Sheridan | Get Creative

Architectural Technician/Technology

W2019 + S2019

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School of Architectural Technology
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Cover page image courtesy of Stille Hjem and Braedon Brearley

Volume 4 [W2019 + S2019]

LETTER FROM THE ASSOCIATE DEAN

Welcome to the 2019 graduating class School of Architectural Technology Portfolio, our fourth publication in what has quickly become a school tradition. Introducing creative new ideas and building them into a practice that strengthens our school is a hallmark of ours; it seems like just a few years ago that we started a residential renovation course that matched students with 'real' community member clients, introduced walking tours of downtown Toronto that bring the history of architecture to life, and invited our students to build model framed houses - each now fully-integrated into our pedagogical approach. With the rollout of Sheridan 2024, our new strategic plan, we have the opportunity to begin new and exciting traditions. Building on Architecture Week, Charrette Day, Creative Campus Design talks and poster competitions in semester 6, what is next? Sheridan 2024 invites us to innovate our teaching and learning, expand our applied research, build pathways to and from further education, and connect even more closely with our community and employers. Furthermore, we as students, alumni, faculty, and community members have the opportunity to define Sheridan's new "S-Factor", the signature palette of capabilities that we are best known for.

As a graduate of Sheridan's Architectural Technology Co-op program (class of '95), I feel privileged to have been a part of our evolving rituals, and am excited to consider the possibilities for those on the horizon. When you flip through our Portfolio, I invite you to contemplate how the traditions we hold today have influenced the works in it – did that idea turned image come from a renovation proposal, history tour, school charrette or action learning experience? – and to dream about our future together. What is our next big tradition, and how will you be a part of it?

Dave Wackerlin, M.Ed, B.A.
Associate Dean, Faculty of Applied Science and Technology

ABOVE: New HMC facility for the architectural technologist/ technician programs at Sheridan
Courtesy: Moriyama and Teshima Architects

ARCHITECTURAL VISUALIZATION
THE MAKING OF AN IMAGE

Much of the work found in this publication has been incubated in 6th semester Architectural Visualization. This volume contains work produced by the Winter 2019 semester taught by Adrian Bica and the Summer 2019 semester co-taught by Adrian Bica and Saarinen Balagengatharadilak.

The course uses various design competitions as a conduit to teach architectural visualization. Students learn to craft an image as meticulously as they conceive their competition design. The idea of an image is carefully studied through the elements of perspective, light, colour, composition, and layering techniques. While visualization is one of many methods of representing architecture, students learn to use the image strategically to convey core architectural concepts of the project. Initiating students to the nuances of image-making through paintings, collages, and hyper-realistic visualizations exposes the range of possibilities in finding one's artistic palette. The following projects portray a range of artistic vision in the making of an image of architecture and landscape.

Adrian Bica, B.Arch. Sci., M.Arch
Faculty Member

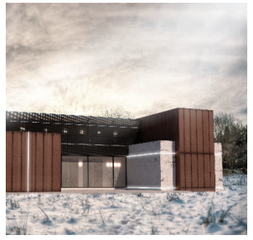
Saarinen Balagengatharadilak, M.Arch, Hon. BA
Faculty Member

Tea Maker's Guesthouse
Ken Jentas

Exo-House
Stille Hjem, Braedon Brearley

Assonance
Benjamin Bennett

Driftwood
Sophie Clapperton



Tempo
Alexander Marit

The Lego Home
Siqi Cao

The Interactive Home
Tianyu Cao

Forestside Haus
Jessica Lam

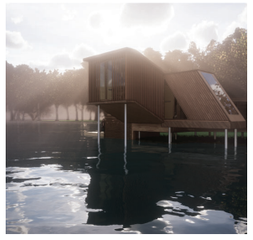
The Apex
Charmaine Maurillo, Harrison Karniej

Forest House
Lance Angeles, Jeffrey Fallows, Malik Wocker

Ozolini Guest House
Bach Dinh

Fairview House
Shaofeng Lei

Pavilosta Poet Huts
Bryan Medwin



The Bezgaliba Hut
Anthony Venneri

Nature Intertwined
Pamela Beh

The Outlook
Abdul-Rahman Gasali

Snowview House
Hairui Guo

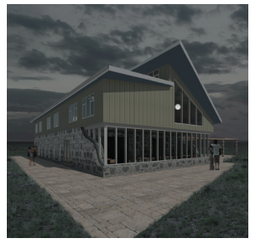
The Ember Pavillion
Ollivia Peon

Rouge & Blanc Wine Gallery
Rhesaldi Hartono

Adapt Haus
Shanil Silva

The Lookout
Connor Fyffe-White, Jacob Jaroszewski

Courtyard House
Veronica Bostjancic



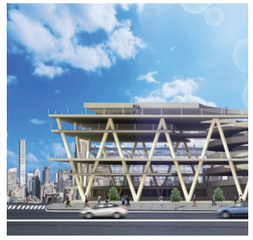
Tea Maker Guest House
Andrew J. Kells

Parasitic Housing Solution
Alexandra Ballard

The Meridian
Gracelyn Chemy, Brennen Kraemer, Tristan Clarke

The T-House
The Anh Le

Forest Retreat
Megan Church



Helix Parking Garage
Jason Lyn

Shift
Matthew Tanaka

Rural School in Haiti
Chantelle Jean Estrada Nichols

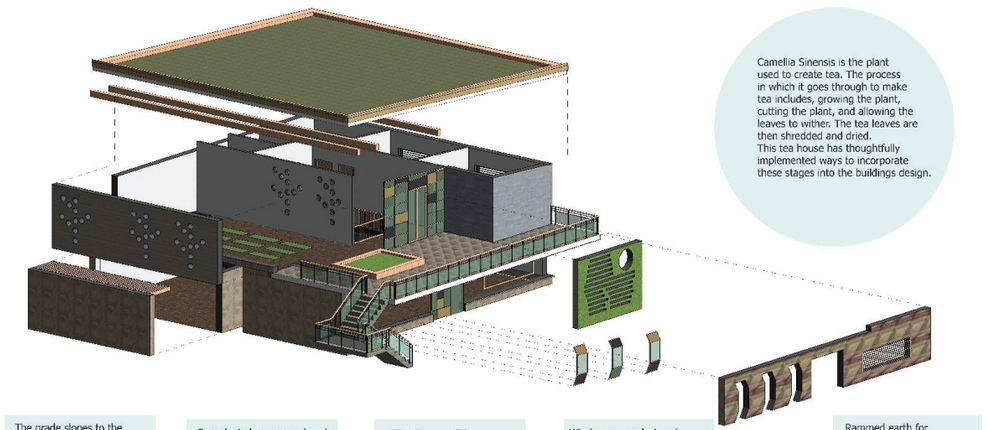
Rural School in Haiti
Patricia Gariando, Nicole Myslivec

Many More....

TEA MAKER'S GUESTHOUSE
Ken Jentas

The proposed teahouse was designed for the Bee Breeders competition. The purpose of the tea maker's guest house was to design an Eco-friendly retreat, which would allow guests to partake in tea making. The building's strategies were developed off of three main principles. Materials, colours, and lighting. The materials were chosen based off the process in which Camellia Sinensis converts from a plant into a beverage. This included the process of growing, withering, rolling and drying the plant. Colours around the building were positioned based off the main types of teas people drink: yellow, green and black tea. While unique lighting techniques were used to diffuse light into areas of the building that normally would not receive natural light.

ABOVE: Close up of second floor exterior balcony's green wall



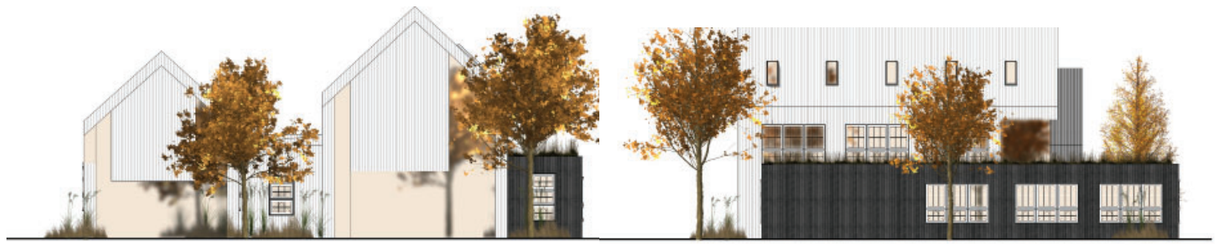
ABOVE: Exploded diagram, explaining the reasoning for the design

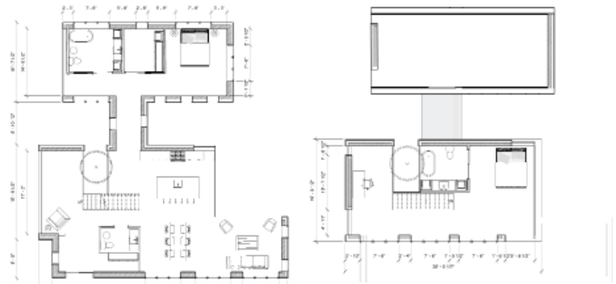
ABOVE: South west closeup of the building's structure

ABOVE: South west view of the tea house located near a large forest and trail

THE HOME COMPETITION 2019
Stille Hjem, Braedon Brearley

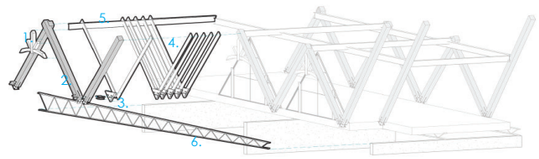
Adaptability is the future of residential design. Whether it is the transformation of the building along with the owner as time goes on, or a timeless design principle that is fluent in multiple languages. We value the simplistic roof line, flat faces and contemporary details that allow a home to be appreciated throughout any season; warm lighting which is inviting from an empty street corner; and synergy, with a shape, form and order that evokes a subconscious urge to “slow your car down”, to give you an extra second when driving by. The tiny features in a project speak volumes when they are interacted with every day.



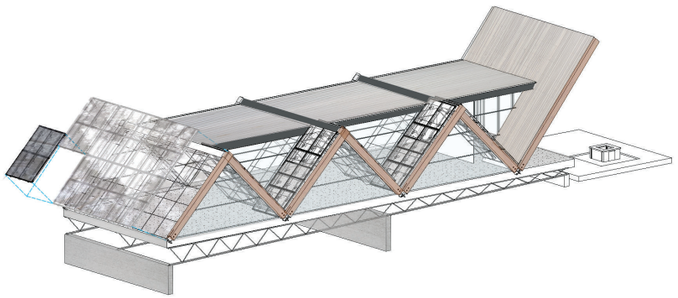


ASSONANCE
Benjamin Bennett

The Pavilosta Poet Huts as presented by 'Bee Breeders' is an open project competition eligible to all. In this term's Architectural Visualization course at Sheridan College, this competition has been adapted as a branch of the term project. Assonance is a contender, created by Benjamin Bennett. The intent of Assonance is to achieve a blissful environment in which one may create their art in serenity. The goal atmosphere is attained through repetition, and the manipulation of both optics and acoustics. Throughout the structure, a triangular element is reiterated to create cohesion in the entire building. This shape is echoed within fenestration, sub-structure and super-structure. Within Assonance, different versions of these structures have been explored to maximize or regulate the exposure to natural lighting through interactive screening systems and several forms of interior lighting. This is meant to influence creative spaces in public and private sectors. Writers often require extremely specific settings to create their pieces; within Assonance, the walls and materials selected were done meticulously to ensure that their sound transmission class (also known as STC) is reasonably high.



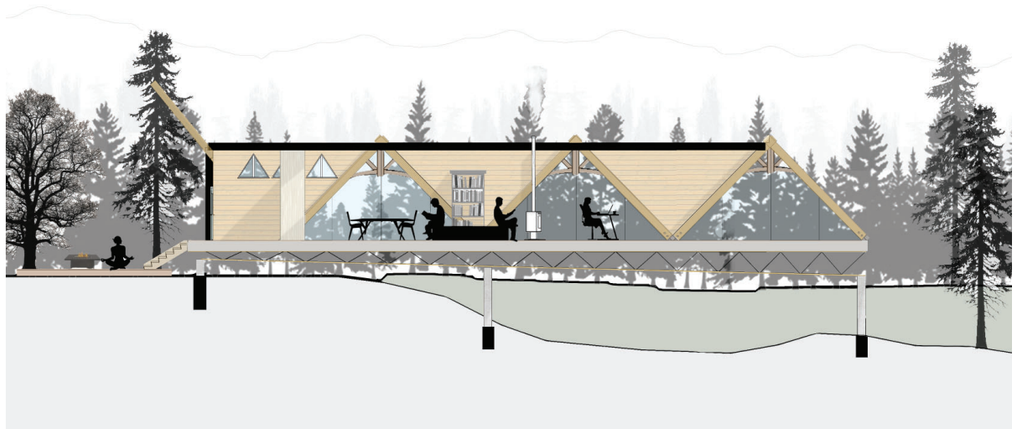
LEGEND
1. Craftman's Truss
2. Sloped vertical Glulam Column
3. Gusset Plate and Bolts
4. Joists
5. Steel Super Structure
6. Tapered Open Web Steel Joist on Varying Height Concrete Supports



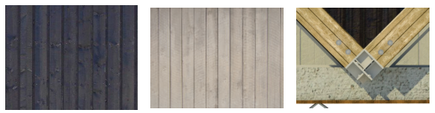
ABOVE: Structural Analysis, Materials exploration- introduction of transparent grey panelling
BELOW: Section cut through *Δssonance*

ASSONANCE

Literary term meaning the repetition of a sound or vowel in non-rhyming stressed syllables near enough to each other for the echo to be discernible.



ABOVE: Autumn on the river-front
BELOW: Night render

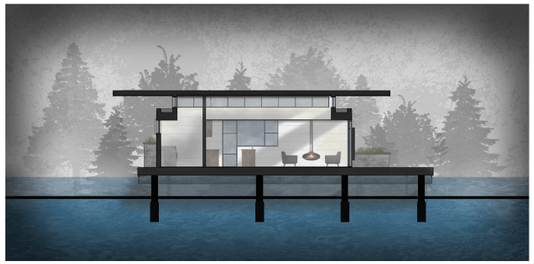


ABOVE: Charred Barn Board / White Cedar Ceiling Finish / Sloped Glulam Connection

DRIFTWOOD
Sophie Clapperton

Driftwood has been prepared for the Here + Now Housing Competition: A House for the 21st Century, designed as part of Sheridan College's Architectural Visualization course. Driftwood is a single-family residential project, proposed as an architectural solution to seasonal flooding in the Kashechewan First Nations Community. The project explores the use of dynamic architecture and its ability to adapt to changing environments, specifically in regards to flood-proof floating homes. Combining features of traditional stilt structures and floating homes, Driftwood sits atop a buoyant foundation, mounted to a series of telescoping piers. As floodwaters rise, the home too rises, while remaining safely anchored to its original position. When floodwaters recede, the home effortlessly returns to its original stationary position. Thus, opposing the physical and cultural displacement of indigenous communities, by allowing residents to remain in their homes and on culturally significant lands, despite environmental challenges.

ABOVE: Building Section in "Resting" Position

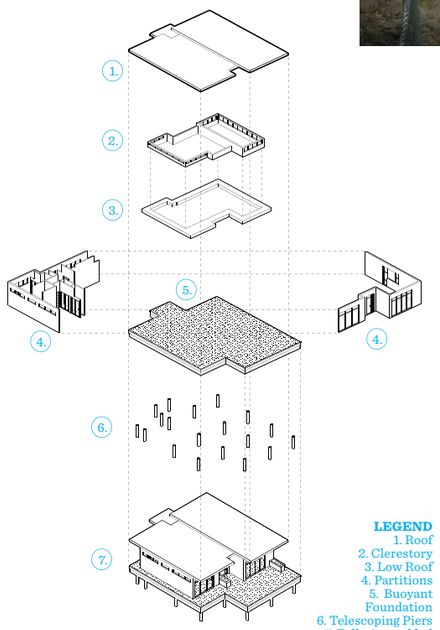


ABOVE: Building Section in "Active" Position

Exterior Rendering: View of South-West Corner in "Resting" Position

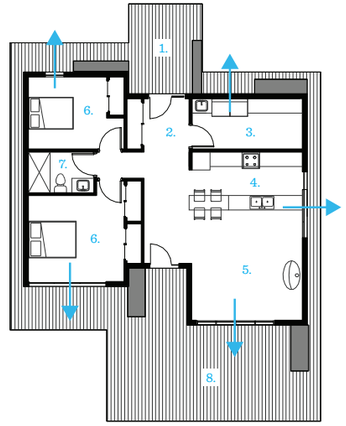
ABOVE: Exterior Rendering: View of North-West Corner in "Resting" Position

ABOVE: Exterior Rendering: View of North-West Corner in "Active" Position



LEGEND
1. Roof
2. Clerestory
3. Low Roof
4. Partitions
5. Buoyant Foundation
6. Telescoping Piers
7. Fully Assembled

ABOVE: Exploded Axonometric Diagram



LEGEND
1. Covered Porch
2. Foyer
3. Laundry/Utility
4. Kitchen/Dining
5. Living
6. Bedroom
7. Bathroom
8. Deck

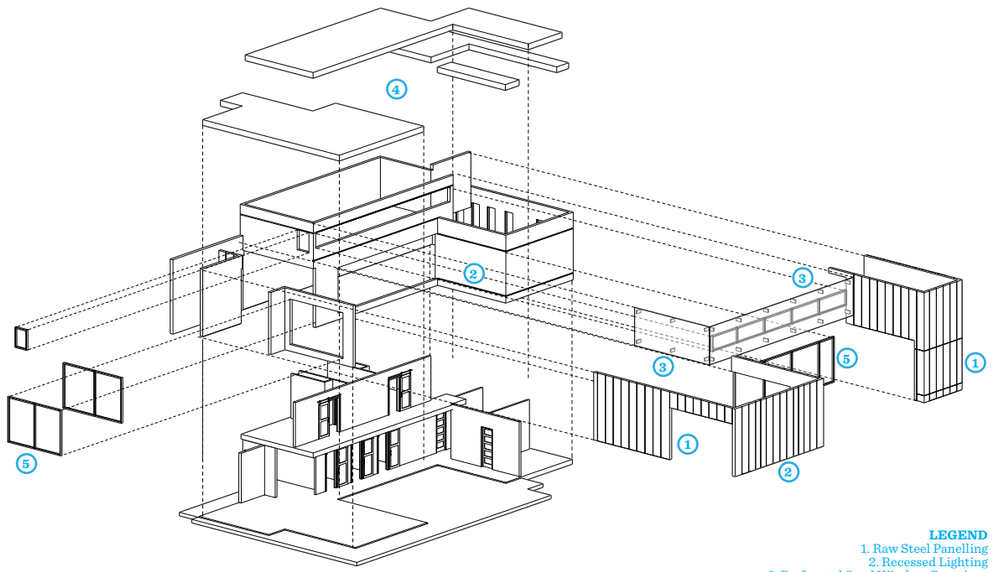
ABOVE: Floor Plan

TEMPO
Alexander Marit

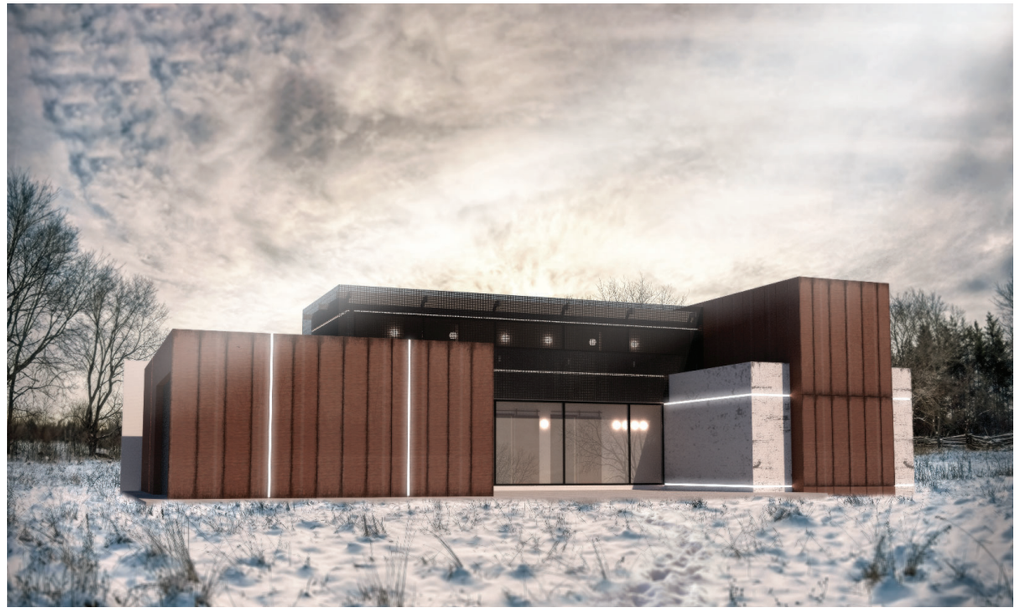
Tempo was created as part of the Here & Now competition for the Architectural Visualization Class at Sheridan College. The single-family dwelling was designed in response to the economic struggle and prosperity, integral to the city of Hamilton. A manufacturing hub, the steel industry was the defining enterprise of the port city for a hundred years until its downturn in the early 2000s.

Recently, Hamilton has undergone rapid gentrification from entrepreneurs, artists, and young families. Raw oxidized steel panelling, perforated mesh steel coverings, weathered concrete, and illuminated reveals are all used to accent form and shape. The structure uses raw metal materials, rectangular volumes and illuminated lines to shed light onto the city's bright future.

ABOVE: Project positioned in a lush forest setting



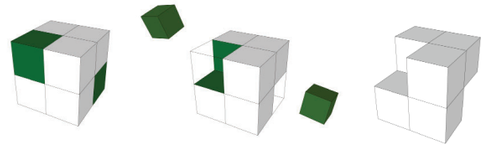
LEGEND
1. Raw Steel Panelling
2. Recessed Lighting
3. Perforated Steel Window Coverings
4. Green Roof
5. Glazing

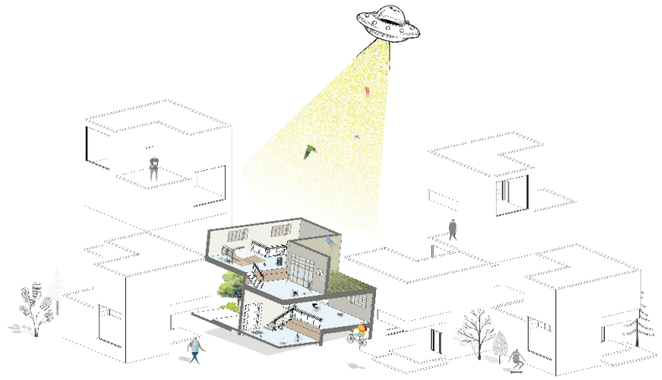


ABOVE: Winter up the mountain
BELOW: Tropical Getaway

THE LEGO HOME
Siqi Cao

The purpose of this design is to create a living unit that can be either an individual house for a single family or a building complex for a community. The Lego Home is designed to encourage the innovation of building construction. The advantages of modular building construction are plentiful, and all hold great appeal for developers; particularly in consideration of the challenging conditions we currently see within the industry. Shorter construction times, higher and more consistent quality, financial savings and reduced disruption on site are just a selection of the benefits that come from the off-site manufacture of buildings or segments within interiors.





BELOW: Exterior Render

ABOVE: Concept Diagram

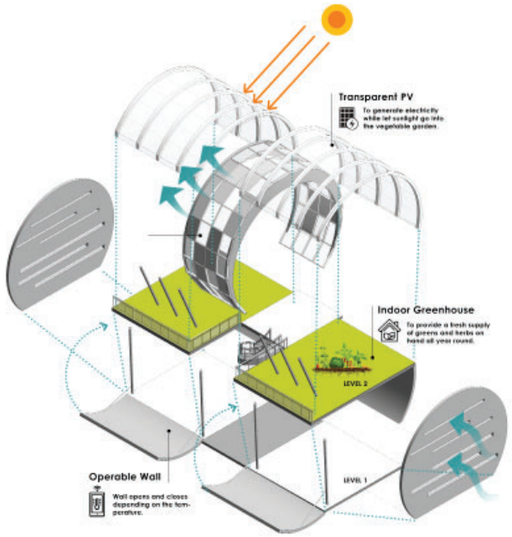
ABOVE: Concept Diagram

LEFT: Night Render
RIGHT: Main Entrance

STUDENT WORK 2019

THE INTERACTIVE HOME
Tianyu Cao

The planet is warming, causing glaciers and ice sheets to melt and earth's sea levels to rise. As the ocean makes inroads over the next century, people living in low-lying areas will be displaced, leaving them in need of new homes. At the same time in big cities, houses require a large amount of energy and materials during their life time. In order to solve these problems, the idea of the floatable, operable, and self-sustained house is imagined. It has transparent solar panels on top of the roof which take advantage of the sunlight to support energy use within the house. The whole second floor is a big green house to accommodate vegetables and plants, and to provide food and oxygen. The first floor contains one big bedroom and a kitchen dining area. A two-story spacious atrium connect two sides of the house together. The front façade walls open and close depending on the temperature.



ABOVE: Exploded Axonometric Analysis

ABOVE: Building Section

ABOVE: Forest Scene

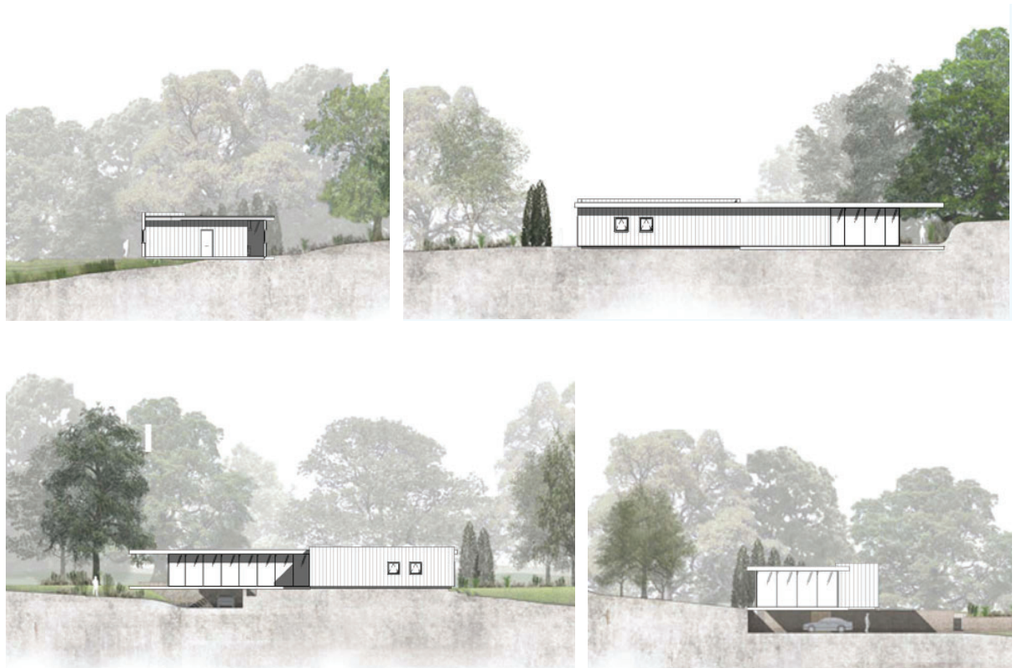
ABOVE: Night Scene

ABOVE: Building Floating Scene

FORESTSIDE HAUS
Jessica Lam

This project was designed as an entry in the 2019 HOME Competition proposing an alternative look at the concept of domestic architecture for the future. The idea is to make a quality retreat on one level, fully-accessible, with an open-plan living area, while minimizing the impact on a scenic location. The home's internal layout will be configured with bedrooms at one end and the open-plan kitchen, living and dining area located in the center of the building. Forestside Haus is subdued in nature, with no other buildings in sight, while portraying a modest presence. Materials will reflect the simplicity of the structure, with the concrete planes sandwiching timber walls and glass walls filling in the gaps around the façade. The open-plan center of the home features retractable glass walls to facilitate cross-ventilation and provide a strong connection to the outdoors.

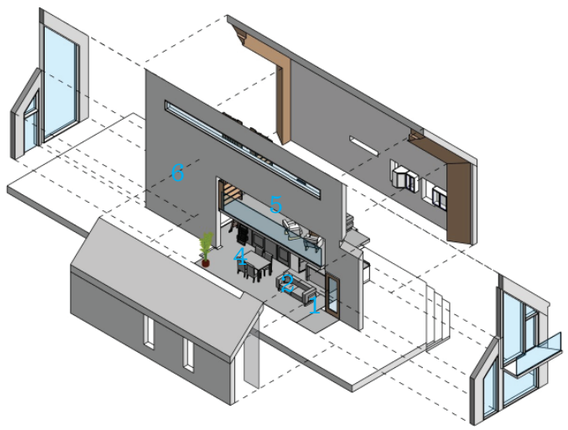
ABOVE: Site Plan and First Floor Plan.
RIGHT: View South-West towards lower hill.



TOP LEFT to BOTTOM RIGHT: East Elevation, North Elevation, South Elevation, West Elevation

THE APEX
Charmaine Maurillo
Harrison Karniej

The Apex is a tiny home designed with a minimalistic approach, with the name being derived from its pointed design. While an apex is defined as the highest point, The Apex is a tiny home that emphasizes a higher point of living. It is a simple geometric form with simple concrete finishes, natural wood accenting, and two large curtain walls for designated views.



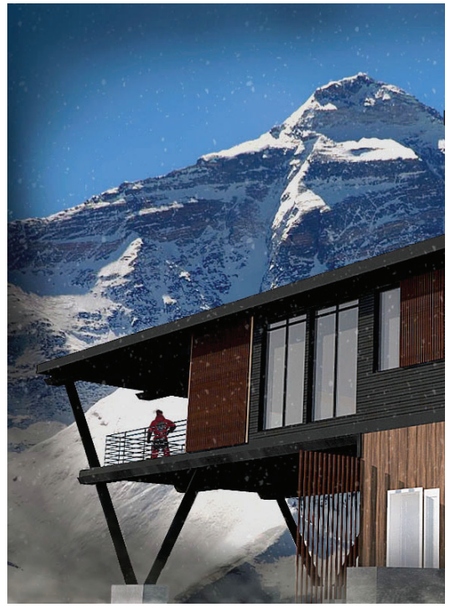
LEGEND

1. Foyer
2. Family Room
3. Kitchen
4. Dining Room
5. Mezzanine / Office
6. Bedroom

STUDENT WORK 2019

FOREST HOUSE
Lance Angeles, Jeffrey Fallows, Malik Wocker

The Forest House is a submission for Here+Now, a house for the 21st Century International Student Design Competition, on behalf of the Architectural Visualization course at Sheridan College. The project aims to explore architecture's ability to foster a modern, cantilevered home in a forest setting for the 21st century. This home celebrates the use of raw materials to honor the beautiful landscape that surrounds it. Use of wood and timber combined with concrete and steel, match the forest setting in harmony with the built form. With the small building footprint, the approach for space planning utilizes the area efficiently while keeping the building compact and minimal. The Forest House was proposed with an innovative and environmentally-responsible design in mind.



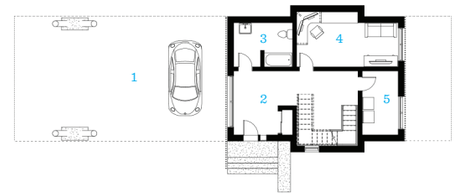
ABOVE: Close up view of the main entrance.

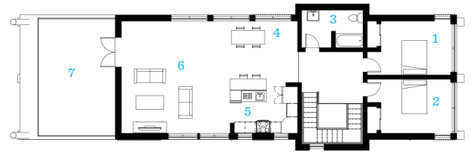
FIRST FLOOR

LEGEND
1. Garage
2. Mud Room
3. Bathroom 1
4. Office
5. Laundry Room

SECOND FLOOR

LEGEND
1. Bedroom 1
2. Bedroom 2
3. Bathroom 2
4. Dining
5. Kitchen
6. Living Room
7. Balcony





LEGEND
1. Balcony
2. Garage
3. Bedroom
4. Living & Dining

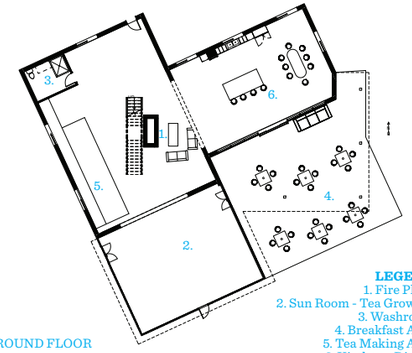
ABOVE: Floor Plans and Section view showcasing the skylight on the second floor.

BELOW: Forest House in winter

STUDENT WORK 2019

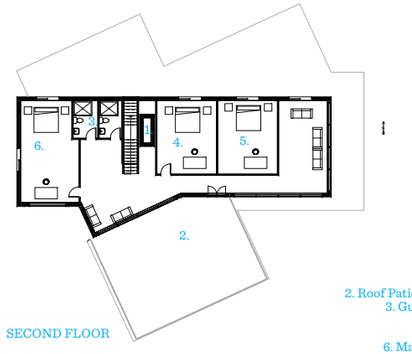
OZOLINI GUEST HOUSE
Bach Dinh

Ozolini Guest House is a project created for the competition to design a sustainable house for people looking for a place to be closer to nature and exploring the tea-making process. The site is in a remote area surrounded by forest and its own lake in Latvia, Europe. The main focus of the project is to create a house that is close to nature, using sustainable local materials that are maintenance free and long lasting. To achieve these requirements, the design incorporates indoor-outdoor living space, utilizes the solar path to minimize energy use and uses a selection of local materials including wood, stone and brick. Other functions of the house are to host summer camp and use the space for meditation and yoga. A large room with wood screen wall and a roof patio facing south to maximizes natural light and is ideal for the building's purpose.



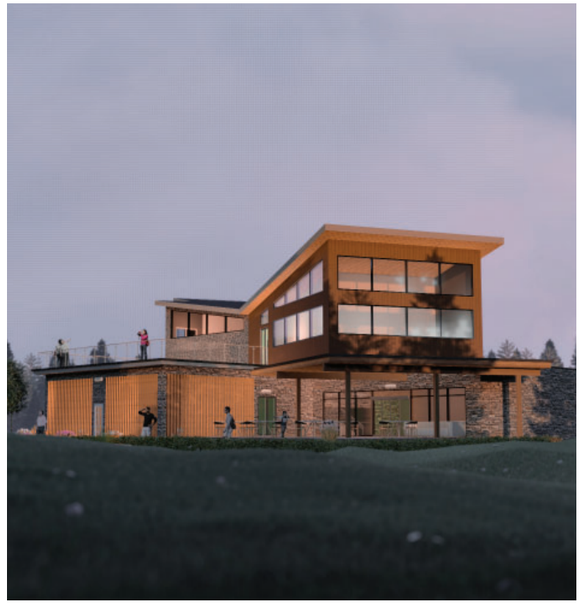
GROUND FLOOR

LEGEND
1. Fire Place
2. Sun Room - Tea Growing
3. Washroom
4. Breakfast Area
5. Tea Making Area
6. Kitchen - Dining



SECOND FLOOR

LEGEND
1. Fire Place
2. Roof Patio - Yoga Space
3. Guest Bathroom
4. Bedroom 1
5. Bed Room 2
6. Master Bedroom



LEFT: Rendering approaching proposed structure from the side

BELOW: Rendering approaching proposed structure from the front

FAIRVIEW HOUSE
Shaofeng Lei & Talha Ahmad

The Fairview House is a project for Here & Now: A House for the 21st Century, International Student Design Competition. The goal of Fairview House is to create a comfortable home with a clean and minimalist design, allowing for great views to nature. This is achieved by simplicity in form and function, simple exterior cladding, and large amounts of open space to provide more natural light. Materials are selected to create a more welcoming vibe, and a good environment for living. The floor plan layout is carefully designed to maximize use of space.

BELOW: Side Entrance Render

ABOVE: Section Render

LEGEND
1. Wooden Siding
2. Stone Veneer
3. Garage
4. Living Room
5. Bedroom

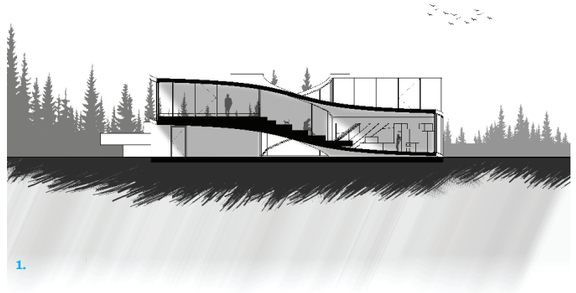
LEFT: View of south east corner of house.

ABOVE: Render of Fairview

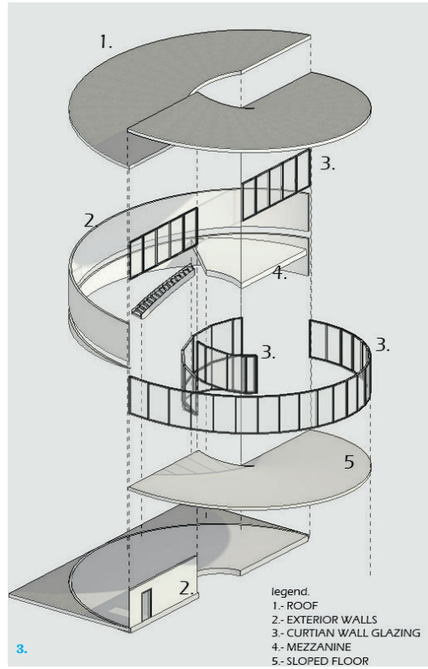
STUDENT WORK 2019

PAVILOSTA POET HUTS
Bryan Medwin

The Pavilosta Poet Huts is an architectural competition that explores the idea of creating huts for visiting poets. The idea is for poets to stay in a hut for a designated time to work and gather inspiration. The town of Pavilosta is located on the Western Coast of Latvia at the Saka River in Courland. The aim of my proposal is to maintain the rich green scenery through the use of low accessible green roofs, preserving views to nature, and creating a building that engages with its surrounding topography. The Vamp Hut features a building shape that resembles the structure of DNA. Both roofs are green, and like yin and yang, each tail connects the one building with the other. A smooth transition from the interior and exterior is provided by the union of the two roof structures. The spiral design allows for maximum views to nature and introduces an abundance of natural light into the center courtyard that is flanked by curtain wall. The town of Pavilosta is a common tourist attraction, not only for its beaches and ports but for its surrounding forest as well. The site features a flat landscape with a surrounding spruce forest in the near background. One of the major reasons why the shape of the building is a spiral is because its main focus is to create unique spaces for authors to think, get comfortable, and use the surrounding scenery as inspiration. There are many unique areas under, in, above, and all around the building where one can simply post up and gather ideas or compose something they couldn't in a typical box.



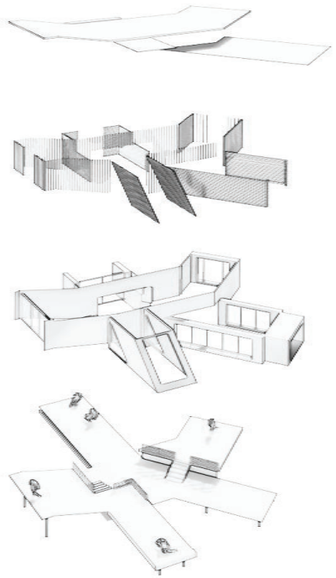
1) Section
2) Interior View looking at Kitchen
3) Exploded View

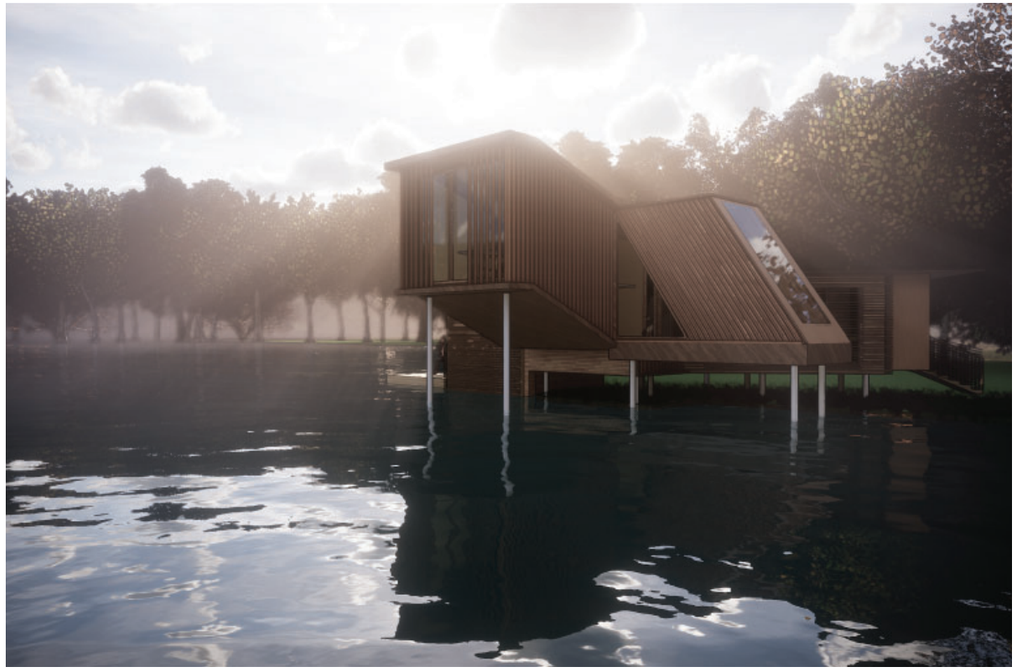


STUDENT WORK 2019

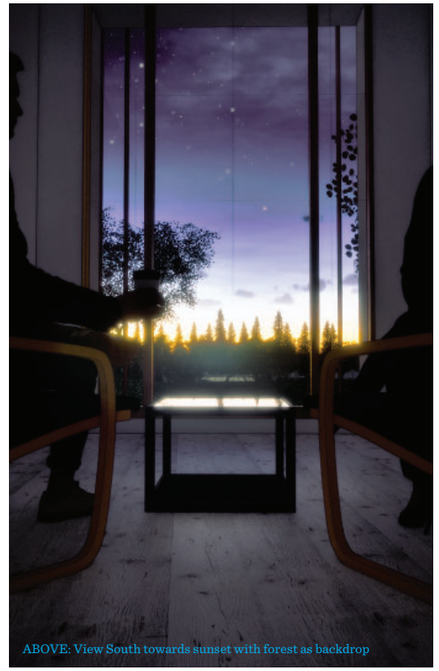
THE BEZGALIBA HUT
Anthony Venneri

The Bezgaliba Hut is a concept envisioned for the Pavilosta Poet Huts competition, as part of the final project for Architectural Computer Visualization course at Sheridan College. The intent of the design is to offer poets a space where they can get inspired in their writing via the breathtaking views around them, as experienced in different strategically designed areas of the abode. Inspirational views include overseeing the pristine lake with a breathtaking background of trees via the cantilevered upper floor, floor-to-ceiling windows outlooking the forest, a floating dock on the lake to enjoy the outdoors, and a room where the poet can get lost in space with panoramic views of the night-time sky.





ABOVE: Night views from panoramic hut

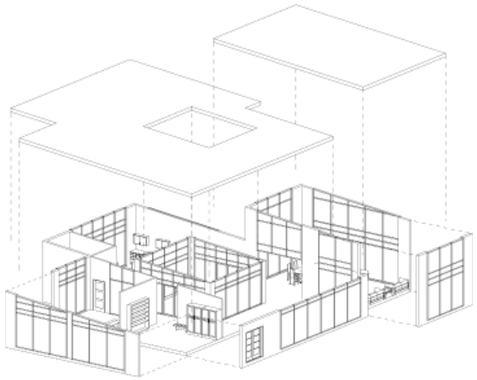


ABOVE: View South towards sunset with forest as backdrop

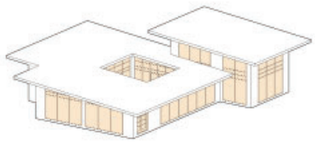
ABOVE: Views north from cantilevered library

NATURE INTERTWINED
Pamela Beh

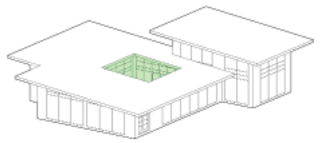
Nature Intertwined is designed to provide its occupants with a connection to nature. The abundance of glass encourages an open feel, as if the nature is within the home. Natural sunlight penetrating through the home gives a warm, nurturing environment within. There is an interior courtyard as well, which literally brings nature in. The occupants can enjoy the outdoors, while still being "indoors". Also, the roof above is open, which allows the space to soak up all of nature from the outside, and have it come inside. The interior spaces of the home are very open-concept, which provides a more open atmosphere. Nature Intertwined intends to give a freeing, natural vibe within the home.



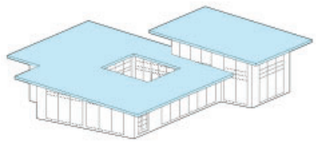
EXPLODED VIEW



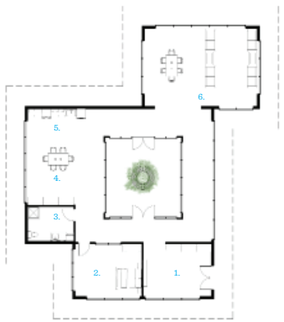
DAYLIGHT AND VIEWS



INTERIOR OUTDOOR SPACE



OVERHANG SHADING



LEGEND
1. front foyer
2. bedroom
3. washroom
4. breakfast area
5. kitchen
6. living/dining

ABOVE: Floor Plan

ABOVE: Exterior Render

ABOVE: Exterior and Interior Renders

THE OUTLOOK
Abdul-Rahman Gasali

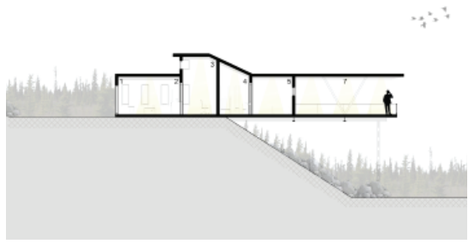
The aim of this project was to explore and propose a future home of any model or scale that resolves the impacts of some issues such as global population shifts, proximity of major cities to coastlines, new materials and building techniques, tiny homes and smart houses. According to the HOME Competition description on this year's competition, a person's home is the most significant architectural place experienced throughout one's lives. In light of this excerpt, the idea behind The Outlook was to design a tiny home that creates sustainable compact spaces for individuals, while providing a driving concept of elevating the human view to a perspective high enough to constructively enhance how future homes are integrated with a spectacle of natural elements. In order to achieve this idea, The Outlook's initial design phase is to adapt a sloped topography thereby creating a natural drop in elevation of the site and providing the occupant with extensive views of nature at its best. The second stage involves the ability to reach out to the perspectives brought about by the sloped site, hence a cantilevered shell was introduced to the building model that wraps around the main living areas while creating an outdoor extension that helps the occupant connect with the views. With the use of engineered steel structural members, the cantilevered shell is further reinforced. Finally, by bringing together all the focus elements described above, The Outlook, as its name implies, was designed to incorporate an outdoor outlook spot using the cantilevered portion of the building to provide extensive views for the occupant.

ABOVE: Floor Plan

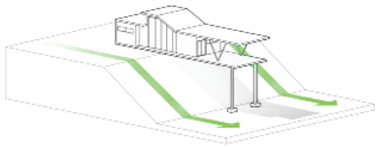
LEGEND

1. Living Room
2. Kitchen
3. Den
4. Washroom/ Laundry
5. Bedroom
6. Hallway

SECTION

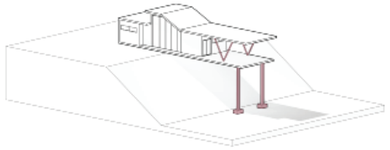


SLOPED SITE

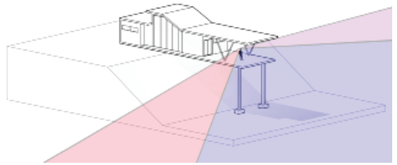


CANTILEVERED SHELL

STRUCTURE



ELEVATION - VIEWS

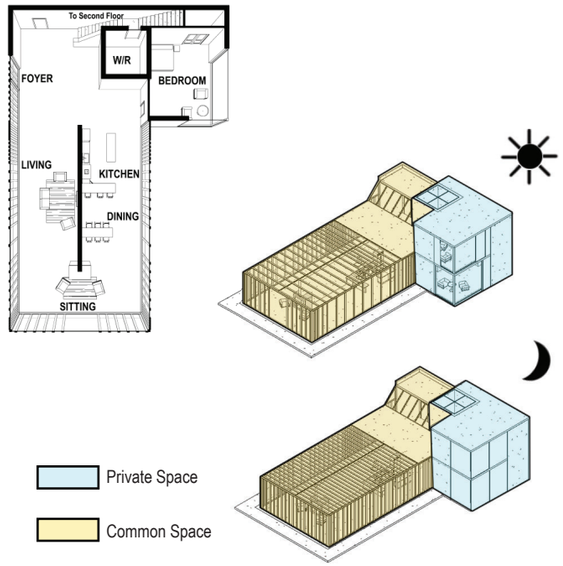


LEFT: Perspective View from Bottom Elevation on Site

ABOVE: Exterior Perspective from Top Elevation Point of Site.

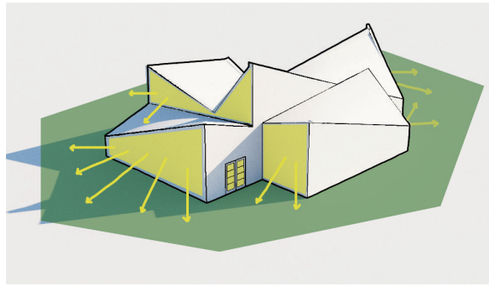
SNOWVIEW HOUSE
Hairui Guo

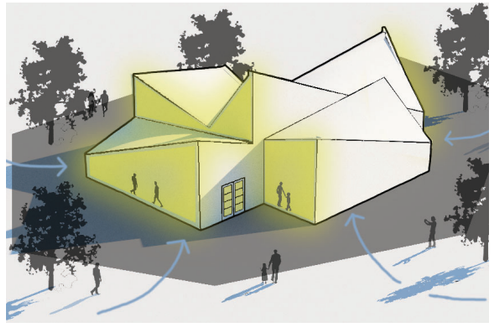
In the future, walls are no longer the main loadbearing component for a building; however, they still play an important role in space separation. In terms of programming, home in the future will have a clear line between private space and common space. Without the limit of load bearing exterior walls the design of the future home will minimize wall space and maximize window space. However, maximizing the window space will lead to the problem of what and when a home can be “seen” and when it should be “unseen”. In this design, the decision of being seen and unseen is left to the residents in the common spaces such as living room, dining room, and kitchen. There are wood strips on the roof and around the building. The strips can be controlled by the residents. At their whim, the density of the wood strips or the light into the building can be controlled as is the exposure level of the inside of the home. In the private space such as the bedroom and office, instead of wood strips, there are wood panels for residents to choose whether to open or not. Therefore, these elements can keep the privacy for residents while satisfying the wish to see outdoors.



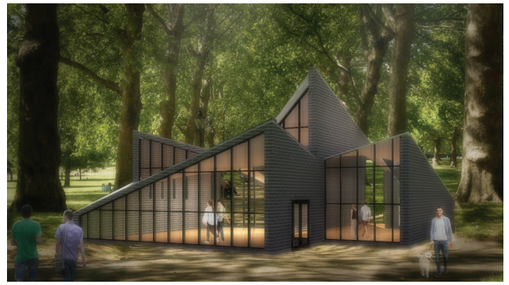
The Ember Pavilion
Ollivia Peon

In modern society, many people are engrossed with technology, losing the social connection that humans create with one another. Throughout the history of the human race, there are several items and events that have continually brought people together to associate with one another. The campfire is one of the oldest elements that brings people together at any time of the day. People often use campfires to socialize, through telling stories, experiences and proposing ideas. In order to re-connect our society, it is crucial that we implement strategies to gather people together. Parks and protected conservation areas are a starting point, however they are not as usable during harsher seasons. Thus, the idea of creating a pavilion will give parks and protected areas a much more habitable space throughout the bulk of the year. The Ember Pavilion is the re-interpretation of a campfire using a building form. The large windows give the pavilion a strong connection with the outdoors, while staying sheltered from the elements. The light emitting from the pavilion during dusk gives the appearance of a glow from a fire or an ember. This glow also has a dual purpose - to draw people into the structure from the dark of night. The pavilion offers users the typical feelings associated with a campfire – safety, warmth, and a sense of home.



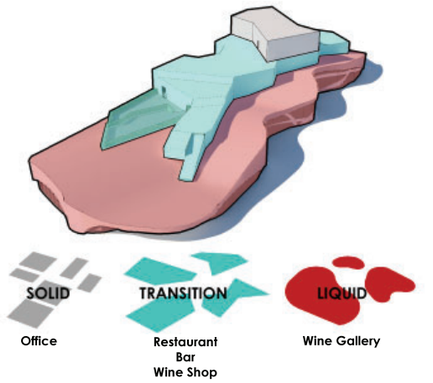


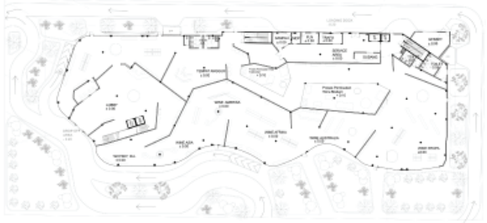
TOP: Isometric view describing the light, views emitting from the pavilion.
BOTTOM: View of pavilion on site, drawing people into the space.



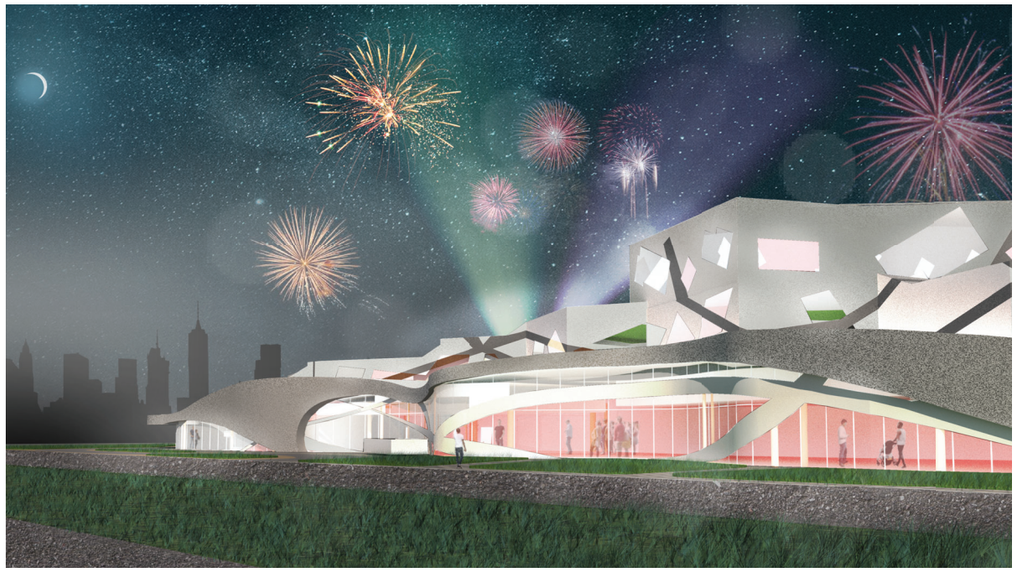
ROUGE & BLANC WINE GALLERY
Rhesaldi Hartono

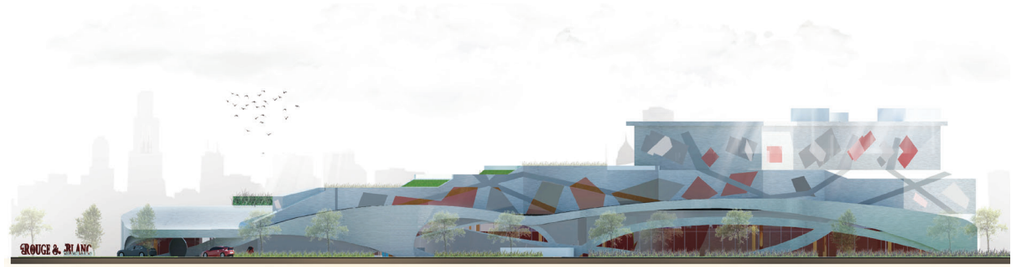
The “Rouge & Blanc” is a Wine Gallery located in Surabaya, Indonesia. This gallery is part of the international competition: Nippon Paint Young Asia Award 2019. This competition focuses on young designers who create buildings that have metamorphic & symbolic concepts paired with sustainable technologies. This Gallery will be the first and biggest wine gallery in Southeast Asia. The main concept for this architectural design is the transformation process of how the wine is made: From grape - fermentation - wine. In design language: Solid- Transition - Liquid. For design execution, Solid is expressed as private areas (Office). Transition expressed as semi- private areas (Restaurant, Wine Shop), and Liquid expressed as public areas (Wine Gallery). The reason for liquid as public area is because of the free-flow and dynamic circulation. No boundaries to observe the detail and information inside the gallery. To accommodate the unusual shape of the *Liquid Roof* space frame structure and custom aluminium panel cladding are used for a perfect and dynamic finish of the design.

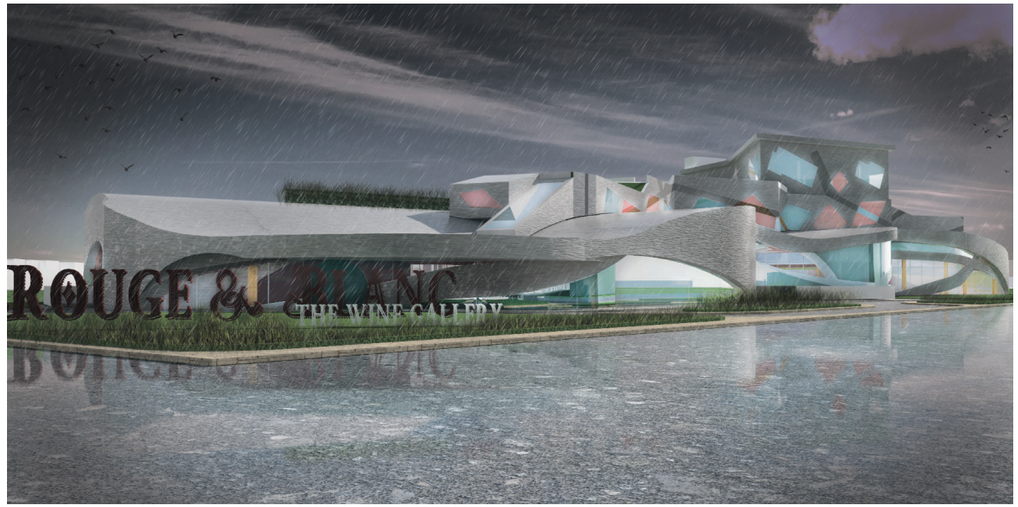




TOP : Concept Diagram
MIDDLE : 1st Floor Plan
BOTTOM : Gallery (Exterior)



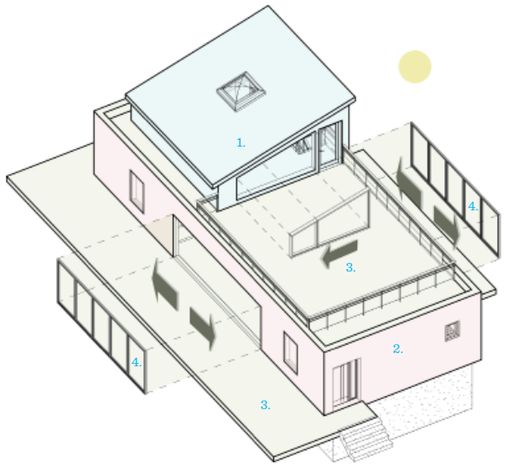




TOP : South Elevation
MIDDLE : Main Entrance
BOTTOM : Wine Gallery Interior

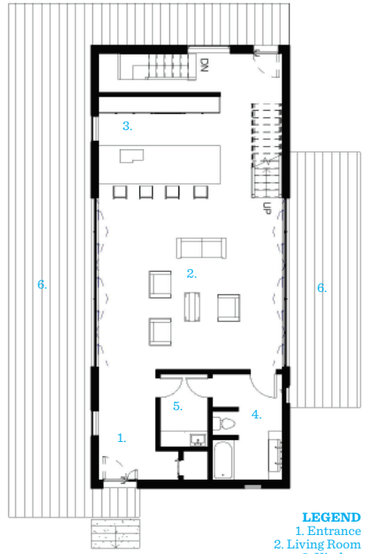
ADAPT HAUS : THE HOME COMPETITION 2019
Shanil Silva

The Adapt Haus proposal is a submission made to The Home Competition 2019. This proposal challenges the aspect of the traditional style homes, which are stagnant and are not adaptable in any way. The architectural concept of tiny houses in combination with small residential style homes were the impetus to create a home that has the ability to change over time, reflecting the people living inside. The driving concept is achieved through three core objectives which include creating an integrative design, a sustainable design, and a dynamic design. Creating an integrative design is achieved by unifying spaces that are traditionally kept separate, which is done in this design by creating a landscaped space which intercedes the public living space on the ground floor. The sustainable design is accomplished by creating rooftop landscaped areas which not only promote green and efficient living, but also promote socially sustainable living. A dynamic design is achieved by creating spaces that are subject to constant change. Having a private loft space in which the use of that space can be tailored to the person living in the home, achieves this aspect.



LEFT: Panels removed during the summer season - creates new dynamic and integrative spaces.

RIGHT: Panels closed during winter season - restores traditionally designed spaces.



ABOVE: First Floor Plan

LEGEND
1. Entrance
2. Living Room
3. Kitchen
4. Bathroom
5. Laundry
6. Landscaped

LEFT: Main entrance perspective facing northeast
BOTTOM: Rear entrance perspective facing southwest

THE LOOKOUT
Connor Fyffe-White and Jacob Jaroszewski

The LOOKOUT is a dwelling designed to achieve modularity within the bounds of concrete construction. It is a submission to the inHAUS Lab – Modular Housing Contest on behalf of the Architectural Visualization course at Sheridan College. It achieves this by virtue of being constrained to three strategies. The awareness of site conditions prior to the design of the home allows the design team to achieve a graceful contrast of the organic forms of nature and the calculated, geometric, and "concrete" forms of the structure. Architecture as an art must have an element of composition. The architectural language displayed in this structure allows it to stand within its environment as a component of nature, from base, to middle, to top. The architecture found in this building is unique in that it utilizes vertical modularity. As the building approaches the tips of the treetops, it spreads its broad floorplate concrete wings in the form of expansive rooms from which people can look upon the environment.

ABOVE: Section 1

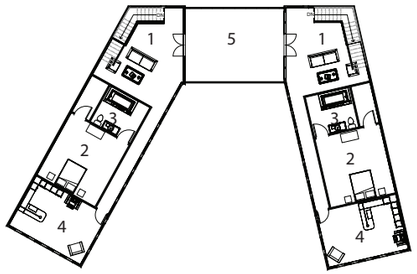
ABOVE: Section 2

Courtyard House
Veronica Bostjancic

Courtyard House, designed for the 2019 Home Competition, provides a solution to the issues of modern housing. The cost of housing means that few young people can afford to own a house of their own and space is often at a premium. The solution to these problems is to share the space among multiple divisions of people.

The introduction of semi-public and public space into the design allows for residents to become more social and reintroduce the spirit of social interaction to the modern home. The courtyard and green roof spaces also allow for urban gardening and for residents to claim an outside space of their own.

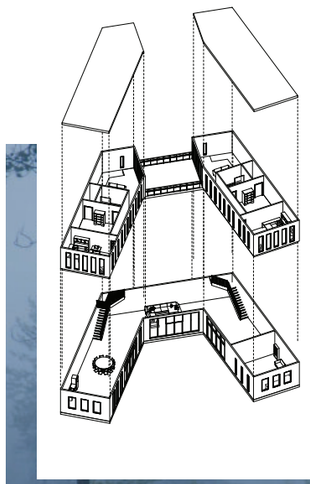
Altogether the Courtyard House is a modern home for the new generation solving housing issues including the cost of housing and limited space in which to live.



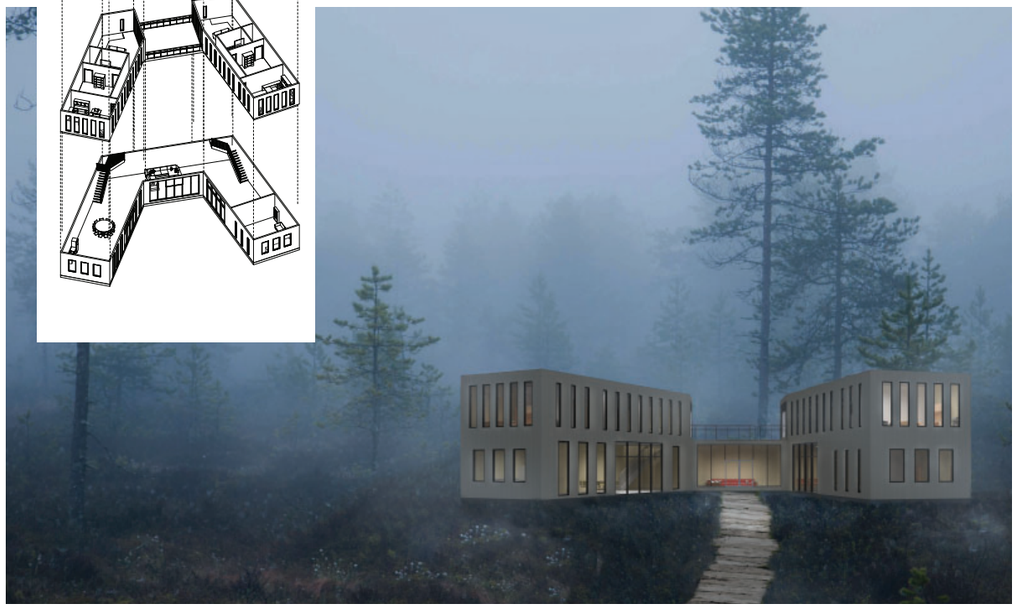
LEGEND

1. Private Living
2. Bedroom
3. Bathroom
4. Office
5. Green Roof

ABOVE: Second floor plan.



LEFT: Exploded axonometric view of Courtyard House.

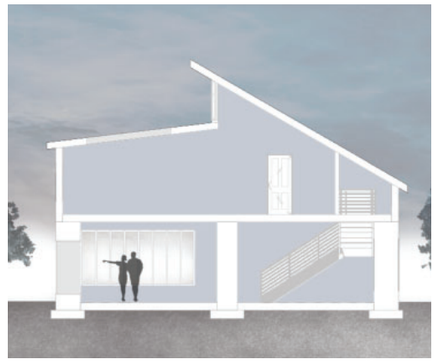


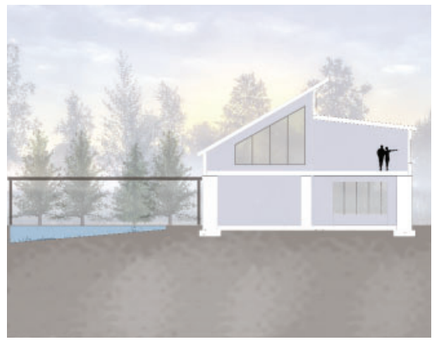
ABOVE: Render of the Courtyard House on a dark and foggy evening.

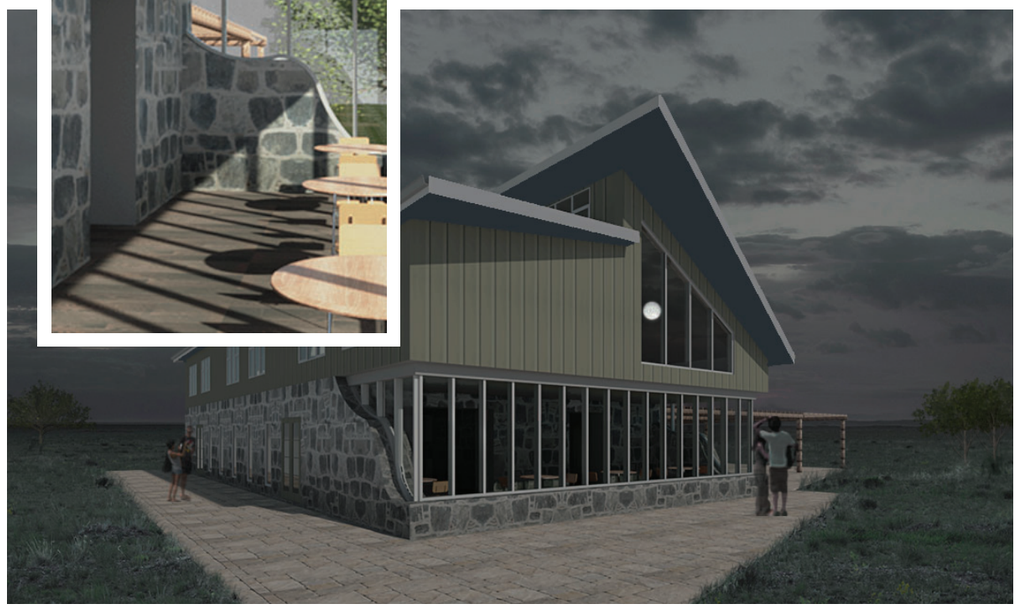
TEA MAKER GUEST HOUSE
Andrew J. Kells

The concept behind the Tea House project was to explore the relationship between peace and tranquility, as it relates to modern architecture. The existing facility of the Tea House property is equipped with a Tea Workshop, however the owners wished to create a more inclusive space where patrons could visit, learn, and relax.

The Tea House renovation provides full amenities for all guests. Including a newly-designed tea workshop, with drying, and packing rooms as well as a 3-room hotel with private bathrooms, and great views of the surrounding woodland. With the use of natural light provided by large cascading windows and skylights throughout the building, all visitors are immediately sent to a place of relaxation.





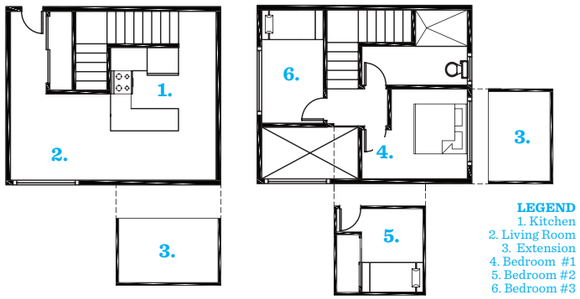


STUDENT WORK 2019

PARASITIC HOUSING SOLUTION

Alexandra Ballard

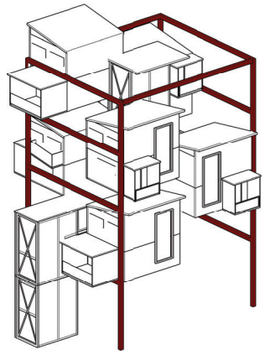
The Parastic Housing Solution takes advantage of existing public infrastructure to both occupy space unsuitable for traditional housing, as well as take advantage of some of the perks offered by these locations. This concept housing is constructed over Paris' elevated subway bridges, offering residents unparalleled access to transportation, services, and city assets.



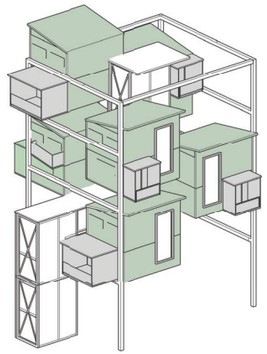
LEGEND
1. Kitchen
2. Living Room
3. Extension
4. Bedroom #1
5. Bedroom #2
6. Bedroom #3

The design of the housing unit is challenged by privacy issues, noise, and structure. The elevated frame provides privacy from pedestrians and traffic below, while taking advantage of river views. The shell of the home is constructed of precast concrete panels, offering protection from vibration and noise. The homes are completely modular, and can have rooms added or subtracted at will.

Site: Metro Jaures, Paris, France
The site of the Jaures Metro station was chosen not only because of its proximity to services and transportation, but also because it is the location of a never ending battle between asylum seekers who are without homes, and the police who continually destroy the shelter they are able to create. The bridge provides a modicum of shelter, and serves as a representation of Paris' housing crisis.



Structure:
A reinforced steel frame, highlighted in red, supports the units. The frame is easily reproduceable, and easily adapted to a variety of sites.



Modular:
Each unit is entirely modular, and the addition of rooms is made simple.

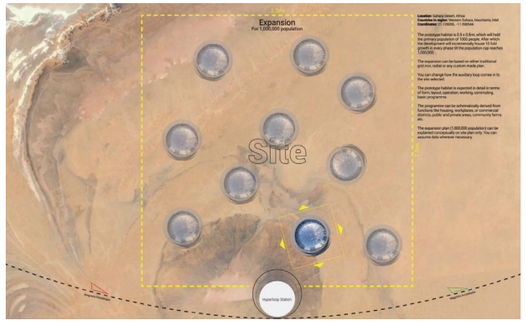
Base Unit

Modular Add-Ons

THE MERIDIAN
Gracelyn Chemy, Brennen Kraemer, Tristan Clarke

The Meridian is a submission created for the Extreme Habitat Challenge 2019. As a side effect to over-population, the Eco-Meridian was designed in order to create an artificial eco-system capable of providing thousands with shelter as well as a livable outdoor public area within a controlled North American environment. The first main strategy focused on creating a space large enough to withstand the capacity of a small city while also maintaining space for a controlled artificial eco-system to provide access to an outdoor area with a less harmful environment. The second strategy focused on a futuristic yet minimalistic look for the building's design. The building exists in a very plain area with only sand coverage, therefore the design is meant to look sleek with a light resemblance to extraterrestrial from its exterior. The building's interior has been rendered in a similar way to reflect the futuristic design but to also create a safe, open, and bright community layout. The last design strategy was the building's design based on future expansion. While pollution and population levels continue to grow the addition of expansions to the Meridian will be required. Due to this, the Meridian was designed as a cylindrical structure with one of many biomes. For future expansion the proposal of multiple Meridian-type buildings connected by walkway systems and each containing their own biome ecosystem was developed.

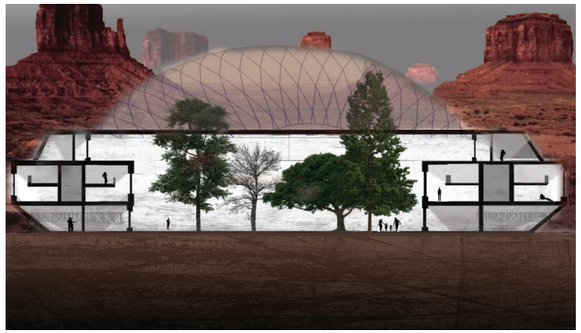
ABOVE: Image of Exploded Section



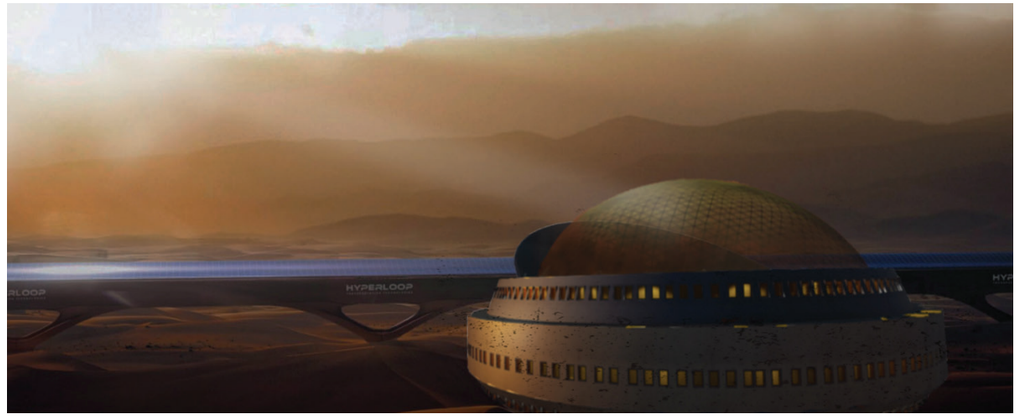
ABOVE: Site Plan of Building with Future Development

ABOVE: View of the Dome of the Building

ABOVE: Interior View of the Building's Atrium



ABOVE: Building Section

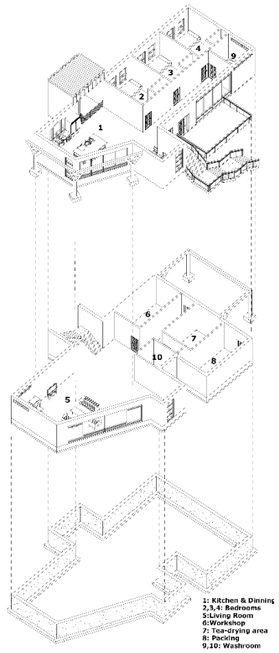


ABOVE: Exterior Render of Building with Hyperloop Connection

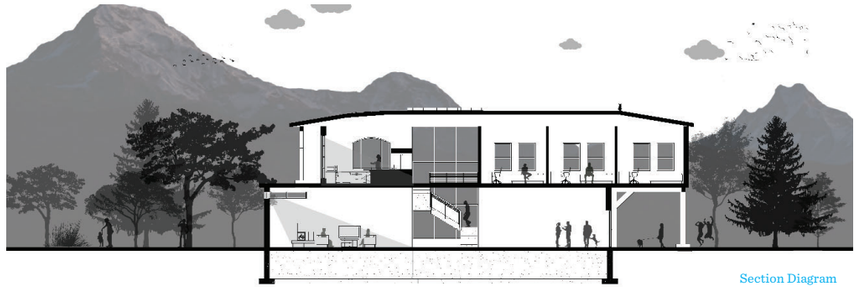
ABOVE: Exterior Render of Building

THE T-HOUSE
The Anh Le

The T-House was created for the 2019 Teamakers Guest House Architectural Competition. The purpose of the house is to serve both guests and tea-making workshops. The design is low in maintenance requirements and cost, and is environment-friendly, with its location in a meadow near Riga. Conceptually, this design is inspired by the existence of the old building, keeping in mind the notion of simplicity. Curtain walls are widely used to take best advantage of natural light. A balcony is also added, to ensure connection to the surroundings. These features allow residents to feel more connected with nature, which helps to eliminate the feeling of being held at length from the outdoors.



ABOVE: Exploded Diagram



Section Diagram

FOREST RETREAT
Megan Church

The Forest Retreat is a private getaway hidden amongst the trees. This house was designed with a minimalist approach, both inside and out. The house fits within the existing trees, so that it does not disturb the environment of the site. Unique roofs and large windows allow for an abundance of natural lighting within the space, while bringing a visual connection between the exterior and interior.

Entering into the foyer of the house, there is a visual connection to the exterior courtyard located in the centre of the house. To the right of the foyer are the living areas, which includes a large kitchen, dining room, and family room with fireplace. To the left of the foyer is the powder room, laundry room, pantry, and front closet. Behind these spaces, is the private wing with bedrooms. The principal bedroom features a large ensuite and two walk-in closets. There are two additional bedrooms with a shared ensuite, and walk-in closets.

ABOVE: Exterior Render

ABOVE: Hallway in Private Wing

ABOVE: Family Room & Dining Room

Helix Parking Garage
Jason Lyn

Helix Parking is based on evolving a structure that typically has one purpose to advocate for better use of public spaces. This structure is a hybrid structure, that has a spiral that ramps up to a spacious green public space that may be used by visitors.

This structure is a rectangular building featuring a helical opening in the centre. This allows for vertical circulation as well as allowing light within the space. This central area, will also serve as a collection basin for water, which will be used to water the green spaces as a sustainable feature.

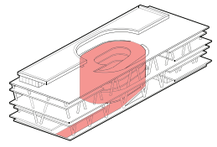


Diagram: Circulation

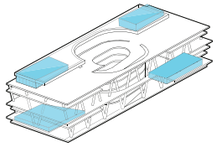


Diagram: Public spaces

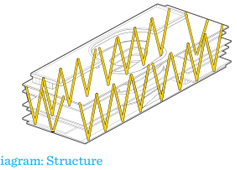


Diagram: Structure

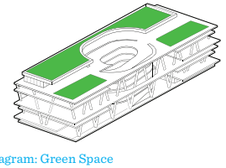
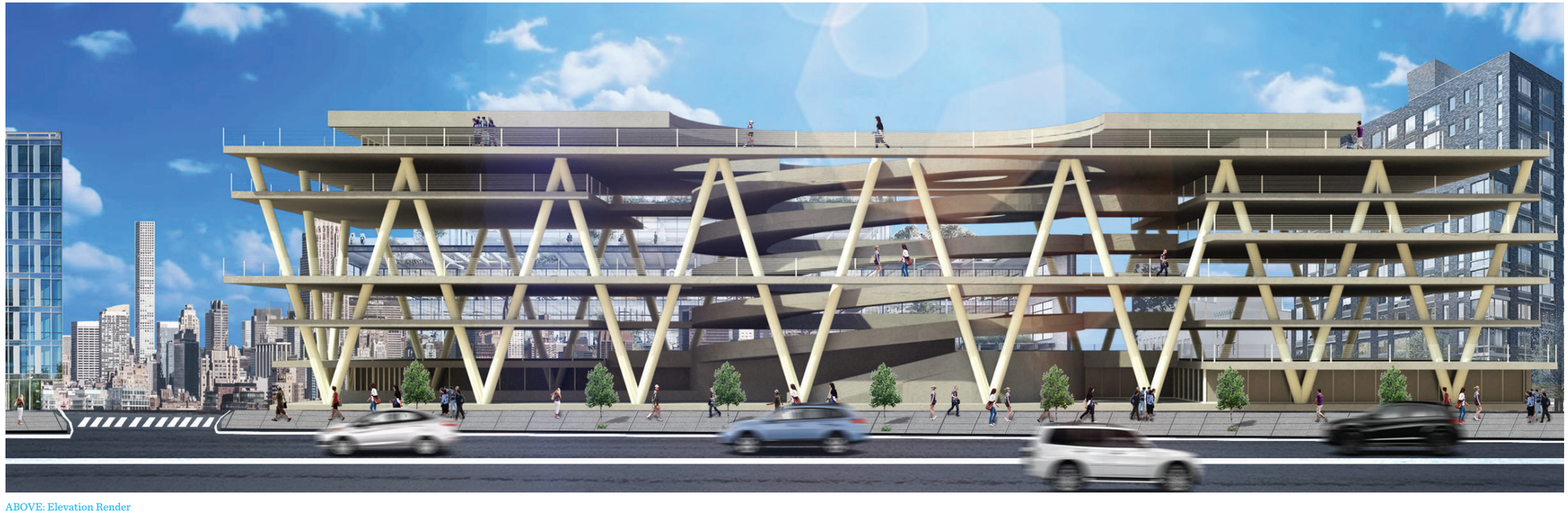


Diagram: Green Space

ABOVE: South East Render

ABOVE: South East Render



ABOVE: Elevation Render

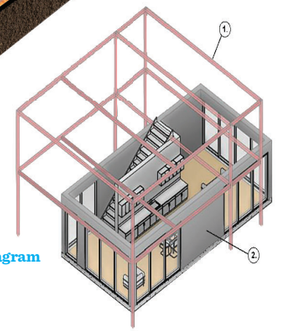
STUDENT WORK 2019

SHIFT
Matthew Tanaka

As time passes people have to make the choice of leaving their home for one reason or another. Many people choose to downsize later in life and many people refuse to leave their homes. They may not be in the physical condition to utilize the house effectively and feel that they should move to a more accessible or appropriate home for themselves. The kids are grown up, have moved out and have left an empty void in the home which is no longer used. For this project, the house is designed in a way that is intended to last throughout a family's life cycle. The house uses a structural skeleton as a template to create the spaces required for the occupants at any point in this life cycle. The base remains static as it is the main building block for the rest of the additions. Floors, walls, roofs, balconies, rooms, bathrooms can be added to the base vertically or horizontally to fulfill the family's current needs. Once the family no longer requires some of these features they can be removed or changed for another purpose. By doing this people can stay in their home for as long as they can while reducing energy consumption and costs over the years as the home will naturally decrease in size.

ABOVE: House Component Diagram

BELOW: 3D - Building Section



Axonometric Skeletal Diagram

1. Steel Building Skeleton
2. House Base

STUDENT WORK 2019

Rural School in Haiti
Chantelle Jean Estrada Nichols

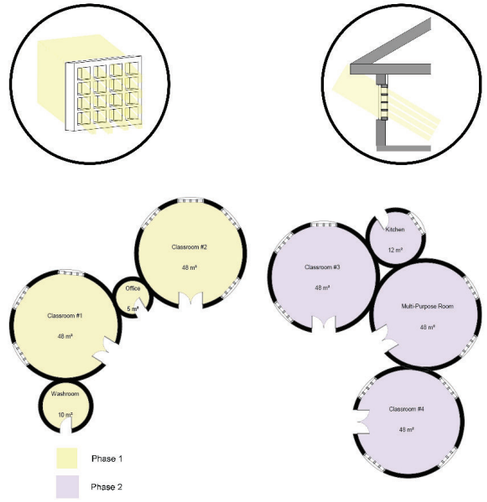
This competition goal is focused on the construction of a rural school for the TENWA community, north of Port-au-Prince. The project meets many social, construction and economic challenges and proposes solutions that improve educational conditions. The school will include 7 levels of classes and will benefit more than 50 children in the community. This design steps outside of the boundaries of a typical block-style school that is usually found in the area. By introducing a unique pentagon shape to the buildings, it allows for large interior gathering spaces. The divided mono-pitch roof is designed to have various elevations which provide ventilating openings throughout the entire building. The shape also acts as an aesthetic feature. The roof overhangs provide shade from the sun, with the wooden louvres acting as an additional sun barrier.

ABOVE: Dining Area

BELOW: Front View - Daytime

RURAL SCHOOL IN HAITI
Patricia Gariando, Nicole Myslivec

The Rural School in Haiti is proposed as an affordable way to better the learning experience of approximately 50 local students throughout seven different grades. The first phase is to create a building that contains two classrooms, a washroom facility, and a teacher's office. The second phase contains two more classrooms, a kitchen, and a multipurpose room. These buildings provide all the requirements that the students might need while using easily-accessible materials. The form of the building is circular in shape to provide a unique learning experience. The position of the buildings are situated around a playground area to optimize the local site and provide the students with an excellent learning environment. This design incorporates several techniques to reduce the negative effects of the sun in a rather hot climate. The roofing material is a white reflective material to reduce heat absorption. Custom windows, which are a typical style to other buildings in Haiti, help reduce the amount of sun that enters into the building.



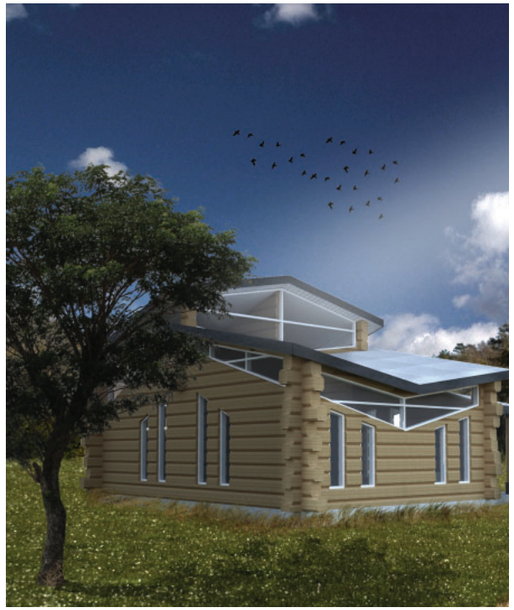
Finally, the large overhang also reduces the amount of sun that reaches the interior of the building. It also provides shelter from rain, allowing the students to travel around the perimeter of the building while remaining covered.

ABOVE: Solar Energy Strategies
ABOVE: Floor Plans

BELOW: School Exterior, Gloomy Day

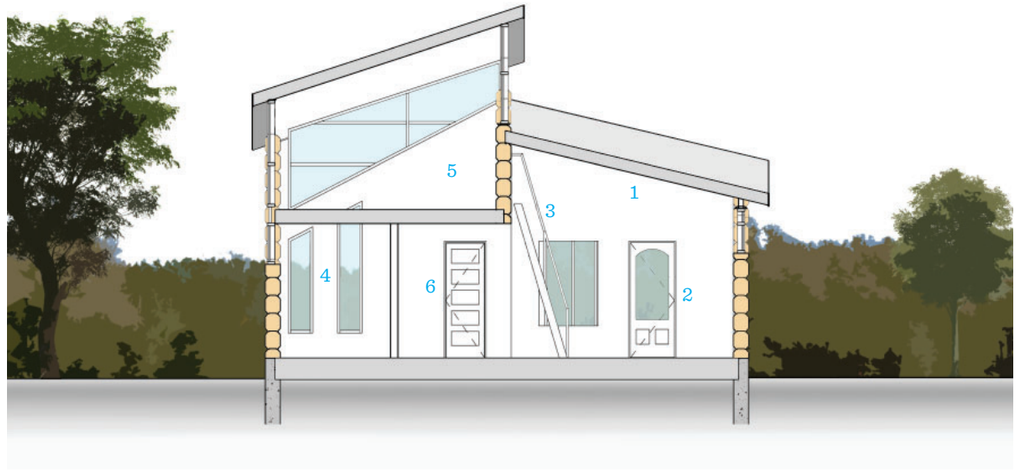
GATHER POET HUT
James Phillips

The “Gather” Poet hut is a small, shared cottage that has been created for the Pavilosta Poet Hut design competition. The Gather Hut is fairly compact, and includes a shared 2 pc. washroom and four separate bedrooms. The focus of this project is to create single and multiple occupancy huts that promote a relaxing and creative atmosphere for artists looking to spend their private time writing poetry. In this design, the first strategy used to achieve this atmosphere is through the use of natural wood materials for the log design wall structure. The next strategy used is to create large wall openings that allow a surplus of natural light and scenic views, but also form to the unique shape of the roof structure.



TOP: View of East-Facing corner
BOTTOM: Daylight View towards the sea

1. Main Foyer
2. Main Entrance
3. Step Ladder to Bedroom Loft
4. Bedroom #3
5. Bedroom #4
6. Bathroom Entrance

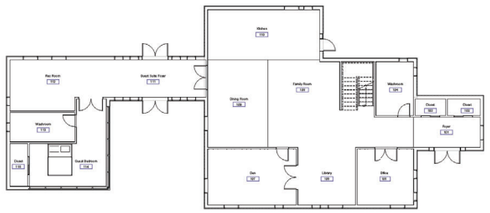


TOP: Section Diagram through Poet Hut
BOTTOM: Night view with campfire

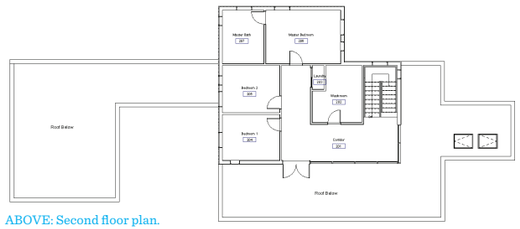
THE SPLIT RESIDENCE
Christopher Lionti

The design competition that was selected for this project is The HOME Competition 2019. The goal of this competition is to come up with a design which demonstrates what the future of residential architecture will look like. The guidelines for type of house, size of the project and its location are left entirely up to the designer. The main concepts behind this design focus on sustainability and flexible living conditions. This project satisfies these needs through the use of both green building materials such as natural stone and wood cladding, as well as through the integration of solar panels, green roofs and a grey water collection system. This design also includes a guest suite complete with its own bedroom, bathroom, rec. room and entrance. This space has a variety of uses, whether it be for grandparents or for a child who has grown older and needs the extra space.

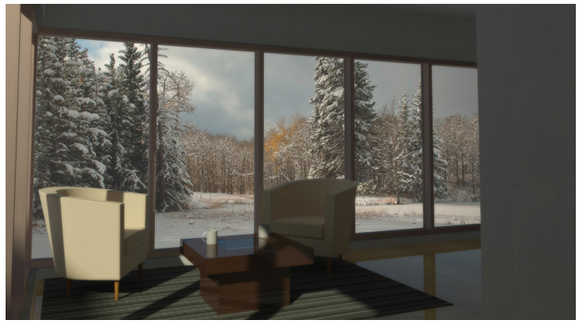
ABOVE: Exterior rendering in a forest environment.



ABOVE: First floor plan.



ABOVE: Second floor plan.



ABOVE: Interior rendering from the guest suite.

LEFT: Exterior rendering in a winter scene.

ABOVE: Exterior rendering of the south elevation

THE BUOYANT HOUSE
Michael Norrie

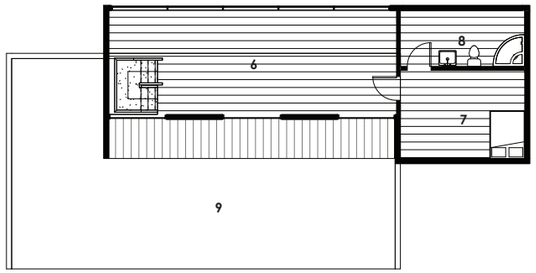
The design for this project blossomed from watching the news and seeing many people dealing with flooding and serious damage to their homes. If only these houses could adapt to changes in water levels, as even piered structures can be enveloped by rising tides. The underlying design for this project stems from a technological yet simple advancement to the modern pier. Instead, using a hollowed out pier with a retractable chain system in place could hopefully help anchor a house as it floats on the water's surface until the levels drop and it can return back down to its foundation. The house was designed with simple lightweight materials to help increase buoyancy. It is one storey, with sleek metal siding, and wooden secondary materials. There is a large degree of glazing in the design so that occupants can enjoy the beautiful shimmer of the sea and the natural world that surrounds them.

ABOVE: Floor Plan

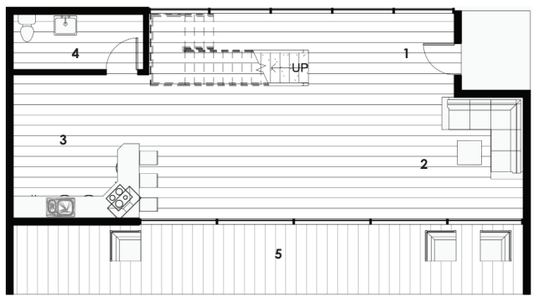
PIER DESIGN LEGEND
1. Wooden Deck
2. Deck Joist
3. Concrete Anchor Pads
4. Iron Retracting Chains
5. Hollow Wooden Pier
6. Concrete Footing

INTO THE WOODS
Jonathan Phan

This project is designed for the HOME competition taking place in 2019. This competition is completely open the designer's interpretation where there are no regulations or rules to follow. The objective of the project is to design a home where size, type and location is all up to the designer. This home is a contemporary house designed for people who enjoy outdoor activities such as camping and nature. The objective of this house is to simulate the same experience of camping where residents live a minimalistic lifestyle with the very basics: a washroom, bedroom, kitchen and living room. The key feature found in this home is the relationship between the spaces and rooms. The house was designed to have spaces where they are open and transparent compared to other spaces where they are secluded with solid walls. This design intent was to allow the residents to have as much social and public space as possible, similar to a camp site. While also allowing residents their complete privacy in the secluded spaces. Residents are given an accessible terrace on the second floor where they can come out at night and enjoy the view of the sky or even sleep under stars. The intent of this feature is to allow residents the experience of camping in the comfort of their home.

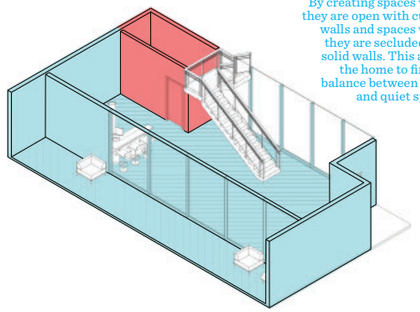


Second Floor Plan
6. Hallway
7. Bedroom
8. Washroom
9. Accessible Green Terrace



Ground Floor Plan
1. Lobby
2. Living Room
4. Powder Room
5. Outdoor Patio

Public vs Private
Common Space
Private Space



By creating spaces where they are open with curtain walls and spaces where they are secluded with solid walls. This allows the home to find the balance between social and quiet spaces.

SUBURBAN MULTI-GENERATIONAL JOINT FAMILY LIVING
Justin Thandi

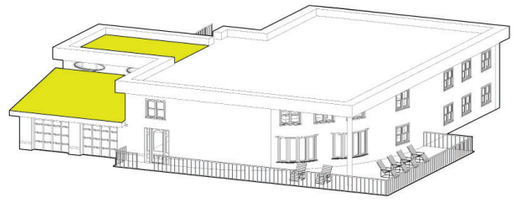
Many of our modern generation of people think joint family living is an invasion of privacy or a last resort for times when you cannot afford a home of your own. People fail to see the many upsides of joint family living. By living under one roof, we are able to share life's most precious moments with those who are closest to us, along with the practical advantage of pooling together our savings to live in a quality home rather than spending half our lives paying off a house we do not love. This home allows 2-3 families to easily grow with their elders without an invasion of privacy. Rooms have enough space and facilities for everyone to utilize the home and live comfortably. A mixture of shared and private spaces allows a family to grow together and experience life with the ones who really matter most, allowing them to live their own separate lives but share a bond with loved ones under one roof. In other words, multi- generational joint family living doesn't have to be a last resort, rather a new way of thinking for better forward living.

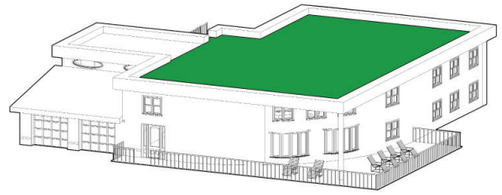
ABOVE: Formal Living Space

ABOVE: North Western View

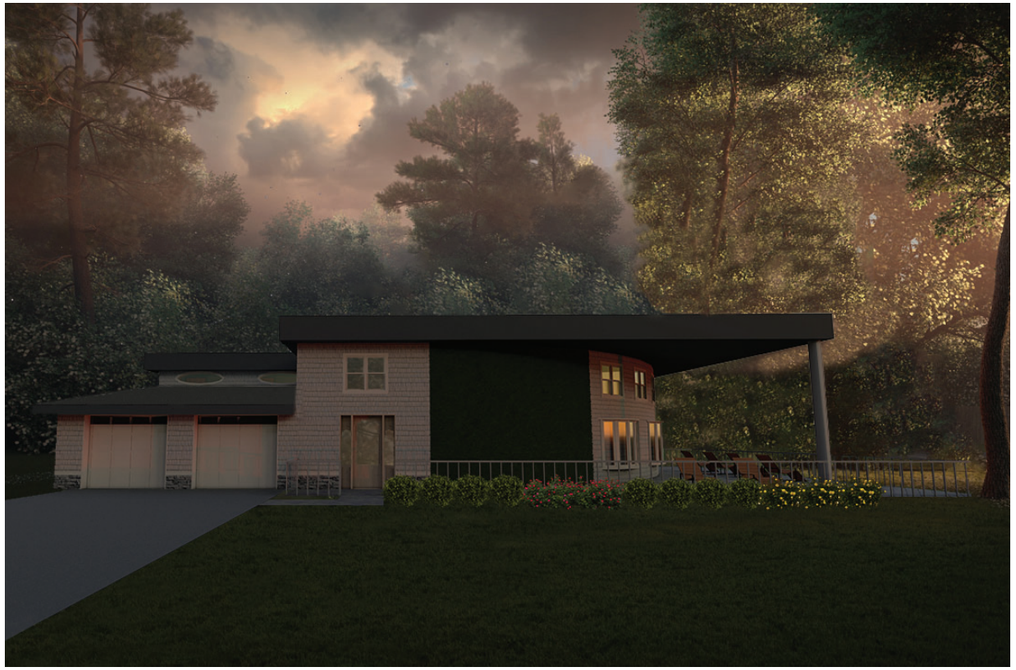
CARBON NEGATIVE
Harris Stuckless

The Home Competition is an architectural design competition for one of the most significant architectural buildings we design: the home. A home is created to make one feel safe and provide a place for self-expression. With our changing society and advancing smart technology our home designs have advanced greatly. I have based my design concept on using this technology to combat a significant issue we currently face: climate change. My home is designed to show how we can take our usual sustainable building a step further while staying in our residential environment. Carbon negative technology is created to take our typical sustainable building techniques further. This building will use both a green roof and "made of air" panels to remove carbon from the atmosphere, enabling the home to have a negative carbon footprint instead of just reducing it. Since most municipalities have constraints on green roofs this design shows we can use the new "made of air" panels to replace them.





TOP: "Made of air" carbon negative roof panel location
BOTTOM: Green roof location



ABOVE: Evening Render