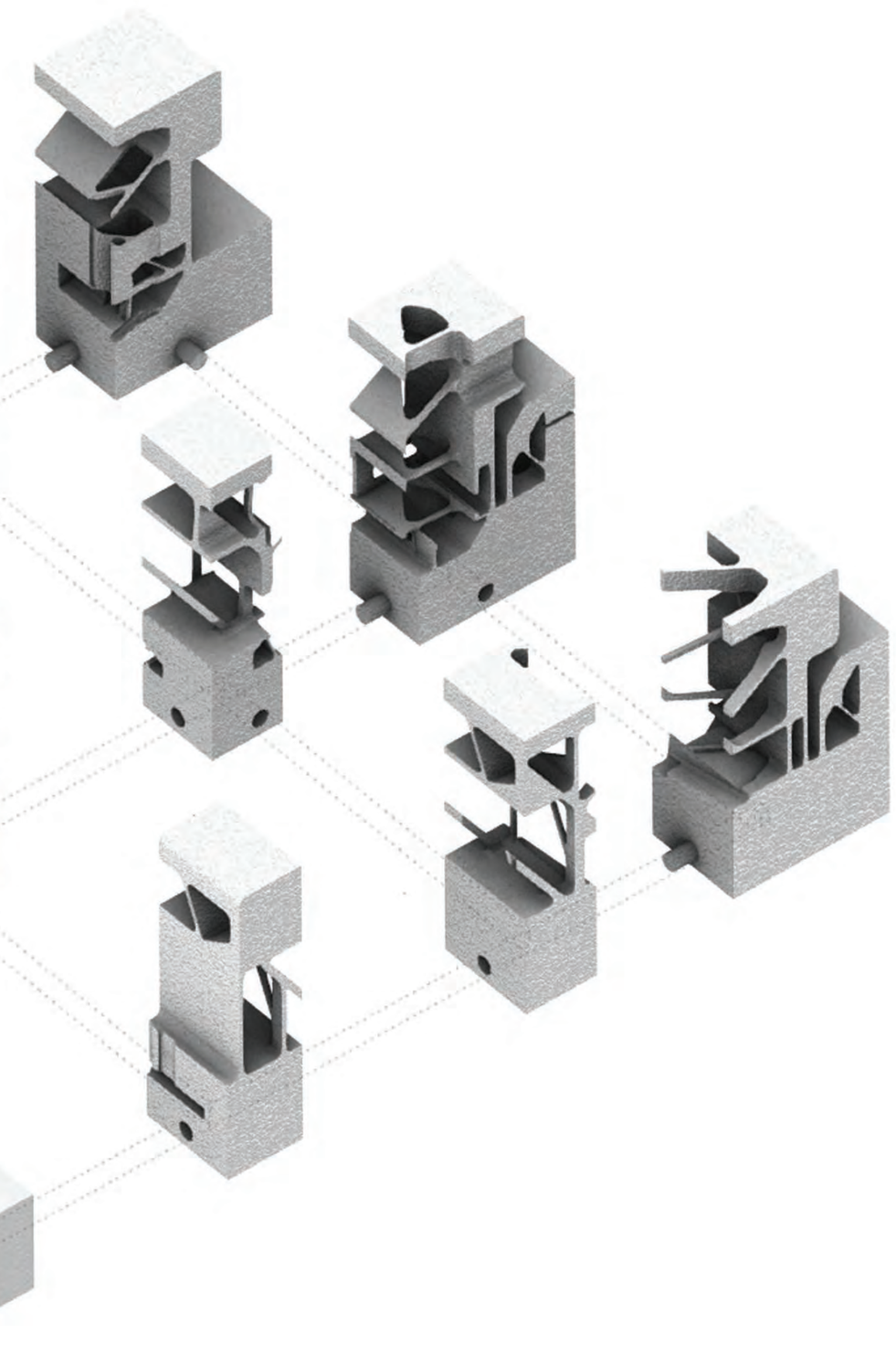


01. RECORDER

adv design I
prof. michael gamble

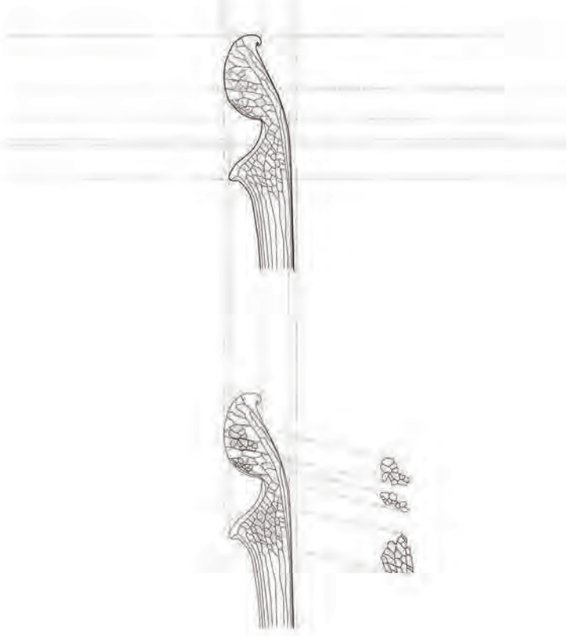
The purpose of this project is to create a "Curiosity Cabinet" to house an established curated collection. "Infinity Drawings" are created out of the cabinet and collection as generative stepping stones for form and programatic ideas. The introduction of the site grounds the project and contextualizes its purpose. Ultimately, the "Curiosity Cabinet" reveals itself as a series of archival and garden spaces tailored to the program of the collection.

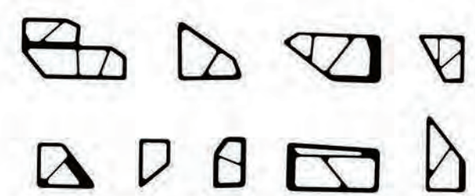
01. RECORDER

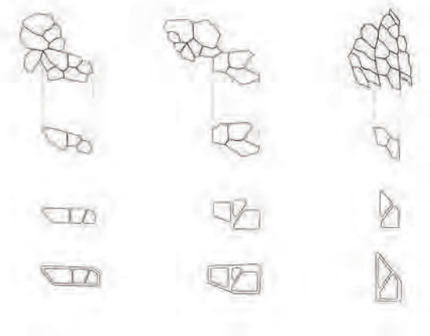
COLLECTION

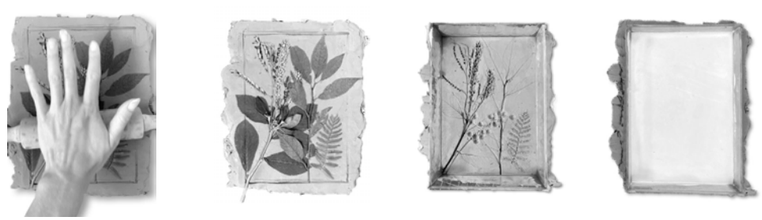
This collection arises from the need to record our natural history through the careful gathering, categorization, and preservation of plant life. A series of studies were conducted to explore different methods of preservation - the preservation of the organism itself [living and dried] and the preservation of form [plaster imprinting]. The result is a collection of plates that record the biodiversity, climate, and atmosphere of a geological location. What emerges is an elegy of time and place.

RITUAL OF COLLECTING







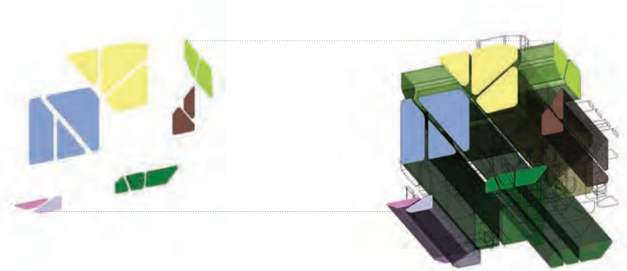


GEOMETRIC ORDER

A geometric order is derived from patterns found in nature. Cell clusters from a Sarracenia "Pitcher" plant are extracted from the elevation of the plant, geometrically refined, and interpreted into a structural framing system.

INFINITY DRAWING

The infinity drawing is a boundless, generative model for spatial and programmatic ideas. The drawing is constructed through the manipulation of naturally born geometries subjected to a series of 2D and 3D digital operations such as mirror, scale, move, boolean difference, rotate, and invert.



KERNFORM

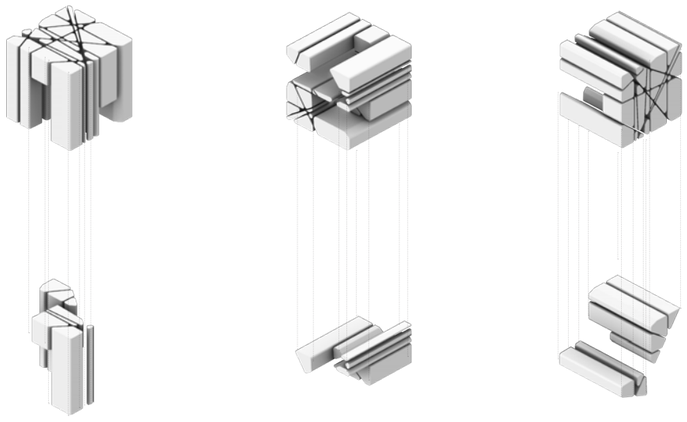
[Core Form]

The kernform focuses on the techniques and structural framework of an architecture. This project generates space by employing a system of stereotomic components subjected to manipulated extrusions and spatial inversions. The geometries are extracted from patterns found in nature and then isolated to perform a series of carving operations - extrude, scale, rotate, intersect, and invert. The resulting interior cavities are carved from travertine stone using an industrial sized CNC water-jet mill. These extrusions can be oriented in a finite but extensive number of ways to craft various languages of space that are adaptable based on programmatic function.

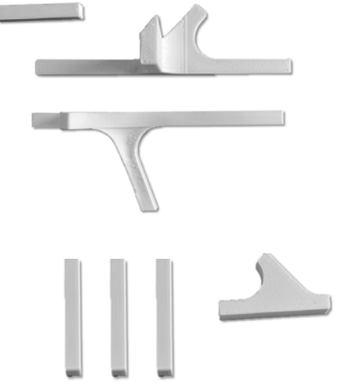
EXTRUDE

LIFT

ROTATE

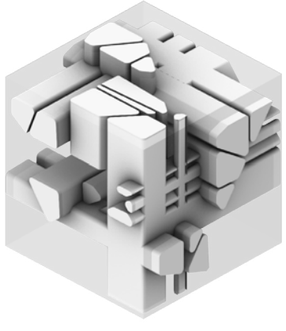


REFINE

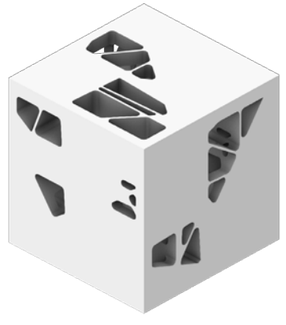


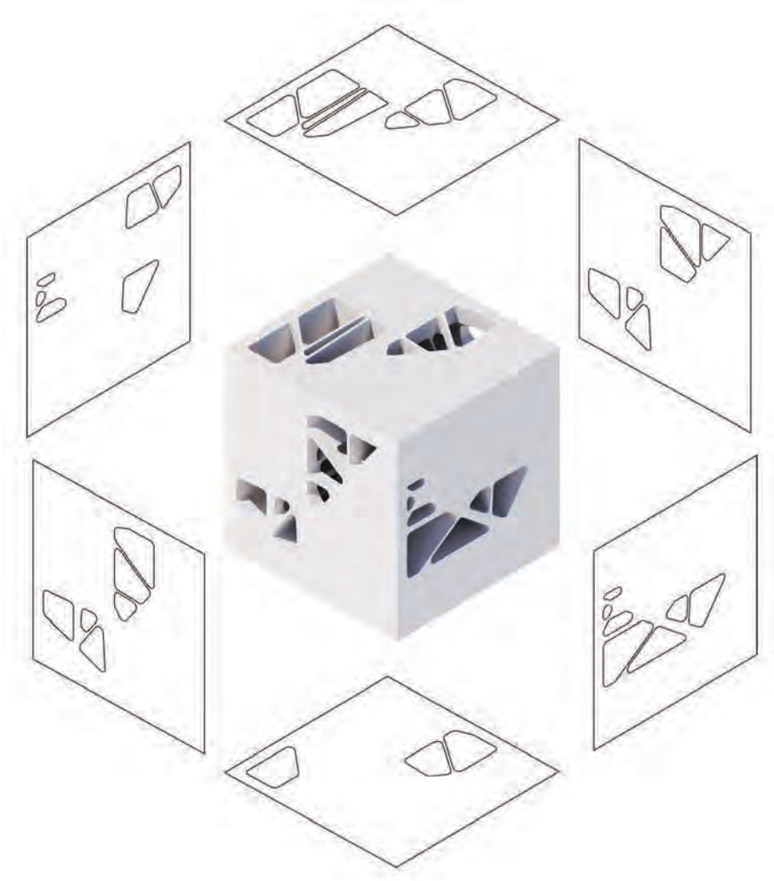
TECTONIC STRUCTURE STUDY
3D PRINTED

INTERSECT

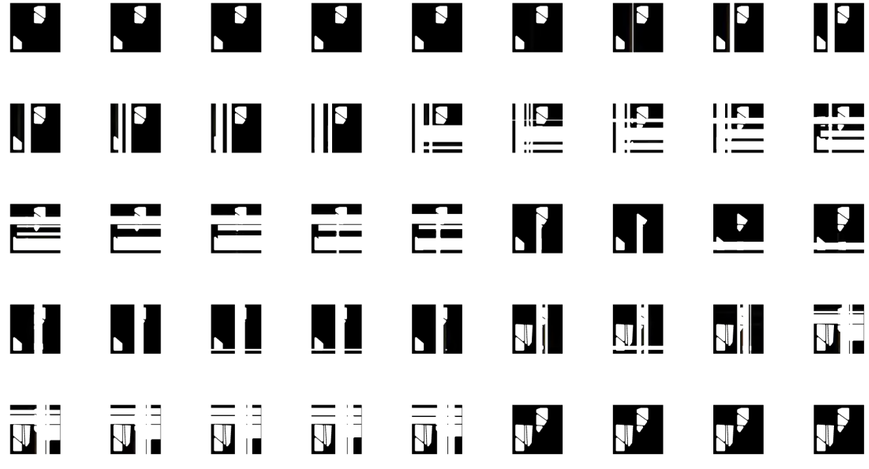


INVERT





EXPLODED ELEVATIONS

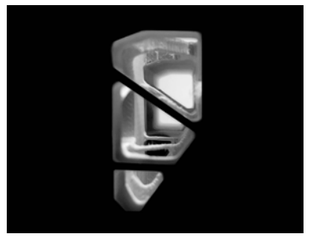


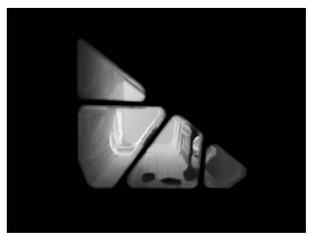
45 LAYERS

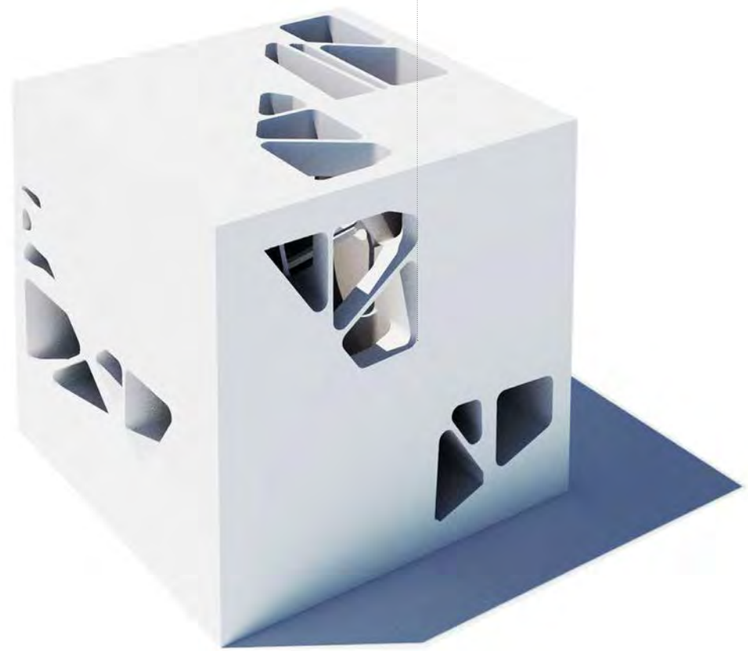
KUNSTFORM

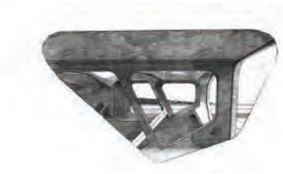
[Symbolic Form]

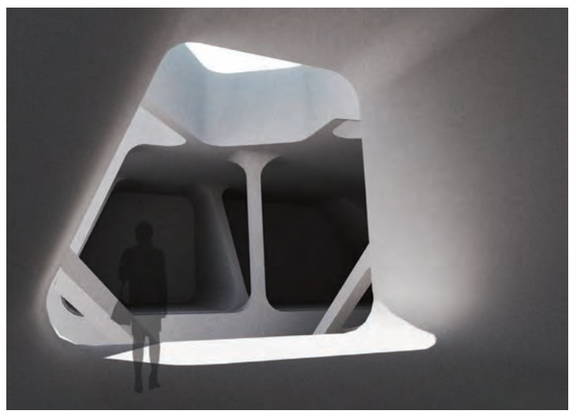
The kunstform focuses on the representational aspects of the construction, such as its materiality and enclosure. This project explores materiality in testing the structural and aesthetic capabilities of travertine stone. The form is intended to display the characteristics of weightlessness, lightness and delicateness of stone that sharply contrasts with the heavy representation of the same material seen in the backdrop of Roman construction. Light-colored travertine stone catches light and shadow to emphasize the surface textures and details. The interior cavities diffuse light that is preferred for archival spaces. Additionally, the representational aspect of construction stems from the organic geometries. Similar to cells functioning as the building blocks of the living world, these carved components are the building blocks of inhabitable space.







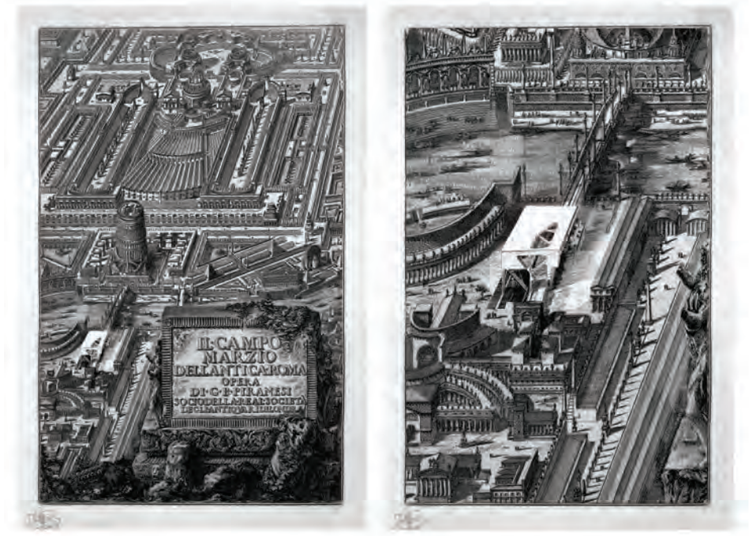


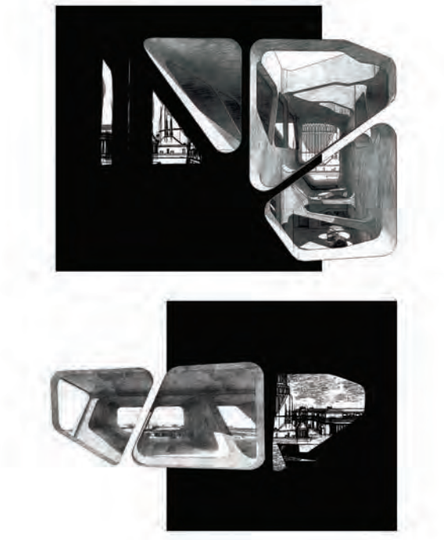


SITE

[Il Campo Marzio, Rome (1762) Giovanni Battista Piranesi]

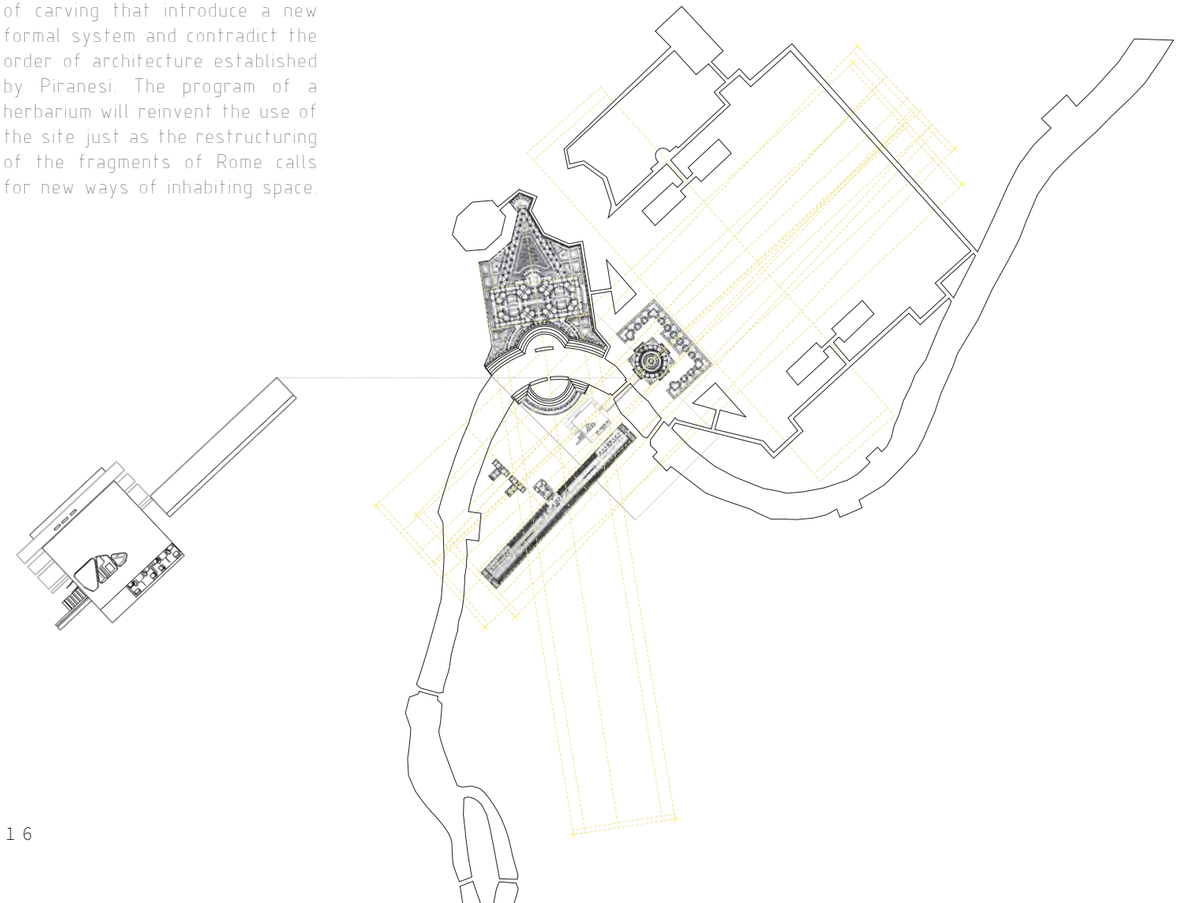
The etchings of Giovanni Battista Piranesi record a unique image of Rome. In his synthesis of his Campo Marzio dell'Antica Rome (1762), Piranesi interrogates the soft, malleable city. He explores the inhabitation of Rome's past and present by addressing the old (ruin) and new monuments within the same plate. It is suggestive in that the historical city is reinvented and selectively restructured into fragments. These fragments endure material transformations and a fictional order that proposes a site for the advent of "other forms." I seek to intervene with an "other form" - a form that respects the same materiality and steromtomic nature of construction, but employs evolved technologies of carving that introduce a new formal system and contradict the order of architecture established by Piranesi. The program of a herbarium will reinvent the use of the site just as the restructuring of the fragments of Rome calls for new ways of inhabiting space.

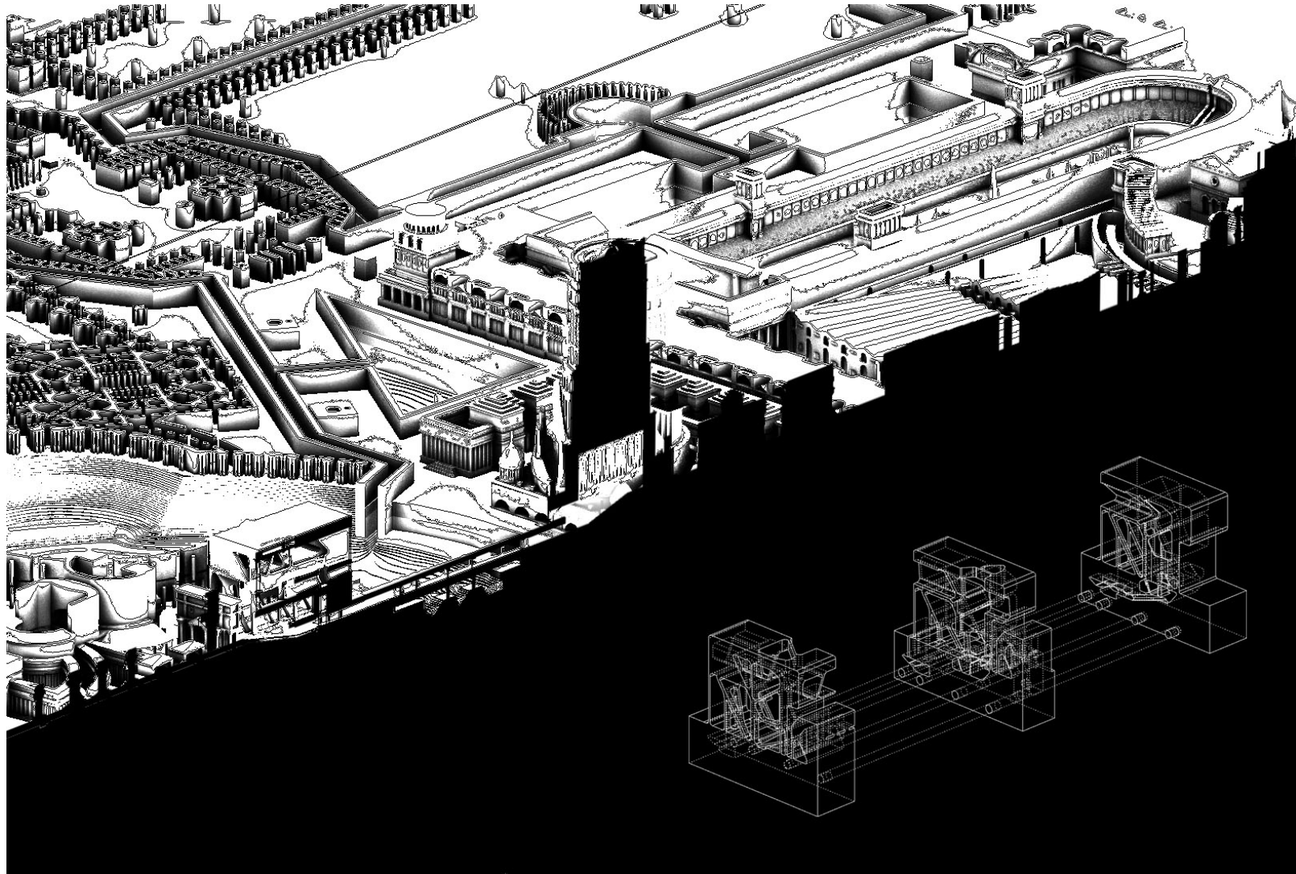




FRAMING PIRANESI

This form intervenes in Piranesi's drawings as a means of not only holding a collection but also acting as a frame to view Piranesi's drawings from within.





P R O G R A M

Herbarium

The Herbarium is a vessel for the gathering, classification, pressing, drying, and preserving of precious plants and plant specimens. The Herbarium is composed of three Archives, and five Gardens. The archive spaces are dedicated to the careful storage and preservation of a variety of preserved plants and plant parts. They are separated by the way in which they are preserved [dried, imprinted, living] and then further organized by their geographic region in which they were collected. The Gardens are spaces designed to instill wonder and create moments of pause. The herbarium's most important poetic function is to connect humanity back to nature. A living herbarium rests within the ground and below the floating cabinet of archive spaces. It serves as a point of growth and collection as well as a poetic opportunity to display the life cycle of these specimens.

ARCHIVES

01. PRESSED + DRIED PLANTS

02. PLASTER IMPRINTED PLANTS

03. LIVING HERBARIUM

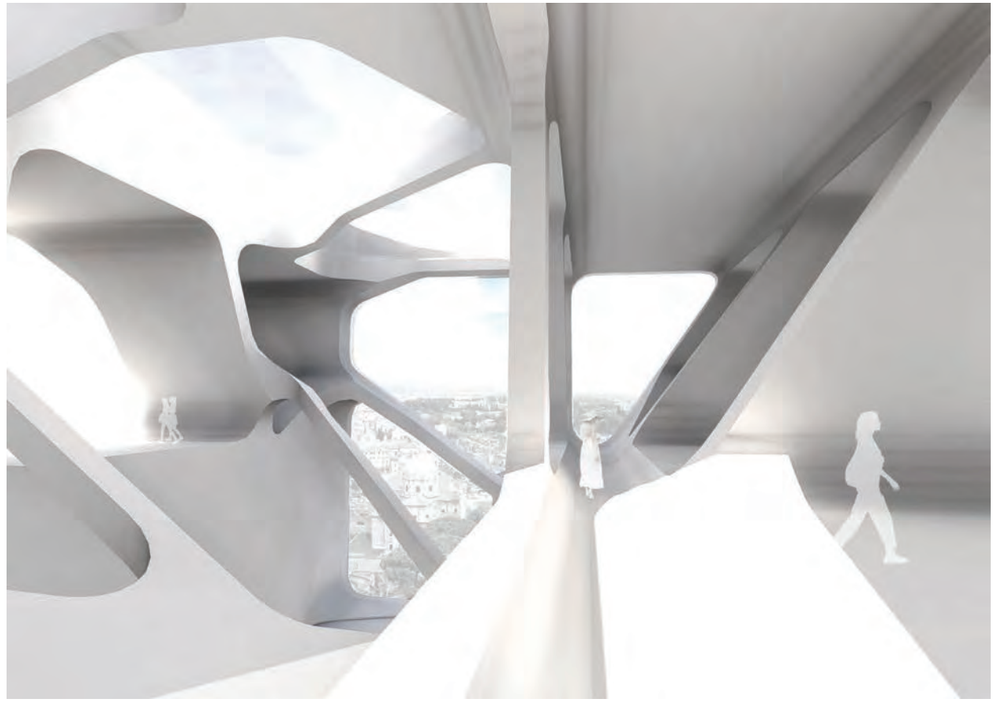
GARDENS

04. ARRIVAL GARDEN

05. COLLECTION GARDEN

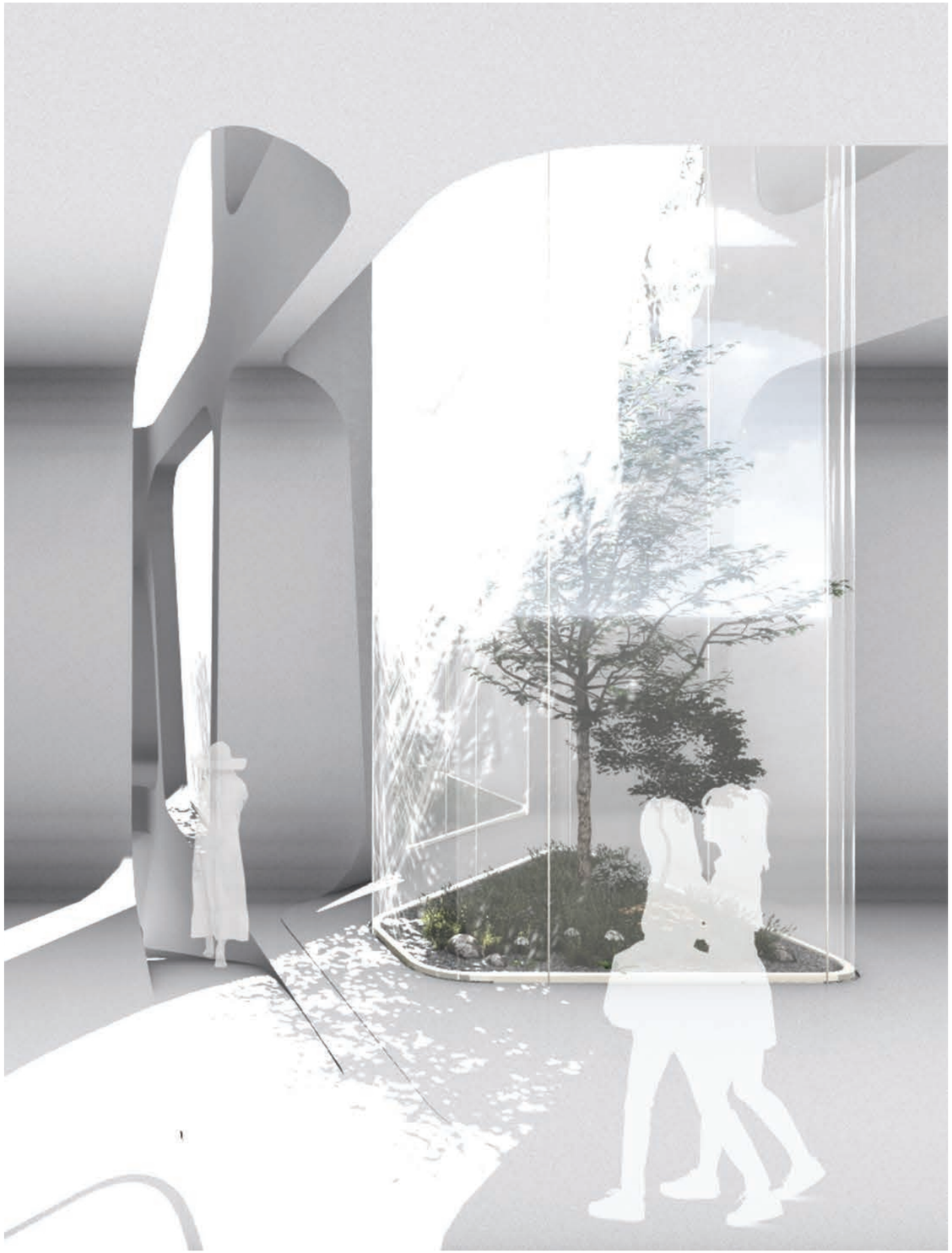
06. PRESSING + DRYING GARDEN

07. EMILY DICKINSON'S PRIVATE POETRY



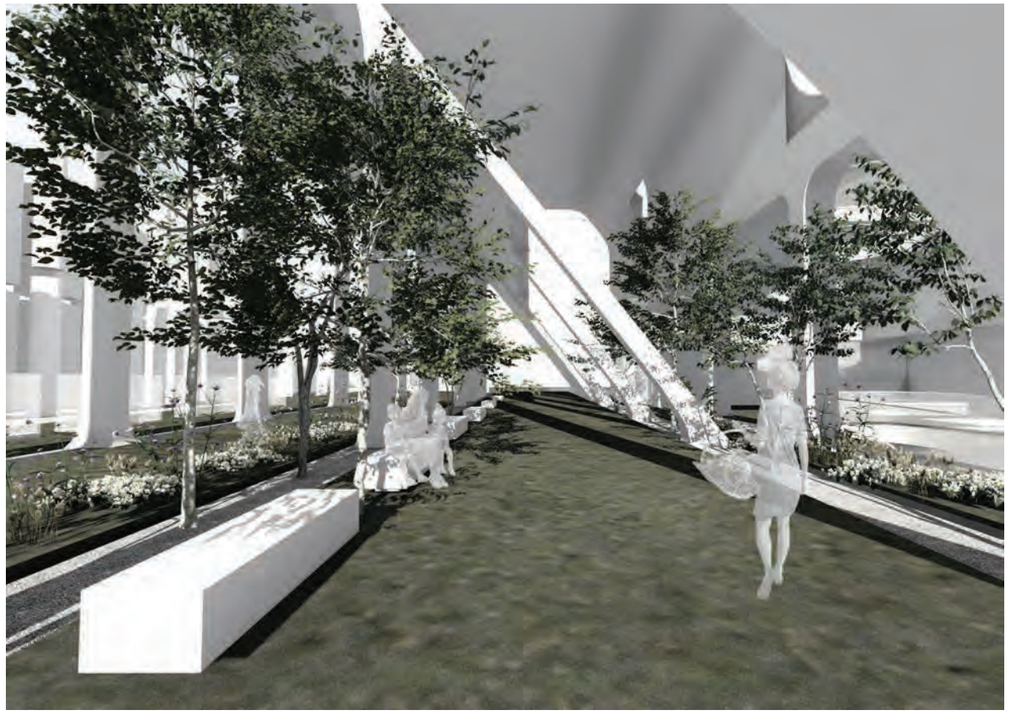
01.

02.



03.

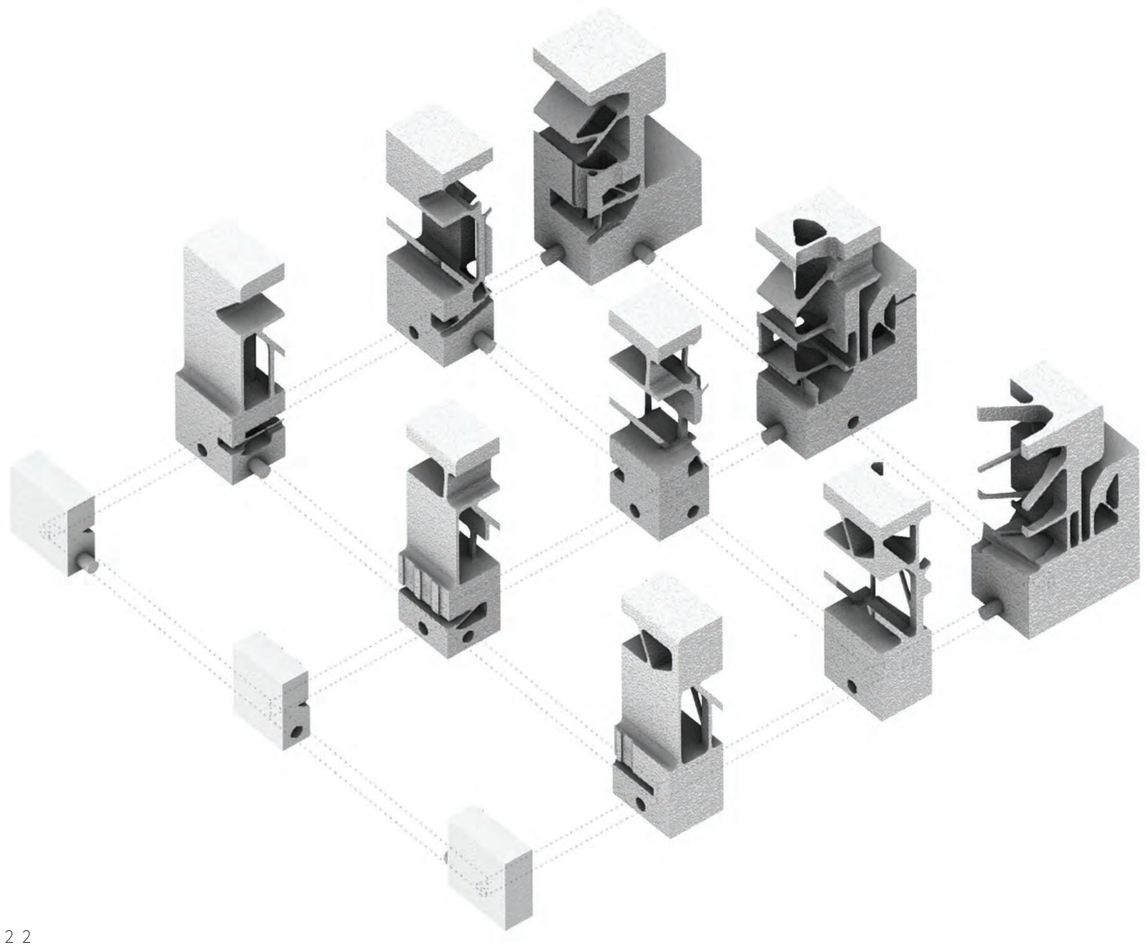
04.



05.

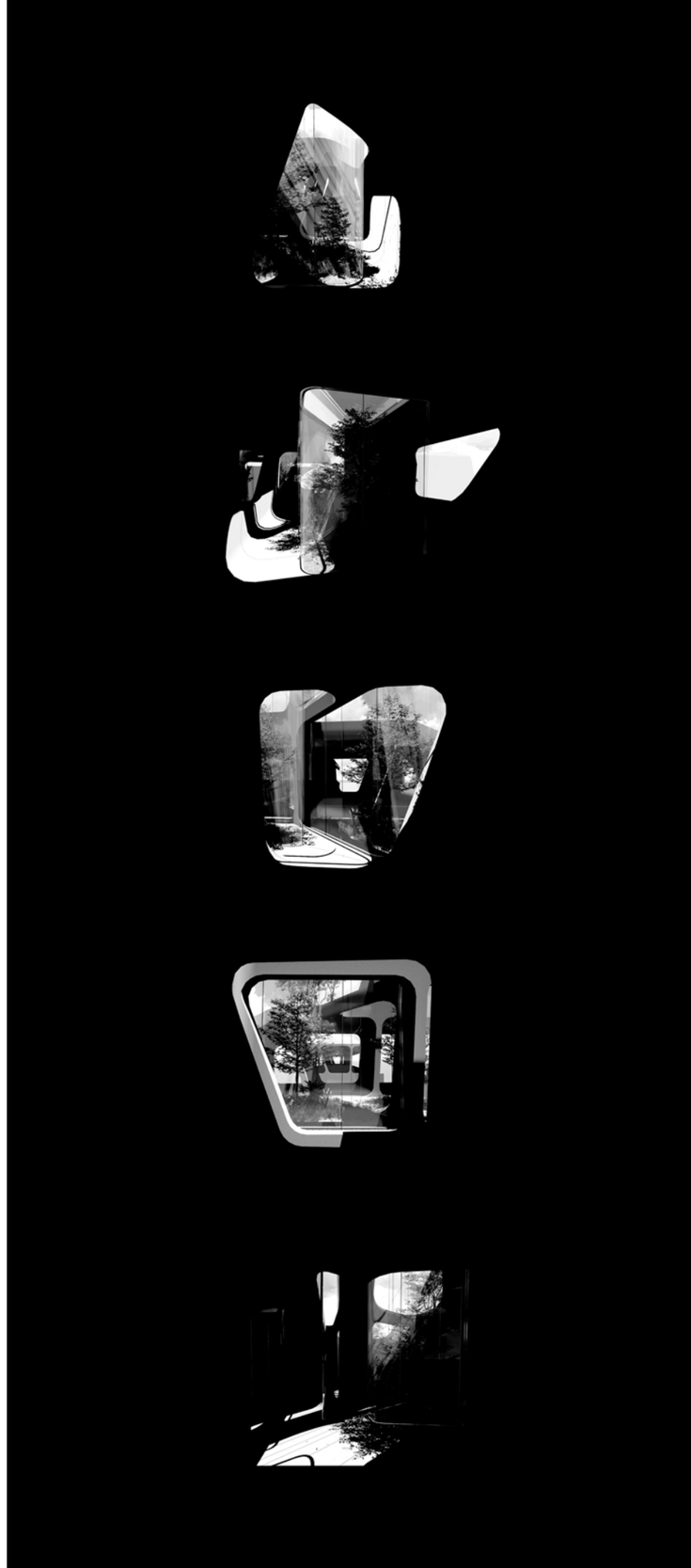
MATERIALITY

Travertine stone is one of the main construction materials of the Roman ruins and will be the material used for carving into. The stone is porous but lacks planes of weakness, thus making it lightweight for its strength. It is commonly used as building material for its durability, variegated color and pattern pallet, and heat and pressure resistance. This material also has the structural advantage of being easy to cut into, thus this material has the specific structural advantages for the stereotomic techniques.



LIGHTING SYSTEM

This project utilizes the natural light in the gardens and archive spaces. However, since the archive spaces could suffer damage from direct UV light, UVray-filtered glass will be installed in all of the apertures. The dried plant archives, pressing garden and drying garden are either buried underground or tucked away to eliminate exposure to direct natural light when the collection is most vulnerable to damage.



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EDUCATION

MASTER OF ARCHITECTURE II
Georgia Institute of Technology
College of Design
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BACHELOR OF DESIGN IN ARCHITECTURE
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College of Design, Construction + Planning
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MINOR IN SUSTAINABILITY AND THE BUILT ENVIRONMENT
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ACADEMIC EXPERIENCE

SEMESTER STUDY ABROAD - ARCHITECTURE
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University of Florida
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University of Florida
Florida League of Architectural Things [F.L.o.A.T.]
Plaza de Americas, Gainesville, FL
Fall 2019

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University of Florida
Fall 2019

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Georgia Insitute of Technology
Fall 2021

AIAS - AMERICAN INSTITUTE OF ARCHITECTURE STUDENTS
University of Florida
Chapter President [2019-2020]
Chapter Treasurer [2018-2019]
Active Memeber [2017-2020]

ARCHITECTURE BUILDING GROUP
University of Florida
Fall 2020

STUDENT BODY REPRESENTATIVE FOR COMPUTATIONAL DESIGN FACULTY SEARCH
University of Florida
Fall 2020

PROFESSIONAL EXPERIENCE

INTERNATIONAL TECHNICAL ARCHITECTURE INTERN
Sin Luz Ingenieria y Arquitecture SLP
Barcelona, Spain
Summer 2019

HONORS + AWARDS

HARRISON CHAIR FELLOWSHIP
Georgia Institute of Technology
2021 -2023

TOP 10 - TWO-YEAR CUMMULATIVE FACULTY REVIEW
University of Florida
Spring 2019

AIAS GAINESVILLE SCHOLARSHIP
Univeristy of Florida
Fall 2019

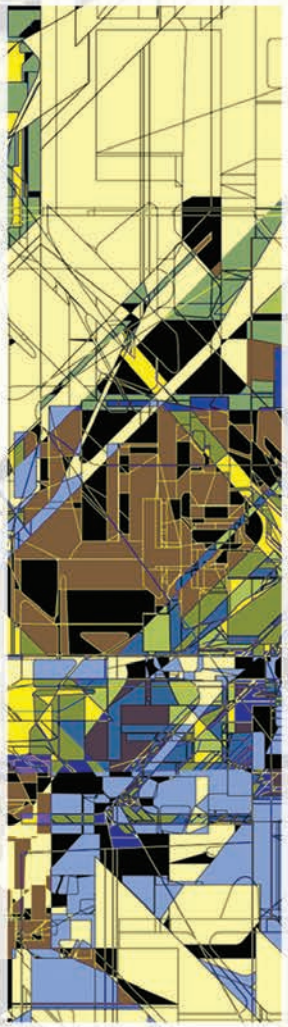
SKILLS

2D
Illustrator
InDesign
Photoshop
Hand Drafting

3D
Rhino 3D
Vray for Rhino
Lumion
Model Making
Basic Woodwork

P O R T F O L I O

M A C K E N Z I E S H I N N I C K



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