This project began with the design of a terrarium for a specific type of plant. An air plant was chosen in this iteration. The primary focus for the terrarium is to maximize the versatility of air plants and to explore new possibilities of spatial arrangement and their relationship with a person.

Based on the concept of the terrarium, the second part of the project focuses on reinvigorating the Soulard district in St. Louis. A transparent floating structure is proposed to resemble the formal elements of a forest. It serves as a buffer zone between the surrounding urban community and the busy highway adjacent to the site. By enhancing the pedestrian experience and walkability of the area, the proposed building aims to revitalize the neighborhood, as it encourages more interpersonal interactions.
Terrarium Model: plexiglass, styrene
Designed with an intention to improve the walkability of the neighborhood, this project evolved from a path that connects between two existing roads near the site. This path is then transformed into a series of elevated overpasses that are supported by a grid of structural glass and air plants, thereby improving the pedestrian experience in the neighborhood.

**PART II: VERTICAL FOREST / URBAN OVERPASS**

Designed with an intention to improve the walkability of the neighborhood, this project evolved from a path that connects between two existing roads near the site. This path is then transformed into a series of elevated overpasses that are supported by a grid of structural glass and air plants, thereby improving the pedestrian experience in the neighborhood.
At the center of the rapidly-developing Delmar Loop area in St. Louis, MO, this proposal is a micro housing high rise building that features a total of 140 micro units. The room sizes range from 320 - 360 SF. A simple, rigid grid layout is adopted to maximize the use of space. The grid creates a repetitive and oppressive ambience that is then neutralized by a wooden frontage and subtle variations of bevel cuts on the facade. The bevel cuts on the exterior columns create complex patterns of light-and-shadow conditions that transform over time. Rooms with no balconies or half-size balconies are arranged in a way that not only offsets the rigid grid structure, but also hints at a new possibility of micro-housing typology.
**MICRO TYPOLOGY**

The design of the building itself is mainly about the aggregation of the micro units and the atmosphere of that aggregation. A simple, rigid grid layout is adopted to maximize the use of space. The grid creates a repetitive and oppressive ambience that is then neutralized by a wooden frontage and subtle variations of bevel cuts on the facade. The bevel cuts on the exterior columns create complex patterns of light-and-shadow conditions that transform over time. Rooms with no balconies or half-size balconies are arranged in a way that offsets the rigid grid structure.
Located on the Chain of the Rocks Bridge over the Mississippi River, this project is inspired by the way river water interacts with the bridge pylon, as water currents diverge and converge in dynamic ways. Indirect light reflected by the ever-changing river surface is utilized as the primary lighting source. The program includes a laboratory for monitoring water pollution. To raise public awareness of this issue, a public exhibition center is also included in the program for the public to directly view research data.
Designated as an urban chapel, this project utilizes a diamond-shaped facade system that allows the form to follow the sloping landscape of the site. This facade system creates complex light-and-shadow conditions that change dynamically with the movement of the sun. An existing jogging path through the site is preserved, so that passers-by also experience the sacred atmosphere created by the interaction between light and shadow.
Conceptual Axon

Conceptual Plan

Model photo: plexiglass, plaster, styrene
Proposal for a performance space above Jamaica Pond in Boston. Utilizing the water surface to reflect sunlight or moonlight through the roof opening, this structure creates an experimental theater space. This is a theater that combines the typology of a skate park and a sky observatory, thereby exploring new spatial possibilities.
Proposal of a community center for senior citizens at lower-west Manhattan. Small windows and large carvings strike a balance between privacy and transparency. The slanted roof reconciles the dramatic height differences between the nearby building and outdoor spaces.
This project began with an analysis of drawings by Ernst Haeckel (1843-1919), a German biologist and artist who popularized Charles Darwin’s work in Germany, but whose own alternative theories of evolution have subsequently been discredited. Utilizing Grasshopper and associated parametric design tools, Haeckel’s studies are iteratively adapted to various imagined environmental conditions. By crossbreeding my initial species with my teammate’s, an imaginary organism was born, as both species’ skin, skeleton, and pattern intermingle. The new organism was then analyzed and fabricated.
Located in a karst landscape formed by the dissolution of limestone, the site of this project is characterized by sinkholes, where the ground surface collapses. Due to rainwater erosion, these sinkholes expand over time, gradually transforming the existing topography. This project interacts with the complex landscape without over-interfering with the existing patterns of erosion.

Near the edge of sinkholes, soil becomes thinner, and the limestone beneath is closer to the ground. This Geological Museum creates a cut into the rim of a sinkhole, exposing the limestone stratum below. The rock stratum is by itself a visualization of Illinois’s geological history, visually and spatially augmenting the main program of the building.
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Air Plant Terrarium Model Photo: acrylic, plastic