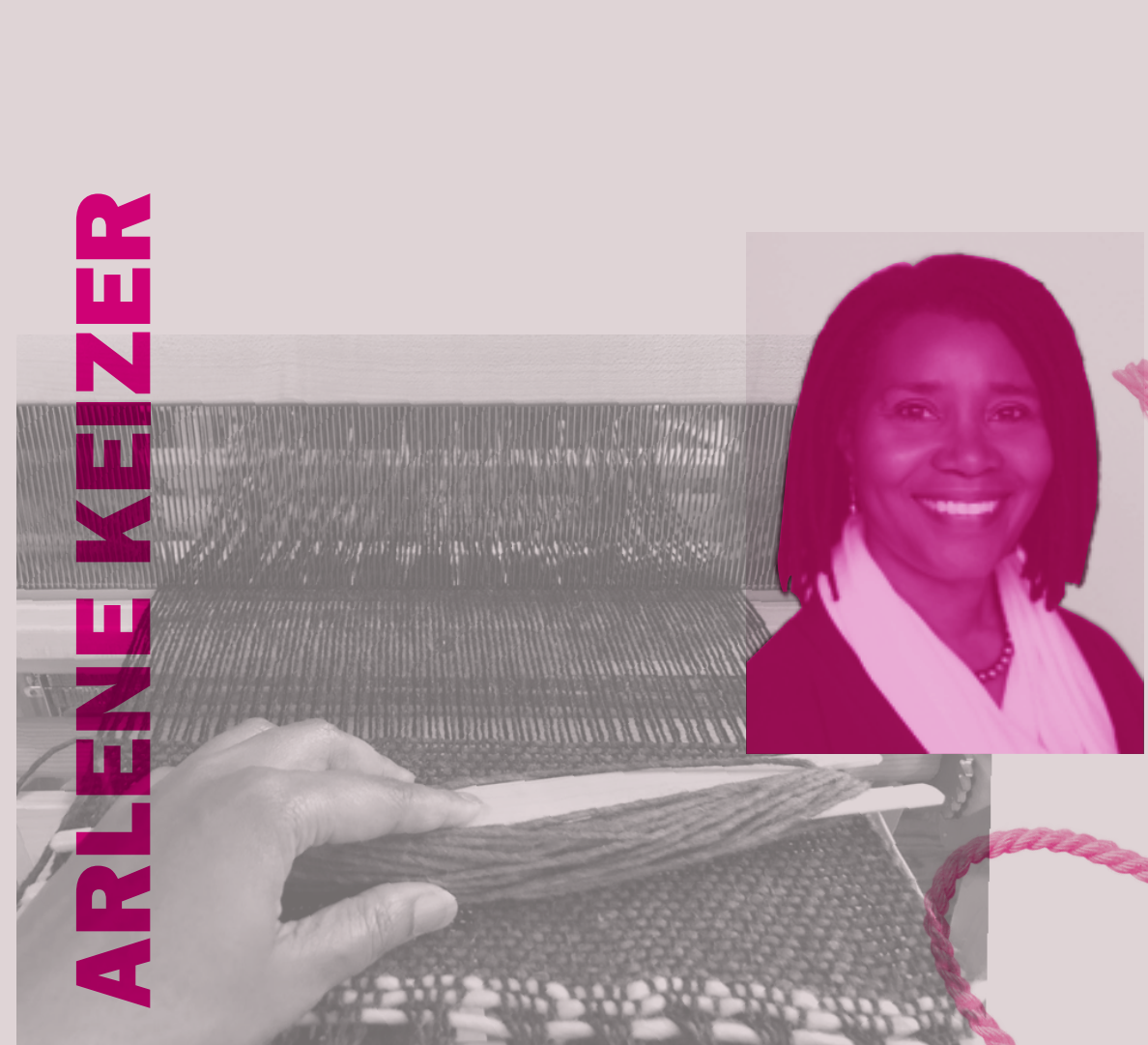


TOM PEARSON

Project | ARCHIVES OF ASTERION

“Olin College is a perfect incubator for experience design—the way we think about innovating for audiences, user interactivity, ethics and responsibility.”

Tom Pearson (resident in 2019-2020) is the co-founder and co-artistic director of Third Rail Projects, an immersive theater company based in New York City. His year-long project, *Archives of Asterion*, is a multi-media art installation and performance activation, a library within a library—a speculative mythology of the adolescence of Icarus, Ariadne, and Asterion, told through dreams of imprisonment and escape, flight and fall, love and loss, fathers, mentors, and invention. The work, built with a group of Olin students, staff, and faculty member Jonathan Adler, is an assemblage of artifacts housed inside of a card catalog, embedded in books, told through a combinations of new and antiquated technologies, and assembled as an archive of letters, images, blueprints, objects, scents, and interwoven narratives borne from archetypal dreams. The work was initially designed for a physical space on campus, but its structure changed suddenly with the March 2020 shutdown. Pearson and the students responded inventively, translating the experience to a virtual reality platform. For the VR experience of *Archives of Asterion*, visit [RansomPoet.com](https://ransompoet.com). The book of poetry and visual artifacts on which the project was based, *Still the Sky*, was published in June 2022.



ARLENE KEIZER

Project | WEAVING AND/AS TECHNOLOGY, THEORY, AND HISTORY

“Ideologies of making are the often-unspoken ideas and values that determine the priorities for imagining and crafting objects and processes, which establish the conditions of possibility for making within a culture.”

Arlene R. Keizer (resident in 2020-2021) is Professor and former Chairperson of Humanities and Media Studies at the Pratt Institute, where she is a scholar in the fields of literary and cultural studies, critical theory, feminist theory—especially black feminist theory—and psychoanalysis. At Olin, Keizer developed her residency around *ideologies of making*: a set of principles and values by which decisions about design, fabrication, and use are made. Her activities included a course, *Weaving the Future*, and the curation of a speaker series that highlighted artists who bring modern technologies together with the handmade. Keizer introduced the global history, practices, and politics of weaving, posing questions about this method of craft as a system: Whose problems are prioritized within the system? Who is the ideal imagined user of the system, and are products and processes subsequently modified to serve marginalized users? During her time as Creative-in-Reference, Keizer also completed the manuscript for *Fraternal Light: On Painting While Black*, a cycle of poems honoring the African American painter Beauford Delaney.

SUMMER FELLOWSHIPS

Over three summers, fourteen students received fellowships to intern at non-profit arts or humanities organizations throughout the United States, with an emphasis on ones whose mission is to serve marginalized populations. Fellows were embedded in museums in San Francisco, western Massachusetts, and on the coast of North Carolina; with mural-makers in Chicago; in a community radio station in Los Angeles; at a digital art hub; in a music performance and education venue; in urban planning efforts; and in the studios of fine artists working in textiles and public installation.



These students were asked to swerve out of the ordinary pathways laid out for engineers-in-training and, throughout their fellowship, to reflect on how their paths might shift in response to their experiences. By the third cycle of this program, we tripled the number of applicants eager to participate, which confirmed our sense that every individual pathway affects many others. The narratives on offer to engineers—for their scope of concerns, their civic partnerships, their roles as makers in the future—expand and flourish when the work of culture is made vividly real.



JONATHAN JACOBS

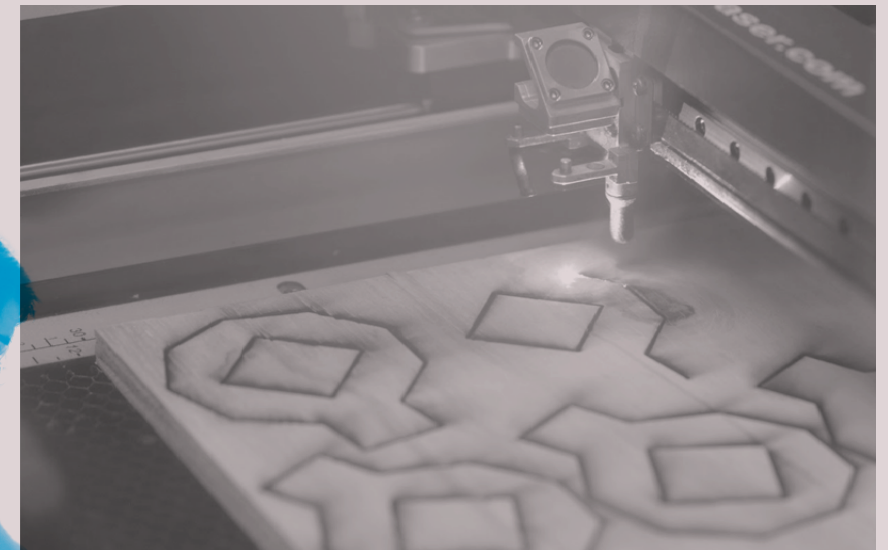
Summer intern with Daniela Rivera Studio, worked on planning and installing a site-specific installation.



"I learned to see myself and my skills in a totally new light — as a real asset to an artistic endeavor where I could complement and reinforce the creativity of others through my knowledge and approach as an engineer."

ANTONIO PEREZ

Summer intern with MetaLAB at Harvard, where he devised an origami folding structure, drafted engineering drawings, and produced laser-cut signage for an art installation exploring the history and philosophy of artificial intelligence.



"Humility for engineers is for them to realize that engineering is only one of many dimensions. A product or service, or anything, has a social dimension to it, economic, political — all the sorts of different fronts from which you can parse different kinds of ideas."



LIBBY TAWES

Summer intern with The Graveyard of the Atlantic Museum, built exhibition materials and educated visitors about codebreaker technologies in World War II.



"This project gave me the confidence to shift my focus from mechanical engineering to user experience research and design, a field I am passionate about."

DAVID FREEMAN

Summer intern at Dublab, contributed to a non-profit, community-supported radio station.



"My summer fellowship was a really important step in understanding that there are so many ways for me to feel purposeful and stable beyond college, and I spent much of that fall engaging with my local social and political environment."

KAI LOEWENSTEIN

Summer intern with Green Star Movement, built public murals in Chicago.



"Helping to create beautiful public murals and seeing community members' responses to those murals changed the way I thought about art. Sometimes, art can help make the world a better place simply because it is beautiful and makes people happy."

ANNIE TOR

Summer and Fall intern at Center for Urban Pedagogy, redesigned "Sewer in a Suitcase," a community education tool used to teach NYC residents about their water infrastructure.



"Working on community-oriented, compelling civic engagement projects sparked my interest in urban design and reaffirmed the importance of community-building. The thought of pursuing something unexpected after graduation feels more exciting and achievable than ever."

SUMMER STUDIO

In keeping with our exploratory, investigative approach, Sketch Model convened two very different summer gatherings, both designed to connect Olin faculty and staff with like-minded counterparts, seeding relationships and ideas. The first was a weeklong workshop of humanistic engagements with technology for participants from around the country, who returned home and grew their concepts into research projects, art exhibitions, courses, and more.

The second began in the depths of winter, with a dinner gathering at Olin of faculty, staff, and Boston-area artists. We shared a meal and an open-handed offer to collaborate, introduced ourselves to each other, and talked about the possibilities. From this, ten partnerships between the Olin community and local artists sprouted. That year, the Summer Studio was a week of semi-structured, immersive workshops to help each of them identify and seed new lines of inquiry together. Sketch Model nurtured these seedlings with participant stipends and funding for documentation, and set the teams free to pursue what they chose, at a pace they deemed fit, with no promised deliverables up front. Those relationships flowered into a wide range of ongoing cultural artifacts, a few of which are shared here.



PRESENT MEETS PAST ONSTAGE

Olin Professor of Psychology Jonathan Adler and Boston University Emeritus Professor of Theater Jim Petosa teamed up to write a new play, *Reverse Transcription*, putting themselves in dialogue with the past. Adler and Petosa excavated Robert Chesley's *Dog Plays*, an important but rarely performed one-act play about gay men's experiences of sex and relationships during the 1980s AIDS pandemic. They wrote a new second act, titled *A Variant Strain*, set during the ongoing COVID-19 public health crisis. The new production haunts the audience, embodying the ways in which we should not dare **understand our current moment** without embracing our forebears. *Reverse Transcription* premiered Off-Broadway at The Atlantic Theater Company's Stage Two, produced by PTP/NYC, in July 2022..

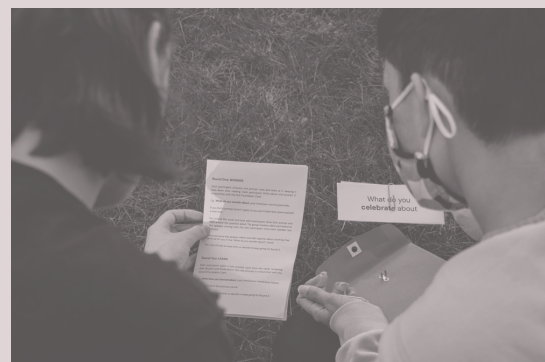


CONTEMPLATION AND EMBODIMENT



The 2019 Summer Studio launched a collaboration between Olin Professor of Physics and Education Yevgeniya V. Zastavker, Madhvi Venkatesh (Assistant Professor of Biochemistry at Vanderbilt University), dancer and choreographer Jimena Bermejo (Director of the Dance Program at the College of the Holy Cross), and educator and performer Elly Berke. Together, they designed and offered a new course at Olin College: *Contemplating Science*, a creative engagement with the neurochemical, behavioral, and embodied experience behind the world's great contemplative traditions, first as a Physics course and now positioned in the Arts and Humanities. Sketch Model support also made **ongoing intellectual and artistic activity** possible. The team contributed material to *The Patch*, an immersive video installation to be exhibited at the Musée d'art Contemporain des Laurentides, shared their work through numerous workshops and presentations at scholarly conferences, and are invited contributors to an upcoming book, *Interdisciplinary Integrative Learning: STEM and Theatre Arts (Bridging the Cultures)*.

CONNECTING THROUGH STORIES



Olin Writing Initiatives Specialist Gillian Epstein and socially engaged media artist Elisa Hamilton instantly connected through their shared belief that everyone has stories and everyone can share them. Their ongoing collaborative work seeks to inspire others to explore stories embedded in everyday life, providing approachable and creative ways to share them and foster connections to one another. With their latest project, *Re-Emerging: A Discovery Book* and its associated activity, *Re-Emerging Together*, they hope to create a space that each of us can use to reexamine our self and our context as we come out of the isolation of the pandemic, by **activating conversations** where participants can share what they wondered, learned, and celebrated over the course of their experiences during the preceding months. In the spring of 2022, Hamilton joined Olin College as a Visiting Artist, including a commission for an artwork, *Illuminated Oval*, to celebrate the inauguration of the College's second President, Gilda A. Barabino.



MECHANICS OF MOVEMENT

For Olin Professor Benjamin Linder and dancer/choreographer Jenna Pollack, the 2019 Sketch Model Summer Studio was a rigorous week of play, a reminder that poetics are also purposeful, and by the end they were exploring movement with a cardboard prototype. In addition to seed money from Sketch Model, Pollack and Linder secured additional funding and in-kind support from the Boston Center for the Arts, Boston Dance Alliance, New England Foundation for the Arts, New Movement Collaborative, and Walnut Hill School for the Arts. Over the course of two years, they iteratively created a shared mechanics for choreography with a series of architectural boxes emerging to become partners with dancers, **shaping the interaction** through weight and movement as the set pieces and the dance co-evolved. The end result was *Work in Process*, which was performed in July 2021 as part of the Boston Dancemakers Residency Showcase at the Boston Center for the Arts.



2017-2022

Sara Hendren, Principal Investigator
Benjamin Linder, Co-Principal Investigator
Debbie Chachra and **Jonathan Adler**, Senior Personnel
Sharon Breitbart, Senior Program Director for External Engagement
Kristin Casasanto, Program Director for External Engagement
Jonathan Stolk, Founding Co-Principal Investigator

FOR MORE INFORMATION, VISIT
www.olin.edu/sketchmodel

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