JUSTIN WAN

Columbia University, G.SAPP M.S.AAD | 2023
USC, School of Architecture B.ARCH | 2022

Selected Works
2019 - 2022

JUSTIN A. WAN | LEED AP BD+C , WELL AP

https://www.linkedin.com/in/justin-a-wan-leed-ap-00000001/

justinandrewwan@gmail.com

+1 (213) 572 - 8095

PROFILE

My sense of responsibility to the natural environment has driven a passion to optimize buildings through smart technology & ecologically sensitive designs, and have encouraged my pursuit of sustainable building accreditations. Having lived in 4 countries, my multicultural background has allowed the recognition of adversities and differences as opportunities for growth, shaping an ability to design through a critical lens.

EDUCATION

MAY 2022 - MAY 2023

+ Columbia University | G.SAPP

Masters of Science, Advanced Architectural Design

AUG 2017 - MAY 2022

+ University of Southern California | USC SOA

Bachelor of Architecture

ACCREDITATION

DEC 2020

+ WELL AP

JAN 2020

+ LEED AP BD+C

PROFESSIONAL EXPERIENCE

Summer 2021

Summer 2019

+ Ronald Lu & Partners Hong Kong | Architectural Intern

- Participated project phases: **Concept, Schematic Design(SD), Design Development(DD)**
- Participation in mixed-use**(SD)**, **carbon net-zero commercial(DD)**, institutional**(SD)** & residential **(DD)**
- 3-D Digital Designing (Shopping Mall Portal), Realistic rendering (Interior), Physical Modelling (Residential)
- Conducted market & site research & participated in weekly client meetings to discuss progress & changes
- Curated material palette & conducted material feasibility studies with engineers
- Provided assistance on sustainability design in net-zero building project

SEP 2019 - DEC 2020

+ University of Southern California | Teaching Assistant

- Class assistant for 3 core architecture courses: **Studio, Arch History & Structures**
- Supported 1st year students with design concepts, digital software assistance, graphic representations
- Assisted architectural historian **Professor James Steele** with research publication in progress

SEP 2018 - MAY 2019

+ USC Architecture & Fine Arts Library | Exhibtion Model Designer

Designed 2' x 3' scaled model of the **Walt Disney Concert Hall** in L.A. for permanent display in library

ACADEMIC ACHIEVEMENTS & AWARDS

MAY 2022 + USC Global Scholar Distinction *(Titled: Sublime Ruin)* — **Prize Winner**

MAY 2022 + USC SOA Post-Colonial Urbanism and Research Award — **Prize Winner**

APR 2022 + USC SOA Annual Research Symposium — **3rd Place**

OCT 2021 + USC SOA Jon Adams Jerde Travelling Fellow *(Japanese culture & biophilic designs)* — **Prize Winner**

APR 2021 + USC SOA Annual Research Symposium - *(Titled: Veiled Rays)* — **3rd Place**

SKILLS

Design + **Rhinoceros, Grasshopper**, Revit, AutoCAD

Media + **Adobe Suite, Enscape, Twinmotion, VRay,** Figma (UI/UX web application design)

Fabrication + **Creality 3D Printers**, Pepakura, Laser-cutting, Slicer for Fusion 360, Hand modelling, CNC

Language + **English (Native), Mandarin Chinese (Native), Cantonese Chinese (Native)**, Japanese (Intermediate)

Content

01 Haze Cartography
Experimental design to rethink ecological role of invasive plants
GSAPP Advanced Architecture Design Studio

02 Veiled Rays
Design aimed to create a biophilic neighborhood
3rd Prize ; USC Research Symposium 2021
Jon Adams Jerde Travel Fellowship 2021
B.ARCH Thesis Studio

03 Twist & Turn
Proposal for sustainable community & sports center
B.ARCH Comprehensive Studios

04 Backyard Jungle
Proposal for Mixed-Use Affordable Housing + Urban Park
Barbara G. Laurie NOMAS Design Competition

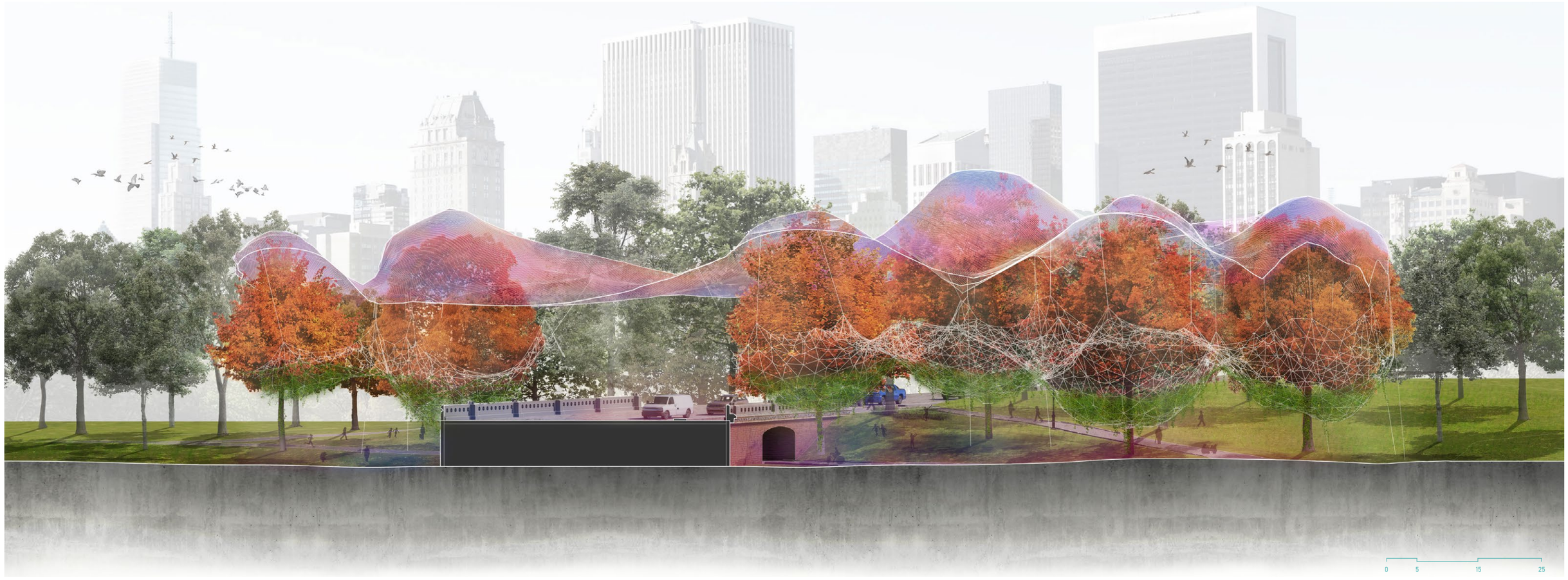
05 Sublime Ruin
Proposal for eco-industrial garden in Barcelona
Global Scholar Distinction Winner 2022
B.ARCH Abroad Studio

06 Fold Away
Biophilic Tree House Module Design
Last Nuclear Bomb Memorial by BeeBreeders

07 Convergence in Time
Memorial designed in support of nuclear disarmament
Last Nuclear Bomb Memorial by BeeBreeders

08 Loofah Squattah
Experimental furniture design made with natural materials
GSAPP Natural Materials Lab: Making with Earth

09 Internship



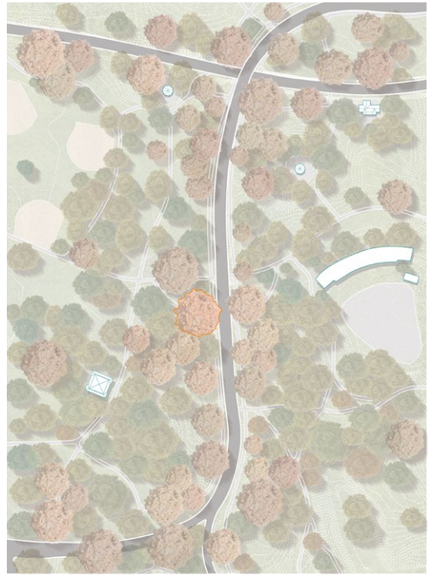
01 Haze Cartography

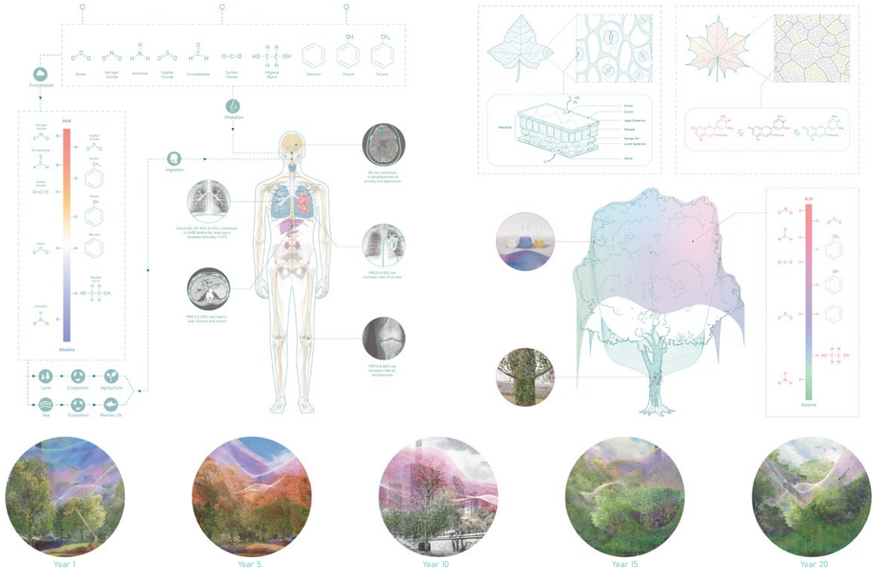
Columbia GSAPP M.S.AAD
Project Type: Experimental Pavilion Design
Site: New York City Central Park, NY, U.S.A
Aug 2022

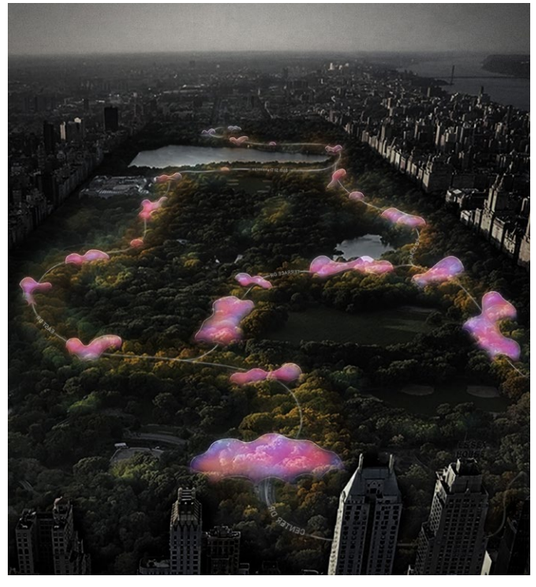
Haze Cartography explores the capacities of "invasive species", in benefitting their ecosystems through design. The Norway Maple and English Ivy show reactivitiy to chemical pollutants in the air.

The English Ivy has air-purifying properties and absorbs greenhouse gases. On the other hand, anthocyanin, the red pigment found in the leaves of Norway Maple, is a pH indicator that changes colors.

The proposal becomes an ambition to intervene with the air pollution issue in Central Park. With a mesh dyed with anthocyanin placed over the maple trees, the design changes colors through acid-base reactions between the dye and the pollutants, showing presence of pollutants. The ivy plant is encouraged to grow without disturbing the trees and continues to purify the air.









Section A-A

02 Veiled Rays

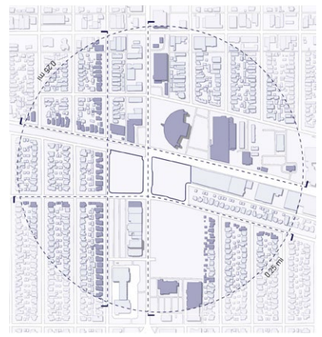
University of Southern California
Site: Los Angeles
Project Type : City Gateway & Affordable Housing
Best Research Award (2021),
Jerde Travelling Fellowship
Dec 2020

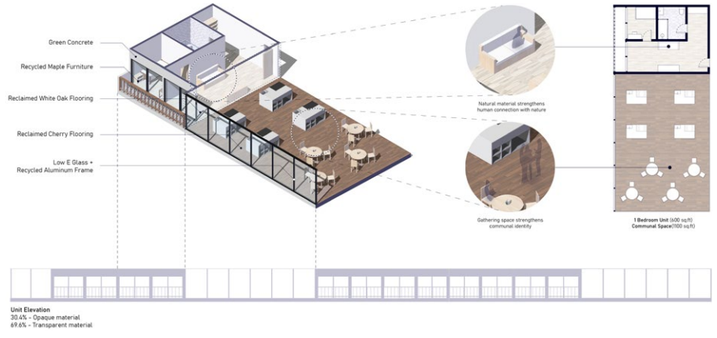
Veiled Rays performs as a city gateway, signifying the entrance into the neighborhood of Crenshaw, and linkage to connect two lots at the site together that is otherwise separated by traffic. The urban corridor is a screen filtering the scenes and ambient noises from the bustling traffic surrounding the site, creating the notion of a pedestrian friendly oasis in the middle of Downtown LA. The urban gesture in place serves to accentuate the sense of a community that invites people into the main plaza space

The residential buildings located at the back of the sites are designed with the intent to provide affordable living for local community in efforts to resist the effects of gentrification. Co-living lounges are added to each of the three wings for cooking and communal dining with interior green spaces at the corners acting as wellness zones for residents.

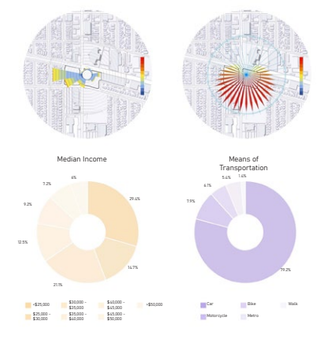












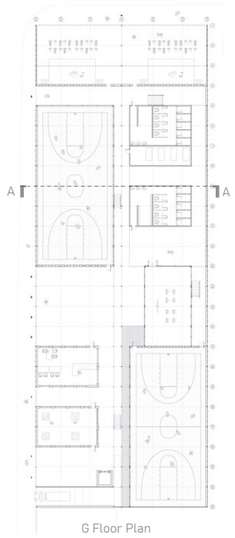


03 Twist & Turn

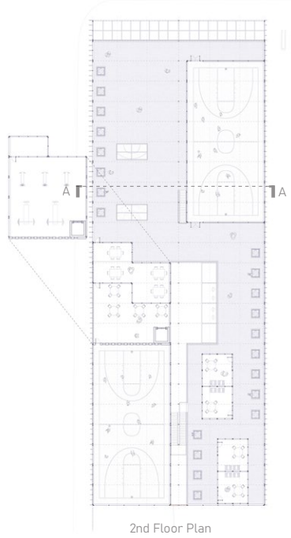
University of Southern California
Site: Leimert Park, Los Angeles
Project Type : Basketball & Sports Center
May 2020

Twist & Turn serves as a total performative community center as means to enhance and promote the culture of Leimert park. The local neighborhood exhibits rows of bricked and stuccoed buildings, which communicates a sense of defensiveness and discourages the cultural vibrancy Leimert park is known for. Twist & Turn is a landmark of the neighborhood, a hub of performances.

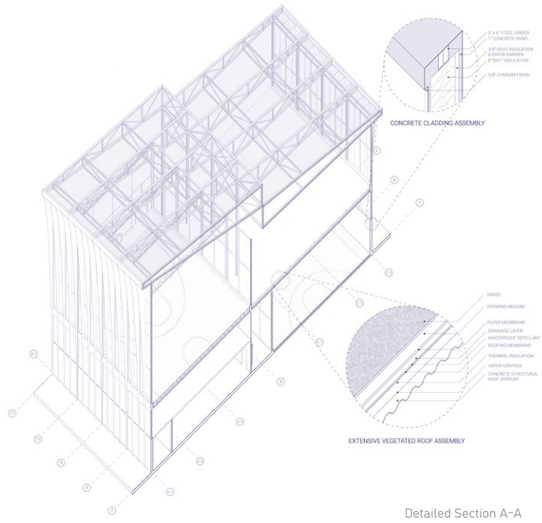
Programmatically, the center houses basketball courts and provides amenities for the neighborhood. The transparency establishes visual connections between programs. Spatially, the transparency connects both the interior and exterior spaces, and activates the site. The lack of green spaces in the neighborhood inspires the addition of a vegetated space on the second floor to expose the occupants to the outdoor elements.



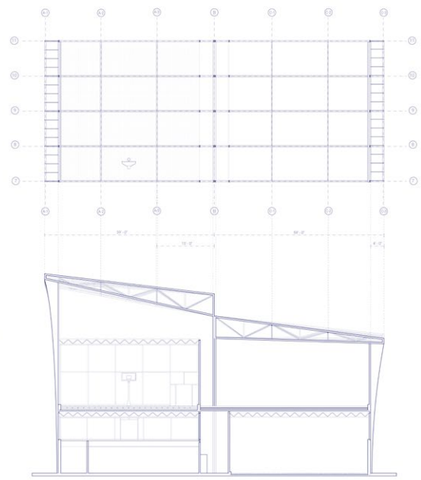
G Floor Plan



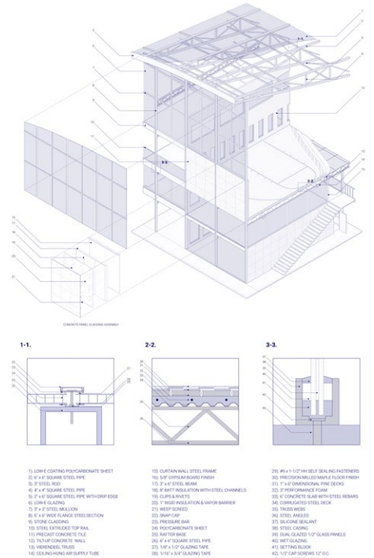
2nd Floor Plan



Detailed Section A-A



Section A-A



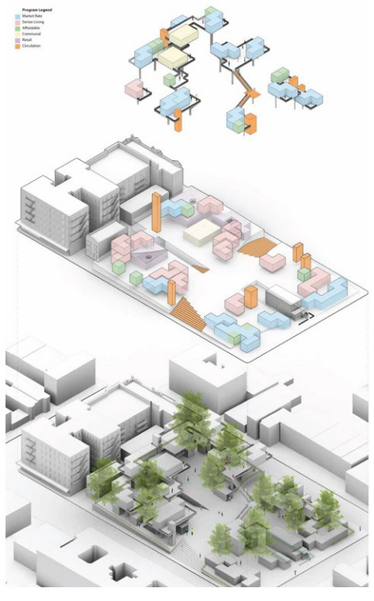


04 Backyard Jungle

Barbara G. Laurie NOMAS Design Competition
Site: Flatbush; New York
Project Type : Urban Park; Residential
Justin Wan, Steven Lin, Jesse Chapelle, Yesi Diaz
Oct 2019

Backyard Jungle is a mixed-use proposal that works to break down the defensive typologies of row houses common in Flatbush. The proposal works to counteract the definitive exclusion with one of inclusive integration with the introduction of natural elements. The trees become the definitive elements that drives the program organization of the living units, retail & communal spaces.

The lone home initially left on the site, is used as a root for the trees and communities to grow from. Habitable spaces are placed to circumscribe the trees, which serve as monuments to encourage social interaction. The trees and living clusters are organized with the purpose of creating implied courtyards and leisure spaces for residents and the locals.

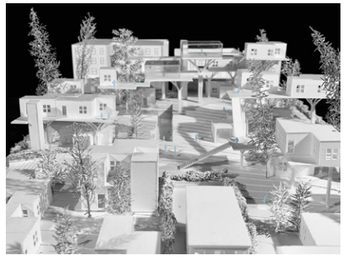


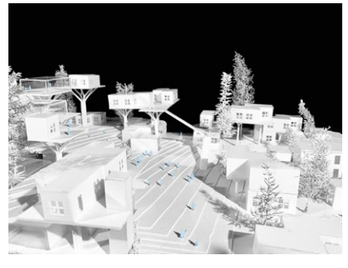




Section A-A







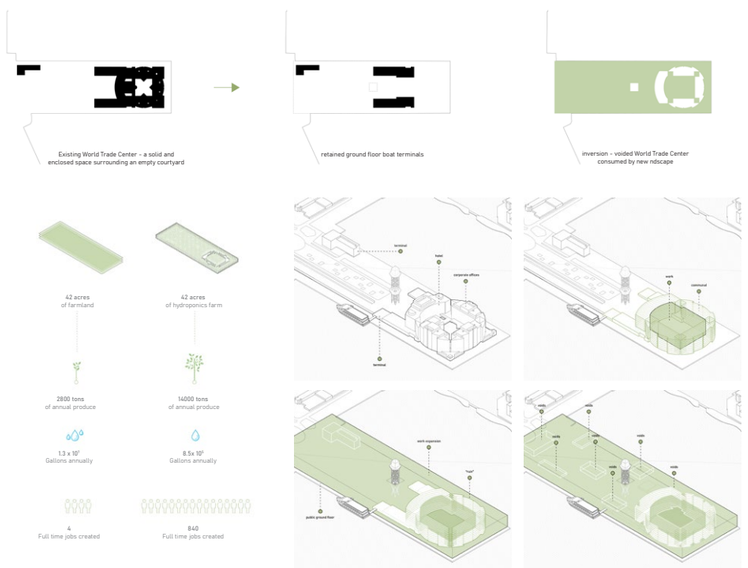


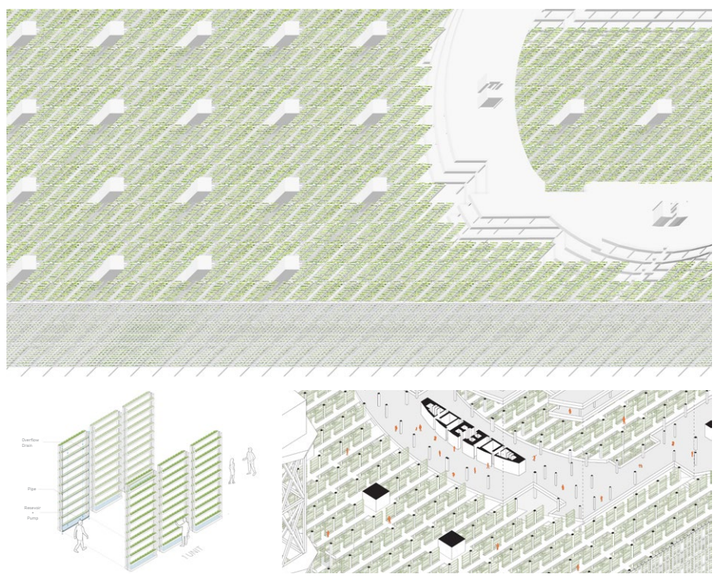
05 Sublime Ruin

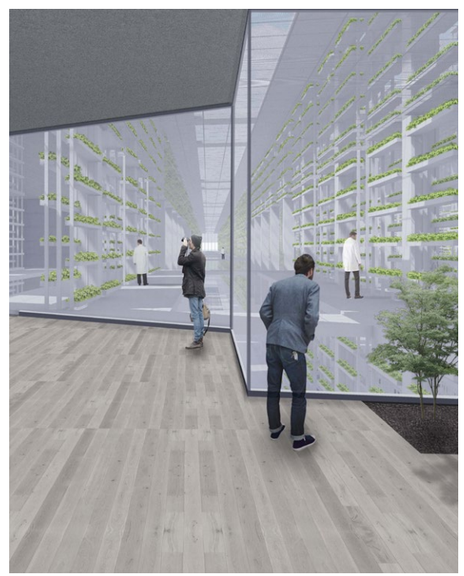
University of Southern California
Site: Barcelona, Spain
Project Type: Public Amenity Space ; Industrial Park
Global Scholar Distinction Winner
Dec 2021

Sublime Ruin is an industrial garden located near the neighborhood of El Raval, Barcelona, designed with an intention to boost the city's food production & economy.

Located outside the old city wall, El Raval has since been redeveloped and extended to become a port neighborhood. Yet, the continuing social needs of the area maintains El Raval reputation as an insalubrious place. Through developing an industrial hydroponics, the pier reimagines the city as a center of production. The defensive nature of the World Trade Center can be reclaimed through repurposing its corporate American space, engulfing it in an expansive, systematic jungle that directly benefits the city, engaging in its circular economy through job creation, food production, and public space.









06 Fold Away

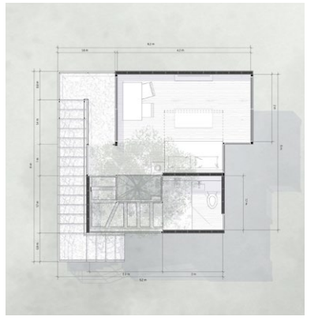
YAC Tree House Module
Site: Flatbush; New York
Project Type : Urban Park; Residential
Justin Wan, Steven Lin, Kristina Tom, Erik Orta, Rashi Gupta
May 2020

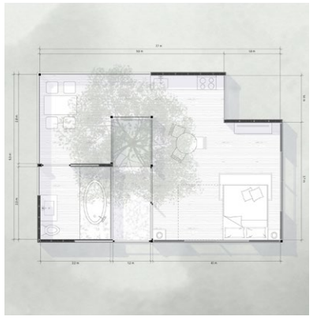
Fold Away seeks to establish a relationship between nature and architecture through optimizing inhabitant's interaction with nature by way of physical and visual connections with the outdoors.

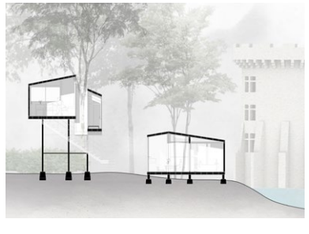
In the rural countryside of Cognac, France, the ruins on site stand as historical monuments, but the castles are left as ruins, covered with vines. The notion of nature as invasive elements is counteracted by the treehouse typology as it physically manifests itself as the midpoint between nature and architecture. The project seeks to co-exists with nature, providing comfortable spaces for its inhbitants.

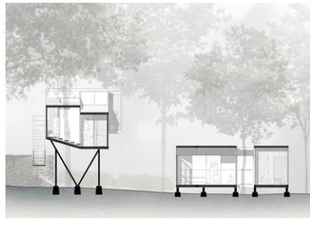
The form is given by ribbon-like exterior shells. It is in place to encapsulate the interior space while framing views of the landscape and the historic ruins.













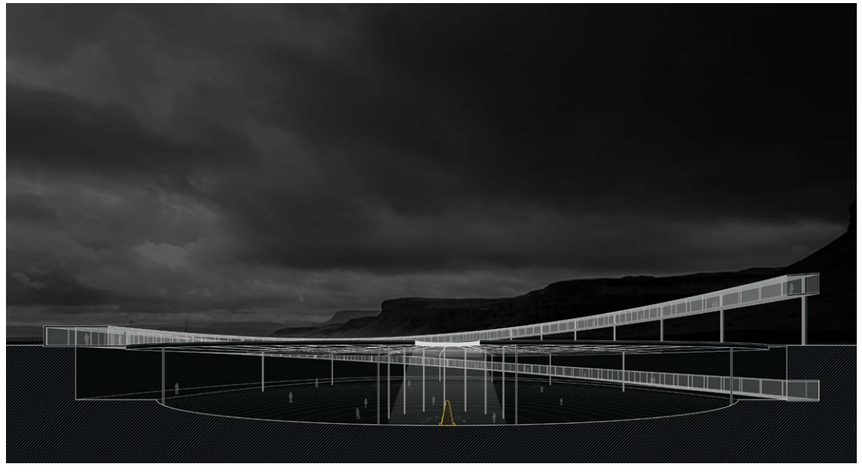


07 Convergence in Time

Last Nuclear Bomb Memorial by BeeBreeders
Site: Trinity Site, New Mexico
Project Type: War Memorial
Justin Wan, Steven Lin, Byron Wong, Darwin Hu
May 2021

Convergence in Time is a memorial in place to mark the end of the nuclear arms race. Located in the Trinity Site, Convergence In Time is placed right where the first bomb was detonated on earth, speaking to all the test sites across the globe about the danger of nuclear weapons.

The memorial features a single circular path that encircles twice: once above with the view of the horizon, and a second down below in the dark underground memorial, symbolizing the Nuclear Race itself where a gleam of hope was brought by the birth of nuclear. Yet, destruction in another light.





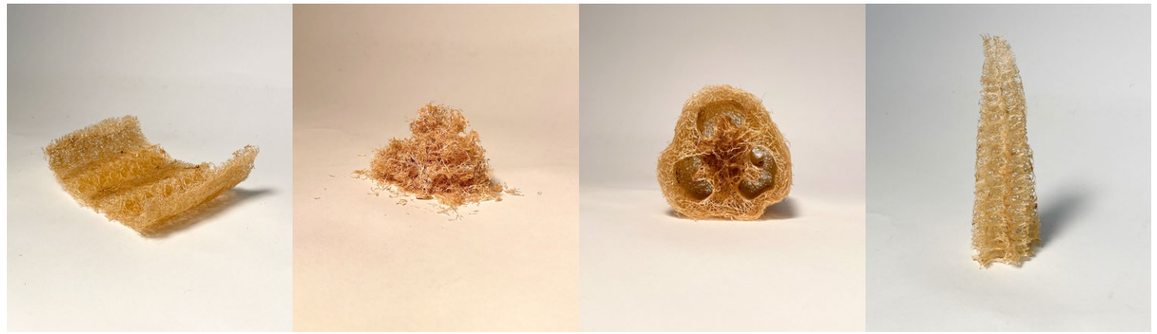










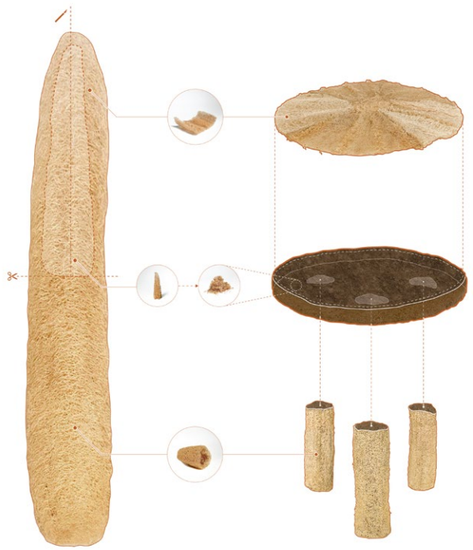


08 Loofah Squattah

Columbia GSAPP M.S.AAD
Project Type: Natural Material research & design; Exhibition Curation
Site: 1014 - Space for Ideas, New York, U.S.A
Team Members: Tim Ting-Hao Chen, Paul Edward Liu
Lola Ben Alon(Advisor)
Role: Concept design, Research, Fabrication, Exhbition Curation
May 2023

The **Loofah Squattah** explores the potential application of plant based by-products, or their subsequent food wastes, as alternative materials for design and construction. The investigation primarily focuses on creating an improved understanding of both the physical properties of the loofah fruit in enhancing the structural strength and durability of earthen designs.

The design challenges the possibilities of applying the fruit to load-bearing purposes operating at the human scale, specifically as furniture, to test its strength and constructibility. In conceiving the concept for the furniture piece, the design considers all components of the fruit, using it as form-work, fibers for construction, and cushioning for comfort and support.



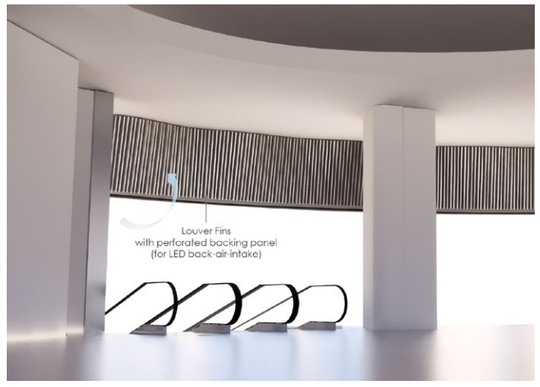












09 Internship

Country: Hong Kong
Site: Confidential
Project Type: Commercial Development (SD~DD)
Team Size: 5
Role: Modelling + Render + Photoshop
May 2019 - Aug 2019



