SOFTlab is a design studio based in New York City. The studio was created by Michael Szivos shortly after receiving a graduate degree in architecture from Columbia University. The studio has designed and produced projects across almost every medium, from digitally fabricated large-scale sculpture to interactive design to immersive digital video installations. As the studio adjusts to a wide range of projects, we are focusing less on medium and more on ideas.

As a studio, SOFTlab embraces projects through a mix of research and ideas. On one hand the studio is invested in projects that require significant research and experimentation. These projects provide a testing ground for us to help germinate a studio environment that is ripe with creativity. We take advantage of what we learn from these projects through the design of our more client based work. The constraints of each of these projects are treated as opportunities and tested through a collaborative studio environment with the hopes of solving typical problems in new ways, with new tools. Through the studio’s unique blend of backgrounds as designers, artists, architects and educators, we are able to approach every project from a fresh perspective to create rich spatial, graphic, interactive and visual experiences. By mixing research, creativity and technology with a strong desire to make work fun, SOFTlab attempts to create new and unique experiences.

In 2012 SOFTlab was awarded the Architectural League Prize for Young Architects & Designers, and previously in 2010 the studio was selected for the New Practices New York award by the AIA Chapter of New York along with seven other young studios. The studio has produced a wide range of design projects and collaborated with various artists, designers, publications and institutions including MoMA, The Metropolitan Museum of Art, New York Hall of Science, Eyebeam, New Museum, Vice Media, Intel, The New York Times, Van Alen Institute, Southbank Centre, 3M, IBM, EPFL, Adobe, Pratt Institute, UAE Prime Minister’s Office, and Columbia University. The studio has exhibited work in galleries throughout New York City. The studio continues to work on many projects in New York while taking on new projects and clients in Europe and Asia.
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Featured Work
Mirror Mirror

Completed: 2019
Location: Alexandria, VA
Size: 500 sq. ft.

Mirror Mirror was commissioned by the City of Alexandria’s Office of the Arts. The artwork takes the form of an opened circle, 25 feet in diameter and 8 feet high, that visitors can walk inside and around. This structure in-the-round, like a lighthouse, is both a place to look outward at your surroundings and a beacon to be seen from afar and watched. The materials and interactive nature of the artwork reference the special type of lens used at Alexandria’s own historic Jones Point Lighthouse – called the Fresnel lens – the most advanced lens technology of the 1800s, which used a series of prisms to concentrate the light source and direct it into a narrow horizontal beam that was projected outward.

Playing with the ideas of reflection and refraction of light, Mirror Mirror’s interior and exterior are clad with a mirrored surface that reflects the surrounding environment in unexpected ways. Through a panoramic array of mirrors and sound-responsive lights, Mirror Mirror will visually blend the waterfront, the fabric of Old Town, and the activity of pedestrians in the new park. While the exterior is a monochromatic mirror that reflects the urban environment, the river and visitors themselves, the interior’s mirrored surface is tinted with the full color spectrum, providing another layer of vibrancy and interest. The artwork is also programmed to respond to sound with light, allowing visitors to interact with the artwork and affect its appearance using their voices and bodies. LED fixtures inside each of the artwork’s vertical components are activated by sound and respond by producing light, transforming the front-facing panels from mirrored to transparent, while the interior panels remain mirrored, creating an infinite, colorful reflection and forest of light.
Nova

Completed: 2015
Location: New York, NY
Size: 400 sq. ft.

Nova was commissioned by the Flatiron 23rd Street Partnership through a competition held by the Van Alen Institute. The installation takes its initial inspiration from the traditional gazebo (“I shall gaze”) as a pavilion within in a landscape that looks out in all directions. We used the rich historical context of the Flatiron Plaza site to frame the various landmark buildings and pedestrians through a series of scopes. These scopes create a pavilion that is different from all sides at street level, but from views above the pavilion looks like a seven pointed star. The structure is made up of aluminum that gains its strength through a cell-like structure similar to a sponge or soap bubbles. Each cell acts like both a stone and part of a three dimensional truss. Each cell is unique, exposing a crystalline interior. On the interior the aluminum structure is clad in acrylic laminated with 3M Dichroic Film creating a kaleidoscopic affect. The dichroic along with the mirrored finished composite aluminum panels cladding the exterior turns each cone into a pedestrian scale kaleidoscope that remixes the surrounding buildings, urban context and pedestrians in fun and unexpected ways.

The overall structure is made of a modular system we developed with the help of ARUP. Each cell is made of two dimensional panels that get attached together to form a three dimensional cell. These cells come together to form a structurally stable dome in the center with each scope acting as an arch. The seven arches come together to create a very stable structure that has at its base a larger half sphere. This gives us both a very stable shape and a surface with many different angles to take advantage of the kaleidoscopic affects produced by the 3M Dichroic Film.
Nautilus

Completed: 2019
Location: New York, NY
Size: 1800 sq. ft.

The Nautilus is an interactive installation created by SOFTlab in partnership with Lincoln and Atlantic Re:think. The installation is a field of 96 touch activated poles that when activated, create a symphony of sound and light. While a single touch produces one melody, simultaneous interactions with the installation create a complex, layered chorus. Each pole also contains a series of lights that respond to the array of tones created by the installation. Located at Pier 17 in Manhattan’s historic Seaport District, the site-specific installation’s mast like elements blend the piers edge with the surrounding docked ships.

The installation is inspired by Lincoln’s new crossover vehicle, the 2019 Lincoln Nautilus. The Nautilus represents the idea that the vehicle puts the driver in control by monitoring the environment in ways outside of the spectrum of what we see and sense. While the field of poles gives the installation an environment for people to explore and walk through, it is also evocative of the constellation of idiosyncratic events the Lincoln Nautilus measures and analyzes. While this environmental intelligence greatly improves safety, we chose to design an installation that focuses on how these sensors also provide a fun and enjoyable experience. The installation acts as a touch interactive environment that allows people to come together to produce an unexpected symphony of light and sound. As a person touches the middle portion of a pole it activates a tone based on metrics of their touch. As that tone is played, lights in the surrounding poles react with a pulse emanating from that pole. When multiple people activate poles the installation plays them in sequence. The installation acts like a large network, reacting to various inputs from the people and the environment much like the Lincoln Nautilus. At the center of the installation is a circular area surrounded by a spectrum of acrylic panels for people to view the surrounding activity through various colored lenses. This second experience is evocative of how the vehicle augments and visualizes activity in the environment that we can’t normally see.
Iris

Completed: 2015
Location: Prague, CZ
Size: 900 sq. ft.

Iris was commissioned for Signal Festival in Prague. The installation is an interactive array of responsive mirrors and LEDs that creates a circular enclosure within the Mirror Chapel. The mirrors rotate in response to the movement of people in the circular space, while the LEDs respond to ambient sound. The circular array can be thought of as a lens that reflects both light and sound. The installation is meant to blend or confuse light and sound through its capacity to focus and unfocus these mediums. As the mirrors rotate, they open the perimeter allowing not only direct views of the Mirror Chapel, but also creating a Mise en abyme, mixing the surrounding chapel, viewers, and light in a vertically fragmented, recursive, and panoramic image.

Both the intricate nature of the Mirror Chapel's architecture and its use as a classical concert hall drive the design of the installation. A mirrored object in the round reflects the ornate surroundings externally while reflecting the viewer infinitely on the interior of the circular enclosure. This reflective enclosure is disrupted as people approach for a closer look. In this way, it is curiosity and sound that activate the installation. A closer look has the potential to produce a delightful bewilderment as the exterior leaks in while space and sound become multiplied in unexpected ways. In that sense, Iris is not an object, image, or artifact on its own, but relies on the existing space as the medium. As it bends, multiplies, and conflates light and sound it calls into question the lenses (both mechanical and cultural) that limit or expand our spatial experiences.
Ventricle

Completed: 2016
Location: London, GB
Size: 800 sq. ft.

Ventricle is a two-part installation that was commissioned by the Southbank Centre in London for the Festival of Love. The installations recall the heart, a symbol that has been used for many centuries and in many cultures to represent love. Along with the chambers of the heart, the installations are a modern interpretation of the hanging gardens of Babylon, a place of many cultures and languages, and also of Eden, a place of free knowledge and expression.

Each lightweight aluminum structure is made of intertwined tubes and clad in 3M’s Solar Mirror Film. The film is typically applied to photo-voltaic panels to increase the sunlight they receive. In this case we are taking advantage of the sunlight coming through the adjacent glass walls to use the film’s ability to refract and cast light. The net like hanging structures refract the light casting a woven landscape of color into the interior of the Southbank Center. Through the combination of entwined geometry and light, the installations are designed to create a visual vibrancy that comes from the embrace of geometry, materials, and light. Like the weaving of the many cultures found in London and around the world the structures are a reflection on the idea that working together through love and by embracing our differences leads to unimaginably wonderful results.
315 Montgomery

Completed: 2017
Location: San Francisco, CA
Size: 14’ x 14’ x 1’

Stratus, in the historic lobby of 315 Montgomery in San Francisco, commissioned by Vornado Realty Trust. Stratus, on view from the street 24 hours a day, consists of a layered array of brass tubes that contrast with the ornate architecture of the lobby in its simplicity. The brass tubes are punctuated by a cloud-like pattern of laser-cut holes; each tube houses a custom LED and diffuser assembly and is programmed with a subtle light pattern that simulates airflow. The two layers of brass tubes are staggered, giving the animated light a three dimensional effect, which is enhanced as the light from one tube reflects off of its neighbors. During the day the assembly comes together in the shape of a light organ, while at night, the tubes fade into the background and the cloud-like LEDs appear to flow through the back wall of the lobby. 315 Montgomery Street, part of the Bank of America complex, is a 16-story office tower in the financial district of San Francisco which was originally built in 1922.
One State Street

Completed: 2016
Location: New York, NY
Size: 40’ x 24’ x 3’.

We were commissioned by One State Street to design a permanent wall installation to accompany the building’s new lobby renovation. Our intent was to create an installation that is not distinguishable as a piece of wall mounted art but would act as a different type of material within the lobby.

We designed a crystalline structure that activates the lobby by casting a range of vivid light onto the smooth and neutral materials. As visitors approach the security desk the details of the lobby are reflected in the crystalline structure in fragmented and kaleidoscopic ways. The crystalline structure gives the wall a much more spatial and material-like quality. The lightweight aluminum structure is clad in 3M dichroic enhancing the variation of color and reflection depending on the angle it is viewed from giving the piece a different form and color from every angle. We worked with Focus Lighting to design a diffused back lit system of LED fixtures that allows for the piece to be lit evenly. Shifts in the color of the LEDs has dramatically different effects on the Dichroic film. Some colors cause the installation to have a much more monolithic color such as purple, while other colors produce variations between reds and greens. Blue for instance, makes the film completely transparent highlighting the aluminum structure. During the day sunlight leaks in lighting the piece from the outside, while at night it is back lit and acts as a lantern that can been seen from the street through the new floor to ceiling glass façade.
We worked with 3M and BBDO to create the 3M LifeLab at SXSW. The structure was not simply a space that showcased 3M products, but was built using some of the amazing materials created by 3M. We designed a multi-functional structure that acted as a ceiling, spatial divider, and custom interior display elements. The modular structure was designed to turn the interior of the 3M pavilion into a kaleidoscopic prism using 3M's dichroic film. As visitors move through the space and the sun passes over the tent during the day, the color and reflectivity of the film changes. All of the interior elements were laminated with glossy white Di-Noc, a 3M architectural finish. The Di-Noc captured creating a dynamic landscape of color that changed throughout the day. The exterior of the tent was clad in a custom fabric made of triangles of Scotchlite that were held together using zippers.

The various elements in 3M LifeLab were designed to work together to create a cohesive and dynamic experience echoing the same work that goes into the material science used to develop many of 3M's products. We thought of the interior as an atmospheric material created through light and program that visitors would walk through. The detailing of all these elements was driven by the need to deploy the structure very quickly and retain a tactility that is both playful and innovative. The modular structure was made of powder coated aluminum pipe that snapped together quickly using over 1200 unique 3D printed joints and sockets. We developed a custom joint detail that allowed each modular element to go together in a matter of minutes by simply snapping the custom lengths of pipe together.
Welcome to the 3M LifeLab.

They say you’re never more than 10 feet from a 3M product. That’s certainly true of the structure you’re about to enter. It’s made with many 3M materials from the brilliant reflective exterior to the translucent canopy above you. Inside, you’ll find many more examples of how 3M products make life safer, better and more complete for people everywhere. Stop inside and see how the world of 3M makes the world as we know it possible.
We worked with IBM and their cognitive platform, Watson, to create a large-scale installation for the Mobile World Congress in Barcelona. We often use digital and computational processes to aid in the production, fabrication, and assembly of our projects, but in this case those processes made their way into the conceptual design as well through our collaboration with Watson. The design process involved the use of Watson’s various APIs to aggregate thousands of images and articles about Barcelona and the architecture of Gaudi to make conceptual suggestions about form, color, and temperament during the design phase. This led to a form found installation made of an aluminum structural surface that was clad in a composite of aluminum petal-like panels and 3M dichroic film. The panels and the film were driven by suggestions about the organic detailing of Gaudi’s work and the iridescent qualities he achieved through some of his mosaic tile work he applied to the roof and other surfaces of his architecture.

The installation also included the vertical movement of chain models that hung from each of the various zones created by the installation. These were activated by real-time data analysis provided by Watson about various topics related to Barcelona, technology, and the Mobile World Congress. Each chain model represented the sentiment Watson gathered by querying social media channels. The chain model was accompanied by a live interface that showed the installation upside down much like Gaudi’s gravity driven models. The installation itself acted as a spatial representation of the changing data, while the interface used the upside down 3D model of the installation as a graph to show more precise metrics and the social media that were driving them.
Create with Watson
Xtra Moenia | North Gate

Completed: 2011
Location: New York, NY
Size: 3,000 sq ft

Xtra Moenia was a site specific installation designed and produced by SOFTlab for the San Gennaro North Gate. The piece was commissioned by Two Bridges Neighborhood Council and produced by The They Co. The installation served as the North Gate to the annual San Gennaro Festival. We developed a form derived from two distinct oculi as a reference to one of the simplest and most effective classical architecture devices. One oculus points up while the other hangs down defining a zone on the street for pedestrians. The form was created using a minimal surface blending the two oculi together in a way that blurs their distinction. The final geometry was developed closely with our structural engineer, Arup, and the piece is completely held in tension from cables attached to the surrounding buildings. The shape is entirely site specific and can only find its true form when attached at specific points and tensioned with the proper lengths. Each piece is unique requiring custom software tools to be developed to fabricate the installation.

The installation is made of 4224 laser cut panels. Each panel is a unique in shape and overlayed with a specific color photo gel. The panels are connected using over 6,000 aluminum grommets. The shape is held in complete tension using a complex system of cables and tubes attached to the surrounding buildings.
“Let us make cake” was a collaborative projection created by Nuit Blanch New York for the façade of the New Museum during the Festival of Ideas For The New City. We were asked to design one of the projections. Rather than create a completely digital video we worked with Nuit Blanche to produce a piece that was more analog.

We decided to “light up” the museum by covering the façade with brightly-colored tape. We produced a scale model of the museum, painted it black, and then filmed it from the viewing angle of a pedestrian. The tape literally illuminates the façade with strips of color. We purposely kept the shots with hands in front of the tape to add a strange human scale to the piece and the idea that there is a larger “set of hands” controlling the appearance of the museum, alluding to the bureaucratic and protocol-driven nature of contemporary museums. Inverting and streamlining protocols, rather than totally discarding them, can make the museum more transparent and vibrant. We sought to take advantage of the commodification of the museum rather than criticize it.

Completed: 2011
Location: New York, NY
Melissa - We are Flowers

Completed: 2014
Location: New York, NY
Size: 3,000 sq ft

We were excited to combine our exploration of technology and craft with the delicate nature of the We Are Flowers collection by Melissa. Nature often provides inspiration for our work and it has been a great opportunity to use one of nature’s most beautiful elements as a building material. We used over 20,000 translucent flowers to create a large immersive hanging surface in the New York flagship. It is both precisely engineered and yet has the enchantment of a vibrant hanging garden. The surface was designed specifically for the Melissa Gallery in New York. We engineered a Mylar net that is made of over 4,000 unique pieces.

The engineered nature of the installation is tempered by the delicacy and exuberance of the thousands of colorful petals we have attached to the surface. These flowers are placed in a more natural arrangement to combine the flowers and structural surface in a way that resembles a natural canopy of flowers. This canopy hangs down into the gallery at specific places to make the installation more immersive and spatial. Although we used significant digital technology to develop this installation, we hope it remains mostly hidden in order for everyone to experience the magic of a hanging garden of flowers. We imagine this installation as an extension of the We Are Flowers collection by Melissa: technically innovative with attention to every detail, but first and foremost a design that expresses sensuality through its form and brings joy and color to the Melissa experience.
Michael Szivos along with Carrie McKnelly worked with a group of students to produce a large scale installation in the Hazel and Robert H. Siegel Gallery. Each year the course attempts to produce an installation that explores digital fabrication methods as while showcasing the previous year’s student work.

This year’s exhibition grouped the work into clusters based on the type of project, where it was located, how it was conceived, and by semester. The projects from Spring 2012 to Fall 2012 were arranged in a simple three dimensional grid based on the above qualities. This grid was then dynamically adjusted into clusters around four qualities of the work. Each project was then used to generate a cell. This provided a cloud like cell structure that looked like it was grown rather than organized. The underside of this hanging structure was clad with color coded images of the student work. The clad “under belly” creates a solid landscape of images at various angles that visitors explored much like a cave, finding images in crevices as they walked around each cluster. The bottom appeared continuous and solid, while the structure above was very porous to allow for the ceiling light to still penetrate into the gallery.

The hanging installation was made of over 250 unique cells. These were each custom laser cut, assembled, and clad with custom cut images. The structure is exceptional light while still being very strong and taking up a large volume. Much like a sponge and in many ways an architecture students education; it relies on redundancy, many connections, complexity, and irregularity to produce an overall structure that is light, nimble, unique, but still open in its ability to grow.
Environment
Innisfree Flagship

Completed: 2015
Location: Seoul, KR
Size: 2000 sq. ft

We were commissioned by Innisfree to produce an installation for their flagship store in Myeongdong Seoul. Innisfree is one of the first all-natural Korean cosmetics brand with products ranging from makeup to skin care products. Many of the natural ingredients come from Jeju Island. One of the main inspirations for the new global store design is the greenhouse. Because the main function of the store is retail and product display which takes up the plan, we designed an installation that would feel like a hanging garden, strengthening the idea of the greenhouse. We also wanted it to be something felt integrated into the store rather than an artist intervention. The installation is made of all natural materials to foreground the importance of the use of organic ingredients in their products. The main structure is made of white oak wood veneer to match the fixtures in the store. The veneer lattice like structure allows the even light from the greenhouse roof to filter into the store. When the surface becomes vertical we clad the structure with petal like elements that give the installation a plant like feel. These petals are made of tangerine paper that is recycled from the packaging used for Innisfree products.

We were also asked to design the façade façade of the store so that it extended some qualities of the installation to the exterior of the store. We populated the exterior with folded aluminum “petal” that mimic those in the store. These were made out of powder coated aluminum and dissolve towards the street in an organic pattern. Random petals have LED light fixtures behind them to give the façade more of a presence at night.
Museum of the Future Exhibition

Completed: 2014-2017
Location: Dubai, UAE
Size: various

For the past three years we have worked with a team lead by Tellart for the Museum of the Future exhibition at the World Government Summit in Dubai. As a part of the larger team we develop overall architecture of the exhibition and in some cases speculative scenarios of future architecture and urbanism.

Each year has a specific theme. This year’s them was Climate Change Reimagined. We developed the overall architecture of the exhibition and with the larger team on speculative urban models that dealt with future climate change. Various environments were designed to showcase future food cultivation and distribution, water desalination, and a “city kit” or self-building infrastructure for urban development. Past year’s have included speculative environments that imagined the future of augmented life and the future of the government services within the context of the city.

The exhibition’s have been immersive environments that have included integrated sound, visual, and interactive media developed by an amazing team over the years including Marshmallow Laser Feast, Spacehabs, Idee und Klang, LUST, and Specular.
Welcome to the UAE HyperMind.
Please approach a station.
We designed the exhibition for Gimme More at the Eyebeam in Chelsea, which showcased 7 installations created by Swiss design EPFL+ECAL Lab. The work is quite exciting and magical, so we decided to keep the overall exhibition design simple. We thought of immersing the projects in a fog or mist so they are revealed as you move through the space. From far away a viewer only catches glimpses of the work through the light they emit and people interacting with them. But as one moves closer and around the temporary barriers, the projects reveal themselves. We produced the minimal amount of walls to define the work, while still keeping the space open. These walls were made of hanging sheets of Tyvek that were wrapped around suspended cardboard tubes to give the divisions volume. The Tyvek was back lit to reveal its cloud-like texture.

We also worked with Pentagram who designed the overall identity for the exhibition. The fibrous texture of the Tyvek and the exhibition signage comes together through custom-designed light fixtures within each Tyvek and cardboard hanging wall. These light fixtures back light the signage and accentuate the material texture to create a glowing field of hanging walls within the industrial space.
GIMME MORE
IS AUGMENTED THE REALITY NEXT MEDIUM?
Our bodies are continually informed in a range of data that collects the surrounding times, a range of digital interfaces. Do we embrace the screen or submerge us? Are we in fact more than a physical presence transports the user through data and reads from the screen to a virtual reality with a digital interface.

CEM SEYER (UR, 2011)

TEXTER (FORMERLY ADRIEN)
Pentagram Remixed

Completed: 2013  
Location: Ningbo, PRC  
Size: 7000 sq. ft

We collaborated with Pentagram on the exhibition design of their 40th anniversary retrospective as part of the 7th International Graphic Design Biennial at the Ningbo Museum of Art in China. Their work is displayed over several rooms, divided thematically into History, Scale, Motion, Narrative, Marks, Print, and Diversity.

For History and Scale, 40 posters are displayed horizontally on red bases and arranged in a grid, creating a timelined field of work, history, and personality that insists on movement to experience. For Motion and Narrative, two films play in opposite open rooms. The Marks and Print rooms are symmetrically related despite their vastly different content. Each room contains a long, dramatic black-stained wood table in the center. The Marks table has a red tabletop with 400 petri dish-like glass discs printed with red Pentagram-designed logos, camouflaging on the tabletop. The visitors choose discs and place them over lights embedded within the table to project the logos onto the walls. The room becomes an ever-changing arena of the various “marks” presented in a unique, interactive, and analog manner. The Print table has a milled black tabletop so that each of 50 books rests perfectly within it. Each book’s orientation points an imaginary desire line at a spot on the room’s walls where the books are mounted. The books become sculptural objects that require tracking to explore their content.

Lastly, the Diversity room is a data visualized explosion of Pentagram’s portfolio. Each page is extracted on a thin plastic sheet with a vacuum-formed P, slightly distorting the graphics. The partners then ranked the projects based on 40 attributes, which generated a rolling cloud-like surface to be explored by walking through and around.
Pentagram Remixed
Hello!

欢迎!
Beaux Arts Ball 2012 - Tender

Completed: 2012
Location: New York, NY
Size: 5000 sq. ft

Every year the Architectural League of New York puts on the Beaux Arts Ball, and in 2012 SOFTlab was invited to design the environment and create a large-scale installation for the event, held in the Williamsburgh Savings Bank in Brooklyn. We chose the theme “Tender” for its linguistic versatility as a noun, verb and adjective. The existing bank hall is quite extraordinary with a 63-foot-high vaulted ceiling and subdivided patron and teller zones, so we sought to condense the space to create a more intimate party atmosphere. We designed a net filled with mylar balloon “pillows” over the main gathering space and dance floor. From the entrance the suspended balloons appeared very solid, but as visitors moved through the space intentional voids gave glimpses of the ornate ceiling above. The pillowed surface also drew visitors up to the main mezzanine granting a completely different view of the piece from above. To create an exchange among the visitors we worked with Natasha Jen from Pentagram to create a field of hanging tickets, each of which contained a graphic time code on one side and an iridescent material on the other that changed as the tickets naturally rotated. The tickets allowed admittance to a sound installation in the basement vault created by David Rife of Arup, where we designed linked seating elements of nylon net filled with shredded paper. The reflective surfaces of the pillows and tickets created both a canopy and a cloud, constantly changing in response to the cool blue lighting and the interaction from the visitors.
Rather than thinking of the store as a pop-up or an installation, we thought of it as a store within a store. We inserted a store in the existing space that amplified one of the most basic mechanisms of retail: optics. The garments are displayed in a way that allows visitors to view specific details of the construction and form. The level of detail in the garments is amplified and/or multiplied through custom built kaleidoscopic view cones covered in a matte black tactile material that is soft to touch and absorbs any extra light, giving preference to the vibrancy inside the cones. The inside of the store is completely clad in a white glossy skin to receive as much light from the viewing cones as possible. We worked with Focus Lighting to create focused light through the viewing cones to provide a multi-colored kaleidoscopic light in the interior space. As viewers move around outside the store and look through the viewing cones, they block the focused light resulting in a constant shift in color and light in the interior of the store. We subvert the natural tendency of the window display by only showing glimpses of the piece and using the curiosity of visitors to activate the space. The human scale kaleidoscope of light and color changes based on how people move through the space. Rather than explicitly designing a color palette or a specific form, we designed an apparatus that can map how people shop and interact with the garments.
SOFTlab and The Living produced an installation and exhibition design for ReGeneration at the New York Hall of Science. The exhibition includes ten individual pieces by various artists that explore immigration, urbanization, and sustainability through art, science and technology. Our brief was for the environment design to not only be a platform for the other installations, but to also be a work of art itself, to be included as the tenth artist installation.

The brief described New York City as an exothermic system that thrives on the infusion of energy through immigration and generates energy through ideas and knowledge. We found that it is not simply the infusion of various groups or energies into a system, but the mixing and tangencies of these energies that produces a “melting pot” of ideas. It is through this turbulence that a community forms and can be seen as a larger whole while still retaining the ability to distinguish the influence of a “finer grain,” much like a weather system. We treated the overall exhibition as one of these opportunities.

We inverted the typical exhibition design of white walls and subdivisions into a floating surface that not only marked the zones of each artist installation but connected them above through a funneled form. Each zone has a custom radius designed specifically for the artist’s installation, emphasizing the individual parts that make up the whole. The circular zones are non-directional implying that the influence of each piece exists in all directions. Each artist’s piece is both an isolated work and an dependent unit of the overall exhibition design, as seen through the minimal surface geometry used to construct the canopy above.
Glass Trösch - BAU 2013

Completed: 2013
Location: Munich, DE
Size: 3500 sq. ft

When we were asked by Glas Trösch to design their booth for the BAU 2013, we noticed that the typical booth is very much defined by the grid of parcels that are allotted. In reaction to this, we sought to create a design that stands out against the other booths by moving away from the typical box-filled parcel. As we explored ways to break away from the box, we recognized that a booth without edges has the potential to have a more omni-directional feel, one that does not have a front, back, or sides. We tried to blur the edges of thresholds so that visitors could “wander” into the booth.

To think of a booth without edges, we began with the extreme of a booth made of fog. For us the most compelling transformation of glass is atmospheric, and how glass and fog might combine through condensation, leading to our main inspiration of fogged glass. We created a sense of mist through a series of curved curtains that are layered to create various degrees of transparency from the outside of the booth. The curtains act as a cloud over the booth with a plan serving as a generator of currents within the booth. We wanted the visitors to meander through the various zones as if searching through mist. The curtains all start on the south side of the booth in a large-scale landscape installation of colored glass sheets. The sheets serve as yet another visual filter along with the curtains above. As visitors pass by this large array of glass, the colors optically mix and perspectively alter—offering the booth a sunrise-like quality. The landscape combined with the curtains evokes a natural changing atmosphere much like clouds over a mountain during sunrise.
We were asked by Glas Trösch to design a spatial environment for the 2012 Designer Werktag in Munich. The main challenge was designing a space that would not only accommodate various events and product booths by various vendors, but would also transform into a showroom for the following year. We decided to treat the ceiling of the overall space in a way that suggested the range of intended programs, which changed drastically from Designer Werktag to the transformation into a larger showroom. We defined the space through a field of colored light: more active program and larger spaces were treated with “hotter” colors like red and orange, while more discrete program was treated with “cooler” greens and blues. The program edges were not defined but blurred through a gradient of colored lights that hung from points based on an irregular grid. This cellular grid was also used to subtly accommodate the intensity of the program, and it became more subdivided in the larger active areas to add a layer of division and less dense in the smaller zones with products on display. Simple white string curtains hung from the grid to disperse the color of the light. These curtains also changed height, in some cases becoming walls that visitors could pass through. This was used to softly create small pockets of space within the larger active event zone.

We also designed modular seating and bars that fit together in the same way as the ceiling. The bars could be joined for events to provide large drink serving stations during events and separated to spread throughout the space for the display of product material.
We were approached by Blue Marlin, an industrial design and packaging company, to design a “flex” space for their offices. The space was to be used by clients for meetings with the ability to convert into desk space. Blue Marlin’s main concerns were keeping the space adaptable and encouraging creativity.

We designed and fabricated many of the elements of the renovation. The space included a feature storage wall made of cardboard tubes of varying size, custom light fixtures, a screen wall made of panels rotating at different angles to produce a cohesive pattern, and various furniture elements. The overall space was subdivided by a series of rails and temporary walls made of hung industrial felt. The space could be used with an open plan or it could be divided into multiple configurations or rooms by moving the felt panels along the rails.
We designed a custom retail display for our friends at NOOKA. We interpreted NOOKA’s theme of organic and crystalline growth into a display that was actually grown as much as it was designed. We developed a system to automate the arrangement of a variety of cubes within a constrained zone based on certain organizational parameters such as height, scale, density, proximity, etc. This strategy allowed us to quickly test many configurations of the display, lending to a process driven by the overall quality. We were looking for a design that accommodated many display options over time rather than moving around individual cubes. The end result allowed for a variety of NOOKA products, and we planned for their rearrangement over time by designing a formal organization of cubes that has an over-redundancy of flat surface area. Products can be arranged at different heights and in an almost infinite combination. The piece is made of stacked layers of plywood, giving the feel of strata or a rock formation that has eroded over time. In the display area there is a layer of felt sandwiched between each sheet of plywood to provide a surface with more finish and contrast for the product to be displayed. We collaborated with Tietz+Baccon and NOOKA on the fabrication of the piece.
GAUD Exhibition 2014

Completed: 2014
Location: New York, NY
Size: 1075 sq. ft.

This year’s exhibition featured architectural models floating on floating platforms. The platforms were suspended by an engineered surface that acted both as a single structural surface and a cloud like filter. The underside of each platform was creating using attenuated cardboard tubes to create a surface that guided visitors to specific locations on the platform where they could view the interior of the surface. Once inside these viewing zones visitors were able to view the models at what would be considered street or person level (although a more realistic view, an over overlooked vantage point for models). The images of student work from Spring 2013 to Fall 2014 were arranged under the field of cardboard tubes as if they are being projected from the tubes. The work was packed together in clusters showcasing the variety and organic nature of how work is produced within the culture of the school.

The hanging installation was made of custom cut laser cut Mylar panels. This surface acts as one piece, only forming its final shape in tension through the weight of the model platforms. The surface weighs under 20 lbs while suspending a weight of over 500 lbs. The bottom of the surface is clad in custom tyvek panels to obscure the models. This encourages the exploration and overall engagement of visitors with the interior of the piece. The interior experience is not only a surprise, but a unique way to view the physical output of students in an isolated and continuous environment.
GAUD Exhibition 2012

Completed: 2012  
Location: New York, NY  
Size: 1075 sq. ft.

Pratt Institute’s Graduate School of Architecture & Urban Design exhibition of student work has been curated, designed, and fabricated by a group of students in a course taught by Michael Szivos for the past 5 years. This year Michael along with Carrie McKnelly worked with a group of students to produce a large scale installation in the Hazel and Robert H. Siegel Gallery. The installation focuses the views of visitors along various axes through the gallery. The visual work of the past years studio work is graphed on the walls based on semester and these various axes. Each axis connects 2 polar qualitative aspects of the work. For example, large-small, soft-hard, analog-digital, etc. Models are housed within the installation that frames the end of each axis. The installation was fabricated out of laser cut cardboard and thin plywood. The form was defined through 6 various polar extremes of the work. The surface of the installation was created with over 2400 custom panels and over 6000 custom clips.
The GAUD Exhibition is an ongoing course taught by Michael Szivos at the Graduate Architecture and Urban Design program at Pratt Institute. Each year a group of students design, curate, and produce an exhibition of the school’s work in an open house for prospective students.

This year’s exhibition consisted of a series of hanging mylar “nets.” Each net contained the printed material generated by students over the last year. A total of seven nets organized the work based on various qualitative parameters in order to enable visitors to walk around and through the work rather than moving linearly along a wall of flat printed material. Not only was the typical gallery model inverted, but the creation of a three dimensional hanging grid produced more surface area than normally available on the walls. Because of the maximized surface area this was the first year print material from every archived project was displayed.
GAUD Exhibition 2009

Completed: 2009
Location: Brooklyn, NY
Size: 1,025 sq ft

The GAUD Exhibition is an ongoing course taught by Michael Szivos at the Graduate Architecture and Urban Design Program at Pratt Institute. Each year a group of students design, curate, and produce an exhibition of the school’s work in an open house for prospective students.

The exhibition in 2009 included custom built podiums. Each podium was defined by the model exhibited and a specific viewing axis that placed the model in various groupings. An automated fabrication system was developed that produced the tooling for all of the panels and connections. This allowed not only for every podium to be different, but also for the design to change easily without affecting fabrication time.
Installations
Spectraline - 21c Museum Hotel

Completed: 2015
Location: Lexington, KY

We designed a custom permanent installation for the new 21c Museum Hotel Entrance in Lexington, Kentucky. The installation provides a stark spatial contrast to the renovated McKim, Mead & White building. The crystalline structure contextualizes itself through a site specific structure that appears to have grown from one corner of the entrance to the ceiling. The overall structure is made of laser cut aluminum clad with dichroic acrylic giving it a changing spectrum of color. During the day the color of the various facets change as people walk under the piece. Lit from within by LEDs, the large crystalline structures cast colored light onto the surrounding space, using it as a canvas. The installation acts as both a spectacular form and a giant lantern, creating a landscape of color, an otherworldly atmosphere. At night the piece is lit from within and acts as a beacon that can be seen on West Main Street through the glass front doors.
We were asked by Behance to design an installation for their new offices in NYC. The office space is on two floors connected by a central stair. The stair became the ideal site to produce an installation that extends to both floors and can be seen from anywhere in the office. The design of the office is very clean and contains a lot of white finishes so we decided to create an installation that acts as a kind of three dimensional stained glass window that casts colored light throughout the space. We used colors from Behance and Adobe’s (Behance’s parent company) brand palettes to create a transition from a red on one side of the stair to blue on the other side. We randomly mixed other secondary colors to make the piece more vibrant. At the top of the stair the piece frames a singular feature light fixture above the landing of the stair and hangs down to frame some of the communal office seating at the base of the stair.
CHROMAtex.me

Completed: 2010
Location: New York, NY
Size: 1,000 sq ft

CHROMAtex.me is a site specific installation designed and produced by SOFTlab for the bridgegallery. The installation was designed to produce a complex environmental and spatial combination of six colors. The color is mixed within the form leaving a vibrant interior that is back lit by the gallery. Rather than creating a finished façade or skin that hides the method of construction, we chose to invert this relationship— the interior of photo glossy inkjet-printed paper appears very precise, finished, and smooth, while the exterior is roughly textured with an array of binder clips holding the panels together. The first thing a viewer sees is the method of fabrication. As a viewer moves around the piece, she discovers the finished effects produced by the construction. The interior is experienced through a series of portals designed to offer a specific glimpse into the piece starting from the front of the gallery. The installation not only responds to the protected interior of the gallery, but also to the busy street as it draws visitors in. The largest portal into the piece is attached to the front window of the gallery completely obscuring the interior. After viewing the colored interior through the main window, viewers enter the gallery to see an unexpectedly all-white exterior textured in thousands of binder clips. This contrast between interior and exterior makes the portals into the piece so sensational.

The installation is made of over 4000 laser cut panels of photo ink jet paper. Each panel is a unique shape and printed with a custom color. The panels are connected using a set of over 17,000 binder clips. The shape is reinforced using a series of custom acrylic rings. The overall form is hung from the ceiling of the gallery and attached to street facing window, completely suspended in the space without touching the ground.
Plume

Completed: 2016
Location: New York, NY

We were commissioned by Etsy to create a permanent installation for their new headquarters in Dumbo Brooklyn. The installation hangs above the public entrance for Etsy’s new headquarters and just outside of the Etsytatorium, their public speaking space. The goal of the piece was to create a spatial installation that was as immersive as possible while still leaving the main entrance open to traffic. We took inspiration from hanging gardens to create a series of net like structures clad in vibrant paper that hang down into the space. The structure was designed to fit within the lighting plan designed for the space so that it is seamless with the architecture of the space. By using natural materials like wood veneer and recycled paper along with digitally developed structural shapes and laser cut parts, the installation combines craft and technology in a way that is emblematic of the Etsy’s commitment to craft, innovation, and sustainability. The overall structural net is made of custom laser cut oak wood veneer that is hung from aluminum frames. The veneer net has details that accept the folded paper “petals.” Each petal is unique and has custom tabs to fit into a particular veneer petal in the structure. The color of each paper petal is dictated by a vibrant gradient that starts at the entrance into the space. The paper is recycled handmade paper that we sourced from ShopWitty, an Etsy seller. Because ShopWitty makes the paper to order we were able to send them swatches and get the custom colors we needed to create the gradient spanning the installation. Overall the installation was a great opportunity to use materials in a way that is both innovative and sustainable.
The crystalline structure we have created for Melissa’s NYC store is inspired by their Winter 2015 collection, Star Walker. Crystals are both highly refined structures and yet primitive. They can be found everywhere, but are anything but ordinary. Much like the shoes in Melissa’s Sky Walker collection, the ordered asymmetry of crystalline structures always inspires beauty. Inspired by both the shoes and crystals, we have produced an immersive installation that looks different from every angle. We have taken advantage of the irregularities in the overall form of the installation to turn Melissa’s NYC store into a kaleidoscope of color and light. By cladding the complex aluminum structure with dichroic acrylic, the piece changes color and reflectivity as visitors move around it. By lighting the pieces from within the large crystalline structures will cast colored light onto the white store using it as a canvas. The installation acts as both a spectacular form and a giant lantern creating a landscape of color, filling the store with an otherworldly atmosphere.

The structure is lightweight compared to its large volume. Using the principles of both crystal growth and soap bubbles the piece appears to have grown in the store. Overall the structure is made of over 50 unique cells and over 400 pieces of custom cut aluminum. Although the pieces are all flat they come together to form a complex three dimensional assembly. All of the parts were labeled and the individual cells were pre-assembled off site and then combined in the store. The dichroic acrylic was used in tandem with this cell like structure to take advantage of the variation in panel angles. The dichroic film causes interference in light depending on the angle of view creating planes in a range of color much like light passing through a crystal.
(n)arcissus

Completed: 2010
Location: Frankfurt, Germany
Size: 1,076 sq ft

(n)arcissus is a site specific installation designed and produced by SOFTlab for NODE10. The piece hangs in the center of the stairwell at the Frankfurter Kunstverein in Frankfurt, Germany. The installation is nine meters tall and is supported by two metal rings, one at the top of the stairwell and the other attached to the lobby ceiling. The form of the piece is controlled by over one thousand custom three-layer-thick mylar panels and the two rings. The shapes of the panels change from a square to an X-shape based on the position of the panel in relation to the space. Two of the skin layers change in reverse to produce a gradated color on the outside.

The piece is meant to be seen as both an object and a spatial intervention. As a viewer enters the lobby it is unclear that the piece extends the full height of the museum. The extent of the piece is not revealed until the viewer moves under the piece in the lobby or ascends the stairs for a more complete view. Both experiences are radically different due to the double skin. From the lobby the interior of the piece is reflective and produces a very narrow vertical space where the viewer is confronted with a distorted reflection produced in hundreds of changing panels. As a viewer moves up the stairs and through the galleries the piece ties the three floors together through a translucent gradated shape created by the tension of the hanging surface.

The installation is made of over 1000 laser cut panels of mylar and vinyl and metal snaps.
pAlice

Completed: 2009  
Location: Brooklyn, NY  
Size: 150 sq ft

pAlice is site specific installation for the group show, system:system at St. Cecilia’s Convent, curated by Adam Henry and Christina Vassallo. The piece connects all of the openings in the room with a singular surface, turning it inside-out and offering viewers reference to the exterior of the room without physical access to it. Viewers can also look inside the surface from the outside of the room and see a space that is the surface average of these openings without actually seeing the interior space of the room.

The name of the piece references the idea of an Alice Universe, which allows at least two topologically-distinct routes between any two points (doubly-connected), and if one connection or “handle” is declared to be a “conventional” spatial connection, at least one other must be deemed to be a non-orientable wormhole connection. The piece approximates a highly precise piece of geometry, but is covered in mirrored panels that camouflage the form by reflecting the interior of the room, cladding the piece with the same texture as the interior of the room, completing the formal surface as an inversion of the room.
R&D:azzle

Completed: 2011
Location: Brooklyn, NY
Size: 900 sq ft

We produced an installation for The Creators Project: New York 2011, a partnership between Vice and Intel. The two structures are made of plywood panels zip-tied together. The geometry is completely held together by the zip ties—there is no frame and the triangulation not only provides an irregular surface, but also a stable combination of points for each piece to rest on.

In an effort to have viewers engage with a static object we designed an installation that is defined by impossible views. The piece is graphically camouflaged so that the shape is discovered by viewers as they move around the piece. The interior of the piece is an inversion of the exterior. While the exterior uses a disguise as camouflage, the interior uses a hyper version of its surroundings to confound a person with the environment. The piece acts as an irregular kaleidoscope of color and light to produce fractured images of views that are irregular and impossible.
Young Architects Award

Completed: 2012
Location: New York, NY
Size: 500 sq ft

Most of the work in our studio is driven through various strategies and ideas. Instead of showing specific projects for the 2012 Architectural League Prize Exhibition we decided to show examples of these strategies. Each model or manifestation was placed in a series of interlocking oriented strand board podiums, which not only produced a varied arrangement of shape and size to house each piece, but also represented the cross pollination of these strategies. Most of these operative directions in the studio are very simple, but as they are combined in various ways they produce an endless range of methods and approaches. This amplification of ideas through recombination is also emphasized through the "cap" of each podium. Each of the caps is made of faceted one-way-mirrored acrylic. The podiums are lit from within so the acrylic is transparent from the viewer’s perspective, but the inside is mirrored producing an infinite and fractured reflection of the interior model and its surroundings. The effect of both the transparency and the reflection changes during the day and at night, as pedestrians view the piece from outside the gallery and as the viewer moves around the cluster of podiums. Much like the creation of ideas in the studio, the perspective is constantly influenced, but always in flux.
POLY.P.lux

Completed: 2011
Location: New York, NY
Size: 270 sq ft

SOFTlab produced a hanging installation for the entrance to School Nite, an exhibition of site-specific installations, performances, and discussions curated by Nuit Blanche New York as part of FlashLight 2011 along with the Festival of Ideas for the New City sponsored by the New Museum.

The installation was located in the entrance of St. Patrick’s Catholic School at the corner of Prince and Mott Streets in lower Manhattan. We generated the form through a gravity-driven process and then prepared it for production. The surface contains more than 1400 battery powered LEDs, as the piece illuminates the entrance for the night-time event. The main formal expressions of the installation are the hanging pieces that flicker and blow in the wind, slowing down traffic through experience and effect rather than with typical physical barriers. Visitors were meant to commingle and interact with the piece, not unlike a clown fish and the sea anemone.
We were approached by Kelsey Harrington to produce a piece for the Business of Aura group exhibition at the Elga Wimmer Gallery. The theme of the show was how process and experimentation produce aura. We decided to respond to the theme by prototyping an on-going strand of research in the studio with a "structural" surface. We produced one "column" of a shape that can be both a vertical support and an enclosure or canopy.

We experimented with cladding the surface with a second skin and the rigidity and potential canopy span of a 1/4" plywood surface. The piece is an experiment in pushing a shape far enough away from regularity while still keeping it structural. We created a construction system that utilizes a series of flat parts to quickly assemble an irregular enclosure.
CHROMAesthesiae

Completed: 2010
Location: Brooklyn, NY
Size: 300 sq ft

CHROMAesthesiae is a site specific installation commissioned by Phoenix Perry for Devotion Gallery in Brooklyn, NY.

CHROMAesthesiae is a landscape of color populating space in high-contrast, gradated clusters. This installation is an investigation into the spatial and chromatic perception of space. By using modularity to generate complexity through repetition, CHROMAesthesiae explores the production of spatial effects through simple strategies. The piece was developed using high-gloss printing paper, acrylic and binder clips.
Interactive/Media
We designed an interactive feature element for the lobby of the new IBM Watson headquarters in Atlanta. The interactive wall is a physical example of how a partnership between IBM and the Weather Channel can lead to amazing new innovations in technology in ways we’ve never anticipated before.

The tiled form of the wall is inspired by weather patterns. Each folded aluminum tile is rotated to represent a field of vectors driven by currents of wind. The directionality of each tile is enhanced by how it bounces light generated by a diffused LED grid behind the wall. The LED grid is driven by real-time Air Quality Index of a set of trending global cities. This air quality data is provided by one of the Weather Channel’s API. The data is then analyzed and used to create an interpreted map of global air quality flow. This air flow map is represented by the back lit LED grid. Each folded panel is back lit by a specific color generated by the average Air Quality Index. Through a user interface integrated into the wall visitors can select various cities based on the lowest, highest, and trending air quality across the globe.
Volume

Completed: 2017
Location: New York, NY
Size: 300 sq. ft.

Volume was commissioned by HP for The Lab, an interactive experience combining many bespoke installations by various NYC based artists and curated by Meta, at the Panorama Music Festival in NYC.

Volume is an interactive cube of responsive mirrors that redirect light and sound to spatialize and reflect the excitement of surrounding festival goers. The paired down details of the installation are meant to foreground the use of light and sound as fundamental building elements of space. The installation redraws the line between what is considered ephemeral vs. physical as the installation remixes space and the character of the festival goers while gazing back at them with empathy and exuberance.

The installation was inspired by the ability of light and sound to form space through reflection and their dependence on atmosphere. Although we often consider this space empty, the air around us is a material made of many particles. Small changes in this volume of transparent material allows light and sound to move through space. The mirrors in our installation represent these particles acting in harmony to challenge and enhance what we see.

The installation is made of a grid of 100 mirrored panels that each rotate individually. An array of depth cameras above track people as they move around the installation. Using a weighted average of the various people being tracked the mirrors rotate to face the nearest person. Individually addressable LEDs along the sides of the mirrored panels respond to the ambient sound in the space around the installation.
Rise Nation

Completed: 2014
Location: Los Angeles, CA
Size: 900 sq ft

We were commissioned by Rise Nation in West Hollywood to produce a permanent installation to add to their workout experience. Rise Nation is the first of its kind climbing conditioning studio founded by celebrity trainer Jason Walsh. The ceiling installation extends the typical training soundtrack found in high-impact workouts into an immersive spatial environment. While the lights are on in the training studio the irregular surface of the installation invokes the feeling of being under a rocky terrain. Once the workout begins and the lights are turned down the installation comes alive through a large array of internal LEDs. At first glance the installation appears to just be a rocky surface, but the precise gaps between the panels allow the reflected light from the LEDs to pass through in irregular ways to create an animated surface that ranges between simple fades to a field of lighting. The LEDs are programmed with various behaviors to accompany the different soundtracks played during workouts.

The installation serves as both a sculptural ceiling under normal conditions and a high intensity interactive light field during workout sessions. The installation is made of a custom aluminum frame that was designed in a modular way to be flat packed and easily assembled on site. The “grid” is made of 160 cells. Each cell is made of an unique aluminum pieces that were labeled and detailed from a computer model of the installation.

Direction & Production: Lucas Werthein, Marcelo Pontes
Producer: Jihye Ku
Sculpture Design: SOFTlab
Software Engineer: Superbright
We were commissioned by Sonos to create an interactive light and sound installation that responds in real-time to Sonos components. The installation is a grid of 600 fluorescent light tubes at varying heights and lengths to create an occupiable interior volume. Sound is gathered from Sonos components in 4 channels through Max/MSP and sent to processing where various behaviours are programmed to respond to the amplitude of the 4 channels. The state of each bulb is then sent to an array of arduino boards that control custom built chips with relays for each individual bulb.

The installation uses light to spatial sound. It was a great opportunity to use two very spatial elements together to “build” an interactive but very pared down space. The piece acts as a “light organ” that actually visualizes sound from the surrounding components as it passes through the space. Through a simple user interface the behavior of this visualization can be easily changed and adjusted. Through the pared down use of simple fluorescent tubes the grid of lights becomes an array of vertical pixels. Although the piece is technically complex the goal was to produce something that was visually simple. It is this simplicity that allowed us to use light as an architectural detail, he ability to focus on light, animation, and interaction as a building materials.
Light House
By SOFTlab

“Light House” is an installation made of space wireless
HiFi System speakers and an array of LED fluorescent
lights, that pulse and ripple in response to music,
showing how sound fills a space.

Step inside “Light House” and pick any song via the app.
The installation utilizes SONY PLAYSTATION®️ and SONY

The installation also responds to live music performances
for a unique sensory experience.
Crystallized!

Completed: 2012  
Location: create.thecreatorsproject.com  
Size: 2 in³

We were asked by Vice Media and The Creators Project to design a real time three-dimensional data visualization for Facebook. As the project developed we extended it to allow users to 3d print a visualization of their individual profile.

Our design shows how a Facebook users timeline, likes and friends grow over time. We wanted the object to be simple and fun, thinking in line with the famous pet rocks of the 1970s. The best part of pet rocks were that each one was unique, like each user’s network of friends.

In the visualization, the outside shell is made of points representing individual friends selected by the user, and the position of these points is based on mutual friends. The interior is made of crystals that represent the likes of each of the users friends. The visualization can be “opened” to view the interior much like a geode. Over time the inside will become more complex as users and their friends increase their activity on Facebook.

We were invited along with Sticky Monster Lab (Korea) and Sosolimited (Boston) to create visualizations. The project is extremely unique as it takes data in real time from Facebook and creates an interactive 3d visualization that can then be 3d printed. It is one of the first times this pipeline has been implemented and allows users to become creators alongside the artists.
Considering the Quake

Completed: 2014
Location: New York, NY
Size: 2,500 sq ft

We helped the Center for Architecture showcase how design for earthquakes can not only be a pragmatic precaution but also an opportunity for innovation. Considering The Quake: Seismic Design on Edge was an exhibition first held in Toronto. We designed the exhibition for when it was hosted by the American Institute of Architects at the CFA in New York.

Along with the overall exhibition designed we also produced an interactive installation in collaboration with ARUP. This installation was a center piece of the exhibition and acted as a way for the audience to not only physically engage with the content, but also as an educational element that visitors were able to learn from. The installation visualized the effects of an earthquake and some of the considerations that are taken into account while designing buildings in seismic regions. A foam layer represented depth change in a soft material similar to soil. This layer not only has its own period but also affects the overall length of each pipe. Each pipe had a weight that has been calibrated at various heights in a graph throughout the grid. These weights alter the natural period of the pipes so that there is a variation between different pipes.

Visitors were invited to create and adjust their own seismic wave, tuning the installation to see various zones of resonance within the grid of pipes. As visitors adjusted the wave these zones would move or dissipate as you find periods coincident with the various pipes. As with a building, each pipe resonated at more than one frequency.
When Humble first approached us to design the set for Robert DeLong’s Global Concepts video, the main direction was to produce an environment made of programmed lights that would interact with the music, along with several other interesting constraints. The video would be shot in one take using a steadicam, and it would be shot for the Condition One App which allows for full 180° view of the environment. This led us to think about the environment in a perspectival way. We arranged the lights of each zone so that the perspective itself would come into focus anamorphically. Each zone has a specific viewing path where it becomes a standalone zone, but as the camera moves away from these particular views, the three zones blend together in a larger environment. We achieved an environment that could be driven by the frame of the camera and also be explored by the viewer through the Condition One app. The video might be seen differently every time.

It was also very interesting to build an environment out of lights. Rather than featuring the construction of each installation, we chose to disguise it as much as possible, using everyday production equipment like c-stands to add strength to the installation. We wanted the lights to appear as if they were constructing the space. The lights were controlled with an arduino to respond directly to various sounds in the song.
The project represents a crossover of some of the various mediums we use and explore in the studio. We were asked by Kelsey Harrington to include our short film Shizuku in a group exhibition at the Elga Wimmer Gallery in Chelsea. We originally produced the film for the le:60 film festival in Boston. The film includes live action video with camera matched CG elements. For the exhibition we also produced a full scale version of the CG elements to be displayed along with the video. The "drips" were made of laminated plywood sections and sanded to produce a smooth surface.
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