Luke Kratsios B.Arch 23



AAP College of Architecture, Art and Planning Cornell University



Luke Kratsios Bachelor of Architecture Class of 2023 Cornell University

I am a third year architecture student with a passion for design and art. Along with my studio work, I enjoy working on various personal projects. Particularly, I have focused the last three years on computer graphics and animation. Additionally, I have put time into learning various coding languages including Java and C#. I have use programing both in my class work as well as VR app development. I balance the digital work by continuing my interest in sculpture and painting. To remain active, I play Division 1 Club Hockey. I enjoy going on walks with my dog in Central Park, but when I can I love to go backpacking and long distance bike riding.



24810BioTechnical
Modeling
WorkTechnical
Hand
Drawing
WorkArtist
Residency
Center



Art and Cultural Center



Structural Systems Model



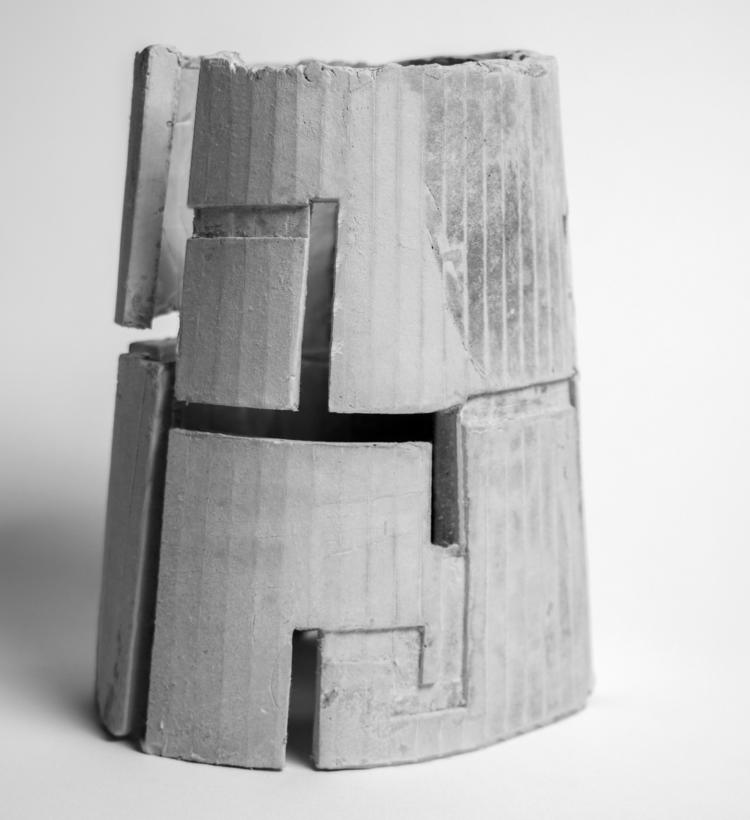
Castel Sant' Angelo -Scholar's Intervention



Additional 3D Design Work

Technical Modeling Work

A series of various projects which range from conceptual forms to a mechanical apparatus. Work in concrete, wood, and metal.







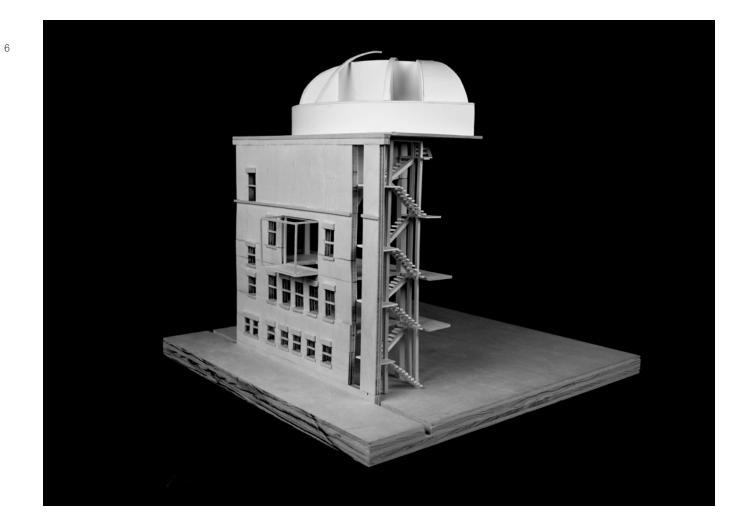




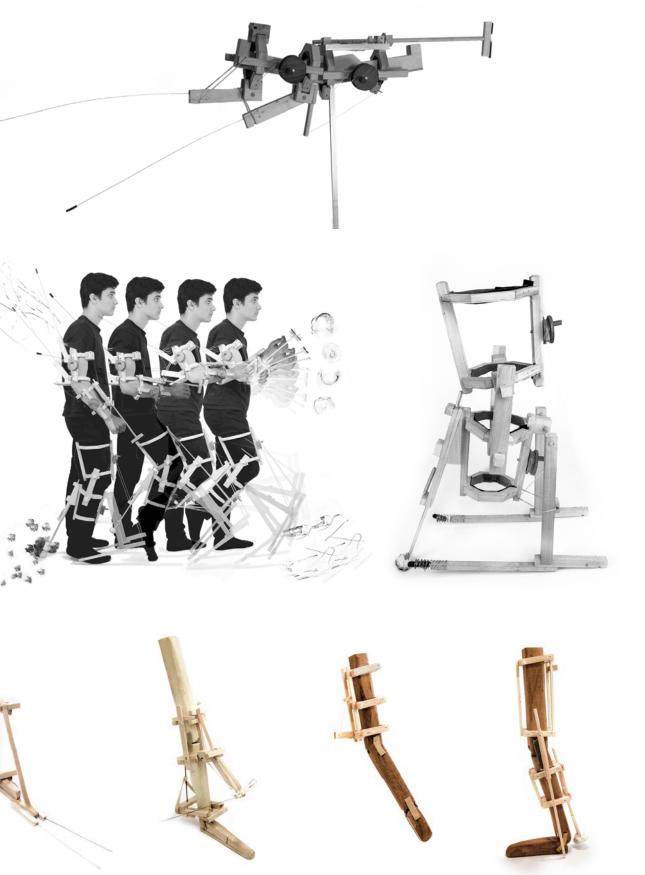


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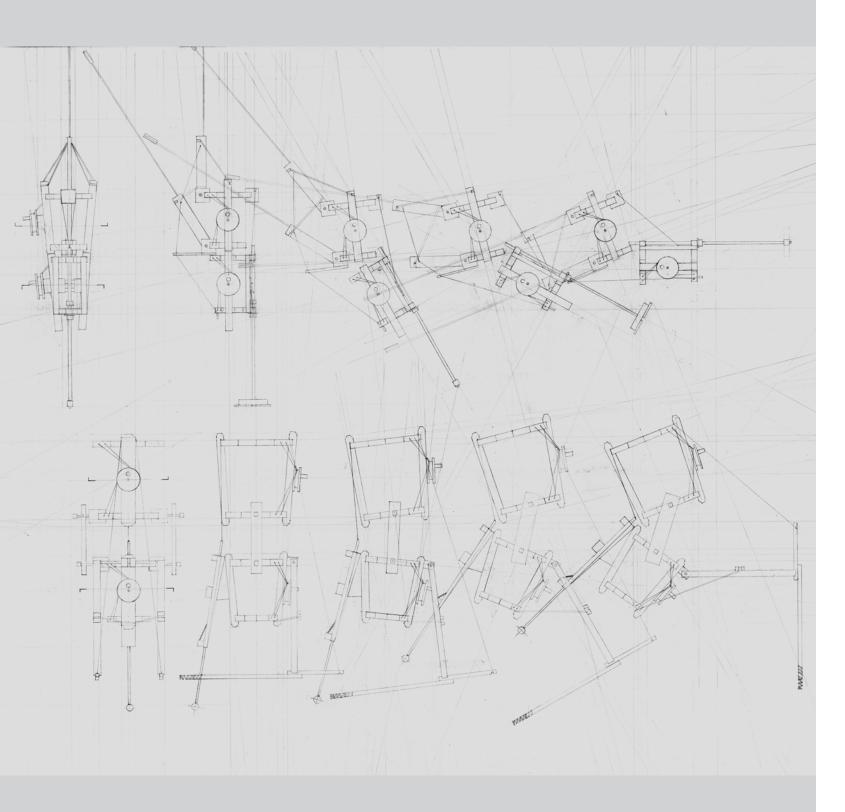


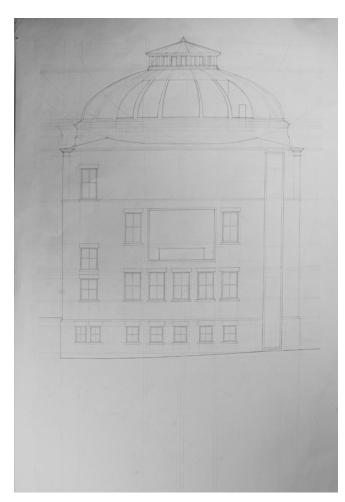


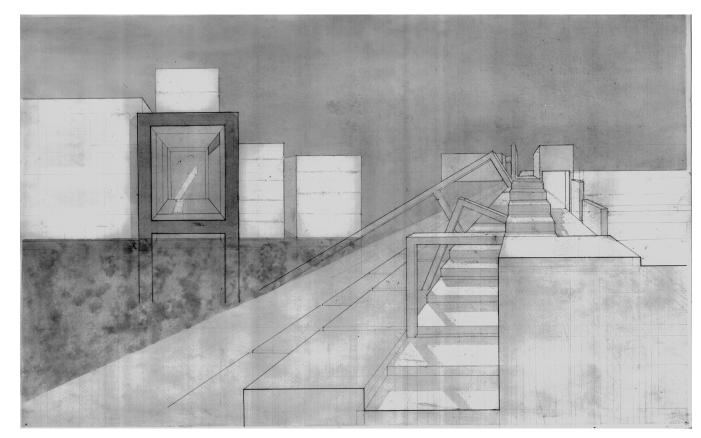


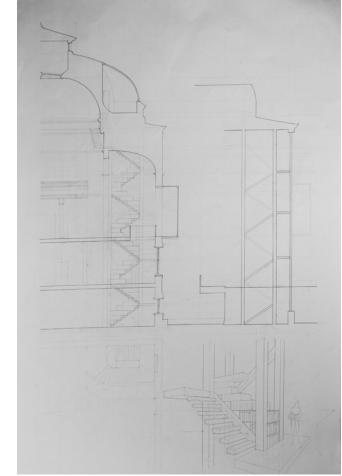
Technical Hand Drawing Work Various Projects Luke Kratsios

A series of hand constructed drawings from various projects. Bottom right piece is pen and ink, other work is done in graphite.









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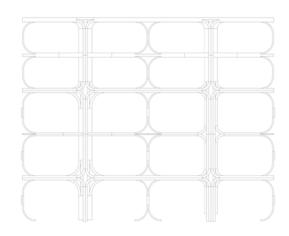
Artist Residency Center - NET WORK Second Year Studio Luke Kratsios

The concept of this Artist Residency revolves around networks: structural, circulatory, spacial, and programmatic networks. It aims to tie itself into the network of the city by becoming and extension of the existing public waterfront trail. This public path is integrated and weaved into the structure as a large open plaza between the separated levels of the building. The pathway bridges across the roadway which currently divides the waterfront trail. The structure is formed of a network of gluelam members which delaminate, relaminate, and curve to produce a scaffolding like array of columns and beams.



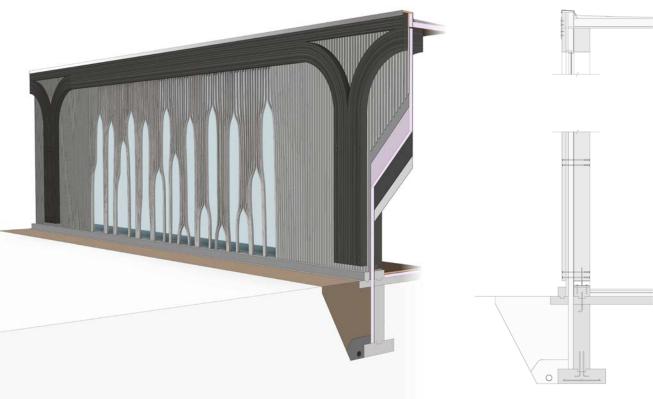
Structure

Structural Grid

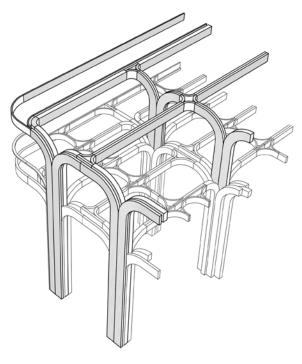


Parallel Versus Perpendicular Laminations

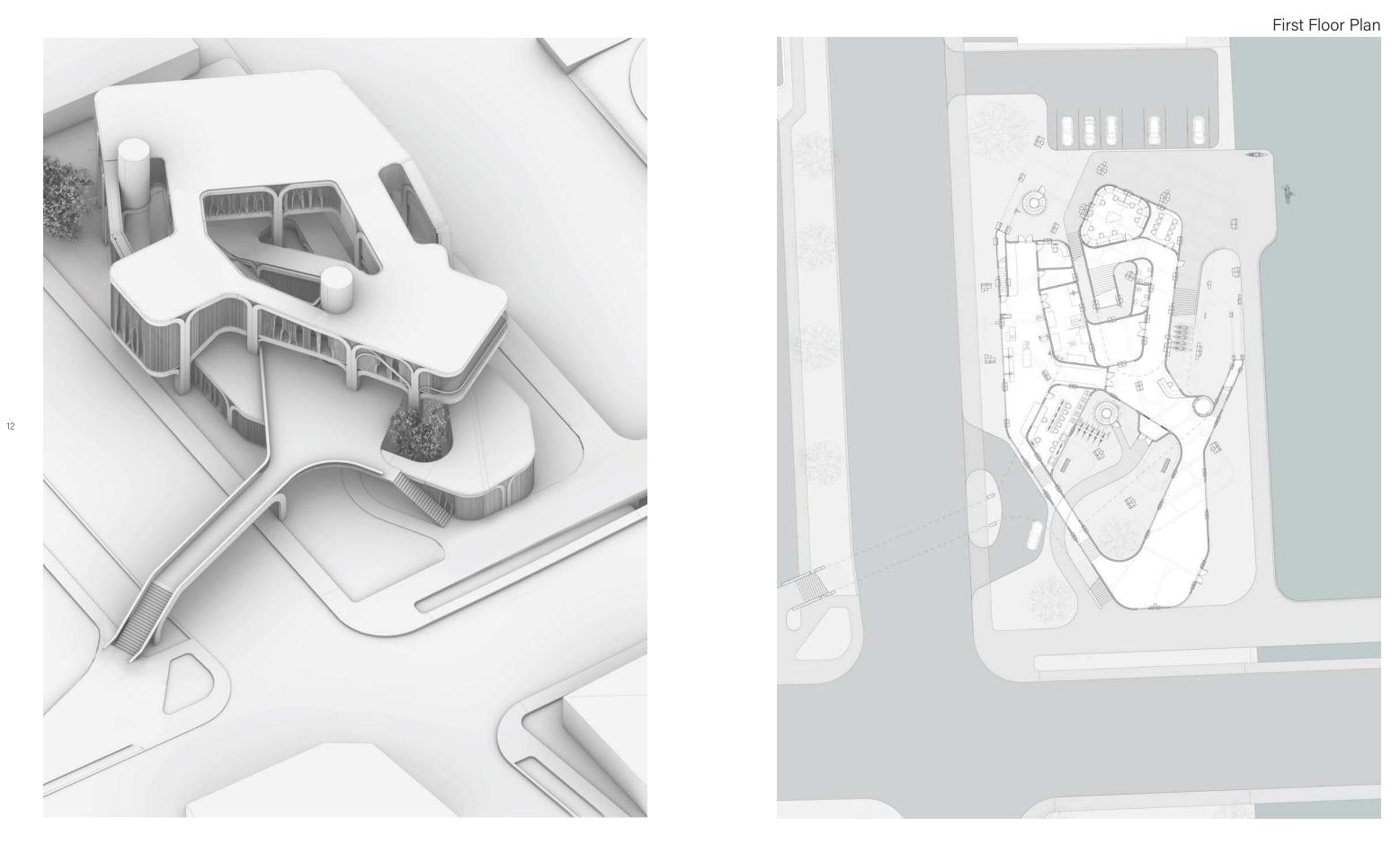




Structural Network

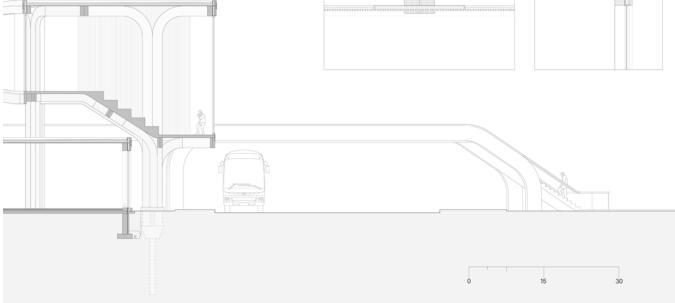


Wall Detail



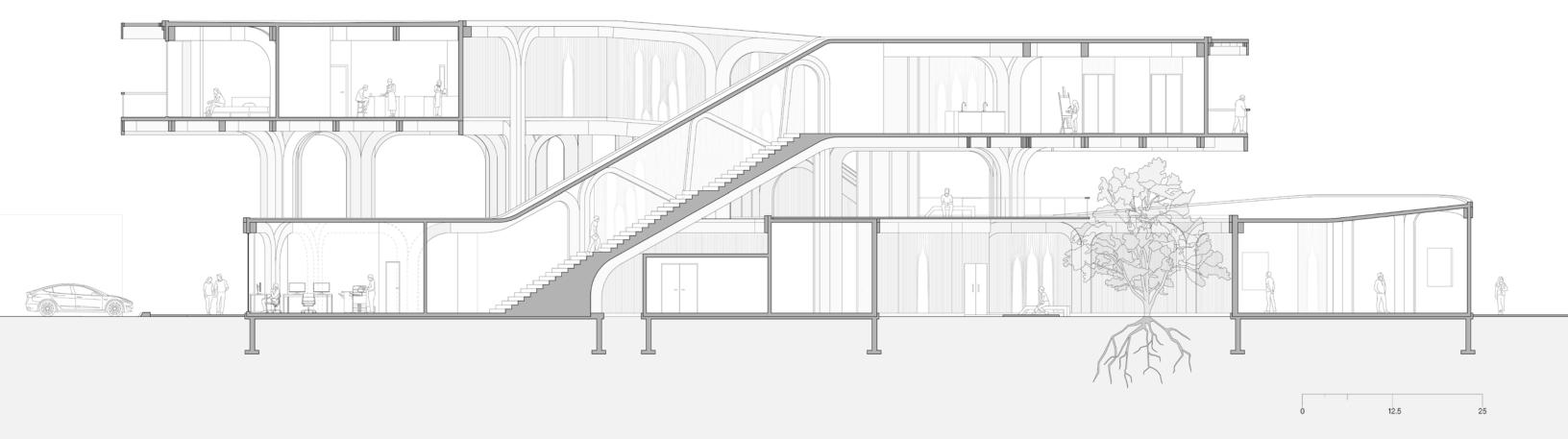
East Elevation

Cross Section



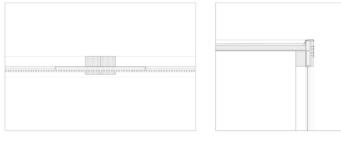


Section



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Contemporary Art and Cultural Center - Ember

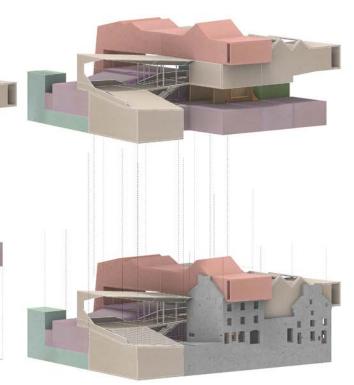
This Is the design of an art and cultural center in Old Montreal. As an art center, it serves as a central community space for Montreal. Running on the fuel of the busy Montreal day, by night it then continues to illuminate its surroundings. Like a burning ember, the stained glass façade calls on the colors of the red maple leaf, while the stacked pattern mimics the existing masonry construction it slots inside of and of its historical surroundings. As a symbol of life and culture, it harvests feelings of warmth through cold winters and long nights. A large public plaza invites visitors into gallery spaces, performance walls and the contemporary art world. Views from the illuminated structure highlight the monumental past of old Montreal, including a historic market and chapel. These framed views become part of the experience of its galleries and further connect it to its surroundings.



Stained Glass Wall Section



Form



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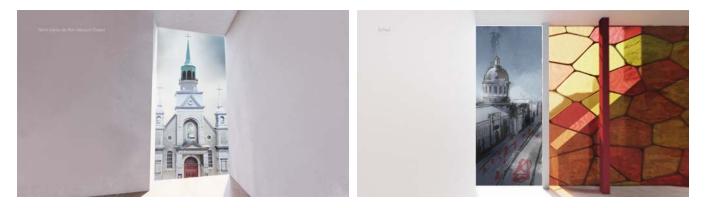
East-West Section

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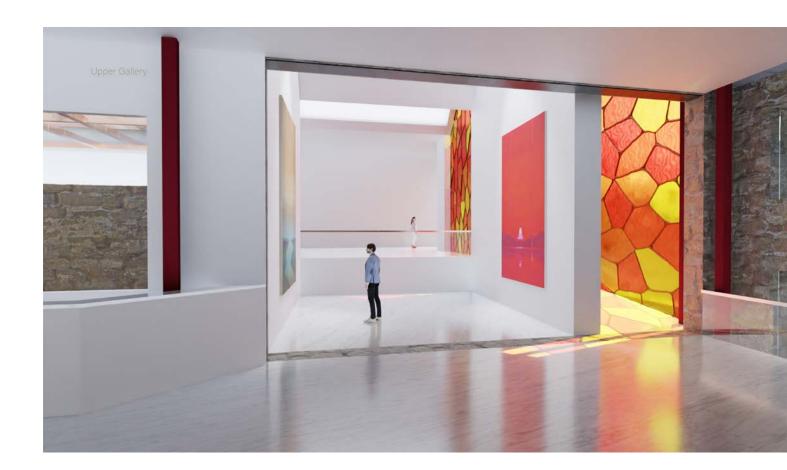
²⁰ Views



Early Concepts





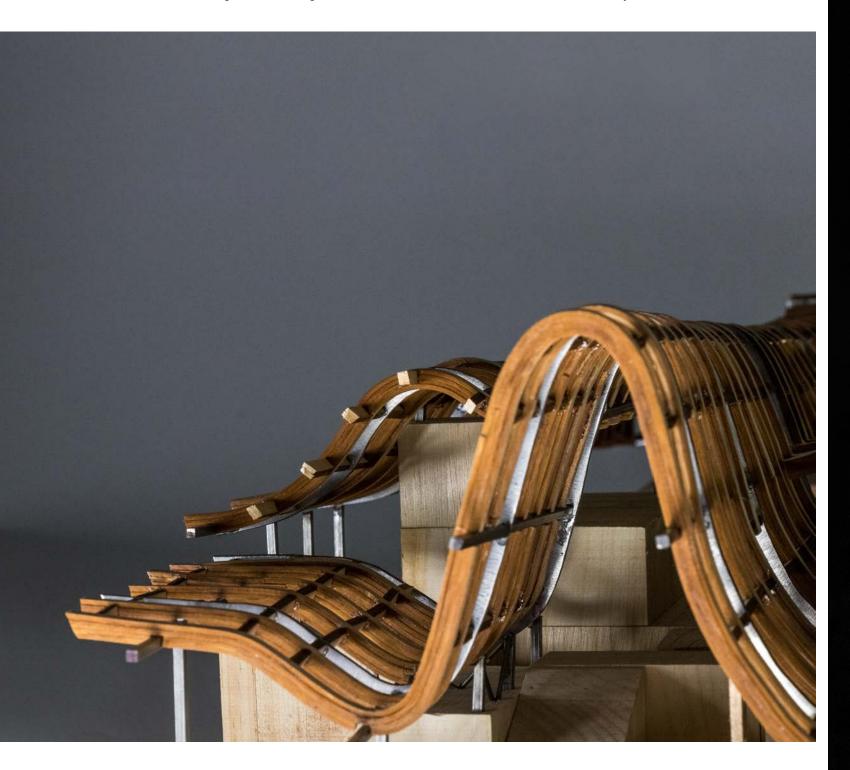




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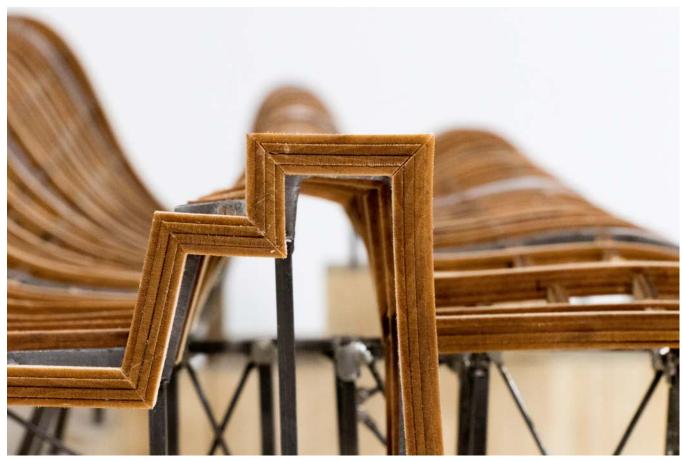
Structural Systems Model China Pavilion for the Milan Expo 2015 Luke Kratsios, Jack Otto, Turner Andreas

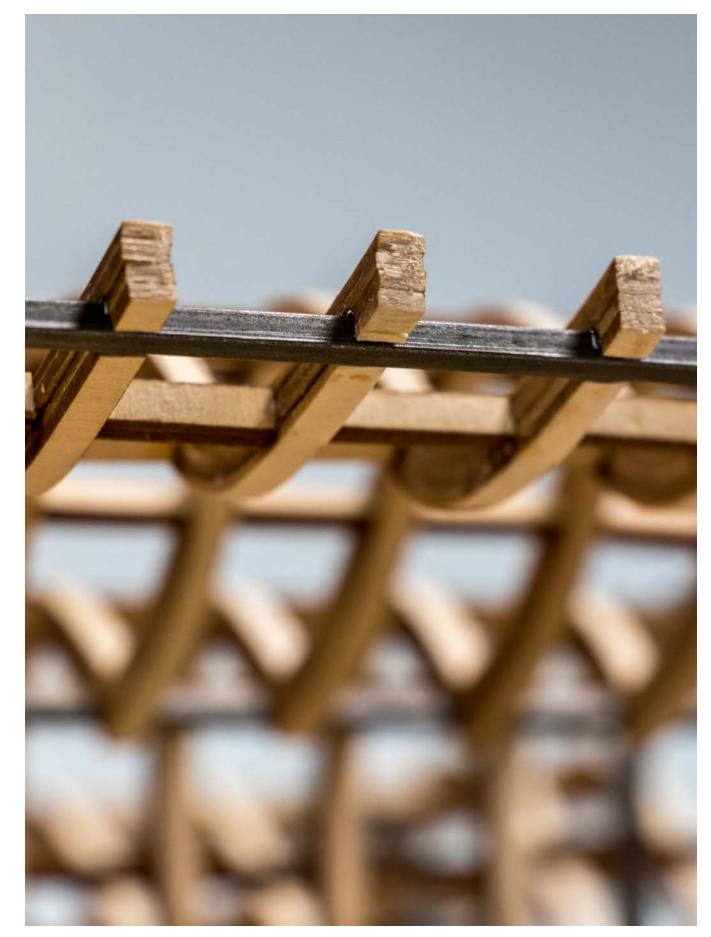
This is a structural model of the China Pavilion for the Milan Expo 2015. The pavilion was constructed out of large gluelam beams which sit atop a steel frame. Longitudinal members support transverse beams as lateral bracing. The shape of the beams transition from curved to angular. This change mimics the site, with mountains to one side and the city of Milan to the other.











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Castel Sant' Angelo - Scholar's Intervention

This is the design of a scholar's research and living facility placed within the existing Castel Sant' Angelo in Rome. The purpose of the facility is to allow for the studying of the castle and surround city. The castle was constructed and reconstructed over thousands of years, and served many purposes, including a mausoleum, prison, and pope residency. It sits today as a museum. A main tubular staircase extrudes from an existing skylight in the central burial chamber of the structure. The stairs culminate in a lookout platform facing the historic center of Rome. The living space exists behind a steel facade attached to the primary tower. The many levels of the tower were constructed at different times and for many use cases.



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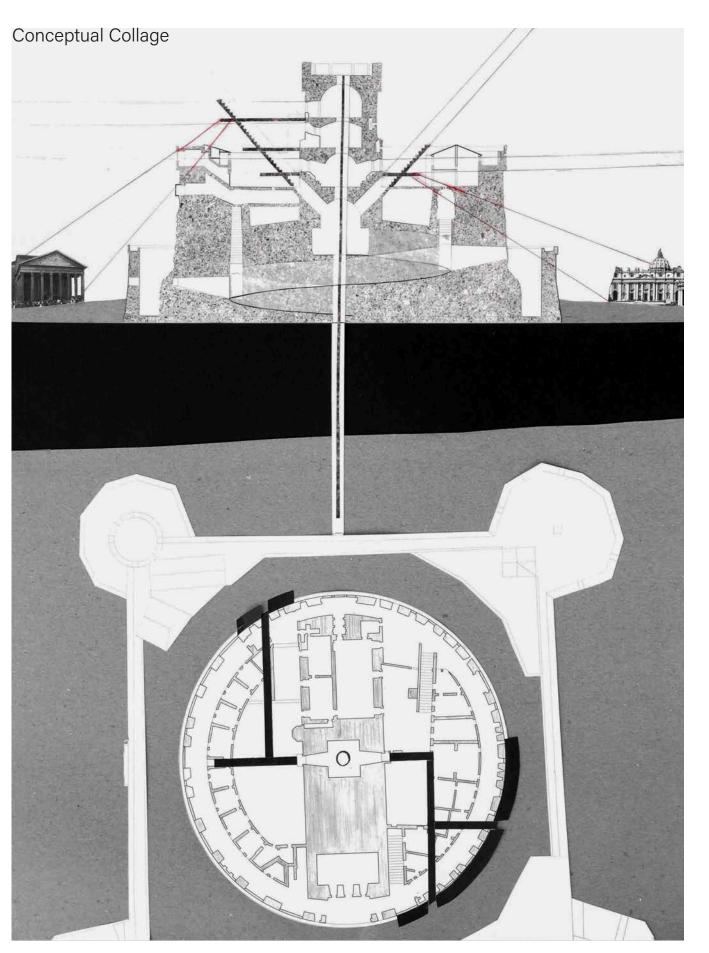
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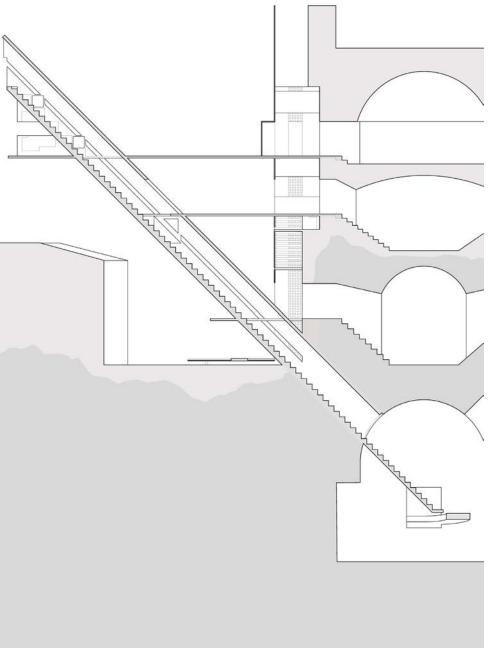
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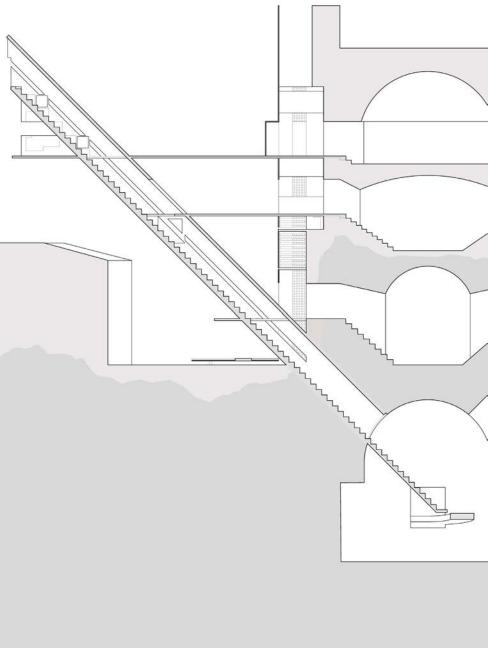
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Section





Intervention

Additional 3D Design Work

Top: Finalist in Nvidia-PNY render competition - still frame taken from animation Modeled and rendered in Blender

Bottom: Original Star Wars Character and scene Modeled and rendered in Blender

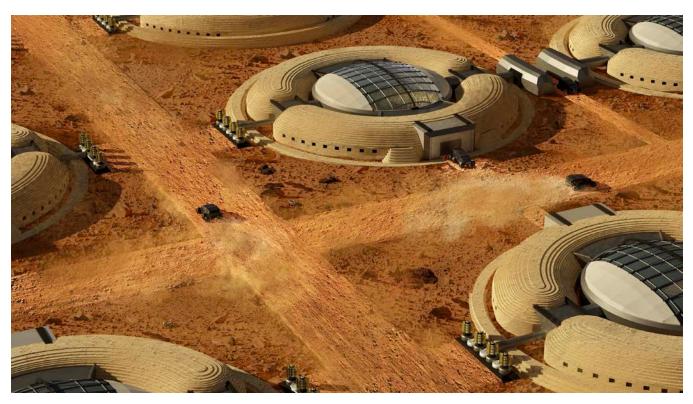




Top: Concept art of a flying car in the desert Modeled partially in Rhino, finished and rendered in blender

Bottom: Conceptual rendering created as part of a proposal for a Mars colonization competition. *Modeled in Rhino, rendered in Blender.*





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