



Christina Lu Jin

Portfolio 2014

SKILLS

Ch

Bilingual in Chinese

R

Revit

Ps

Photoshop

A

Auto CAD



Solidworks

MS

Microsoft Suit



Technical & Hand Drafting

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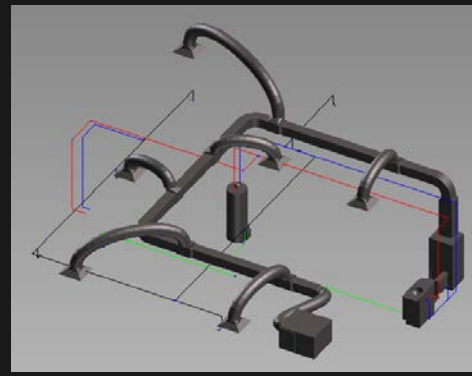
AE 222

{ Computer Aided Working Modeling }

2014 Spring: Semester Project

This project was assigned for semester to model an existing residence that I'm familiar with. The purpose of this project was to learn and understand the program Revit. My project was a two-story townhouse. It was a completed project with floor/roof plans, structure plans, MEP system, lighting and electrical system, interior design, site design and renderings. It also contained details such as sections of walls/building, interior/exterior materials, window/doors design rebuild, girders and downspouts, as well as a short video clip of a rendered walkthrough to display the finished house.

This was the first time I used the Revit program, and the first time I got a little touch of all the four options in my major. I spent numerous time and effort to explore and familiarize with Revit. My project was selected to be displayed on TV in our department building in that semester. This experience built my confidence and helped me strengthen my passion in AE.

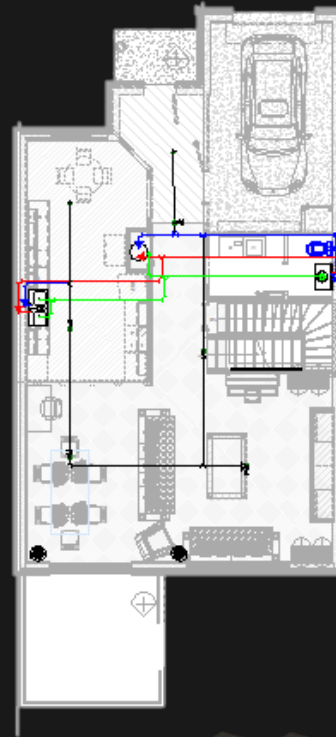


Mechanical System for the First Floor

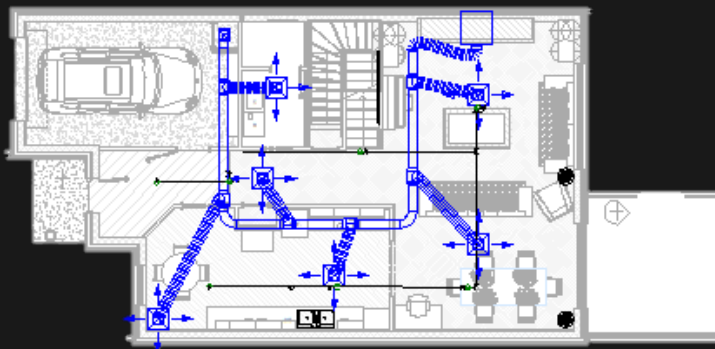
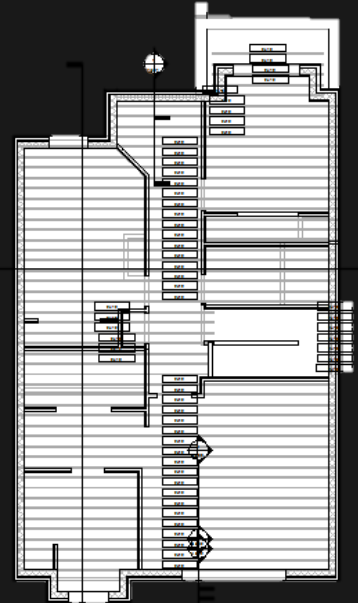


Electrical Plan

Plumbing Fixture Plan



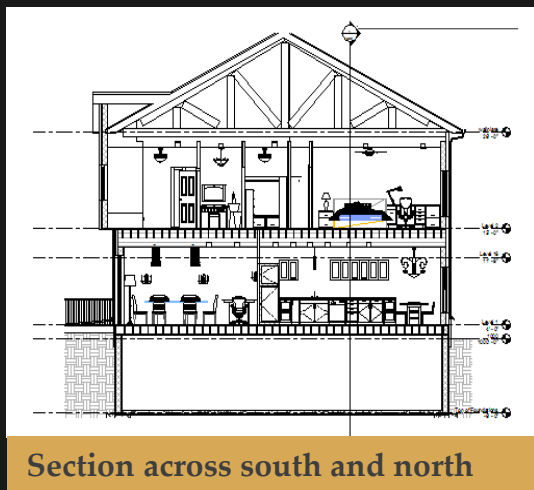
Structure Plan



Mechanical Plan



A Cut-out Box through the South and East



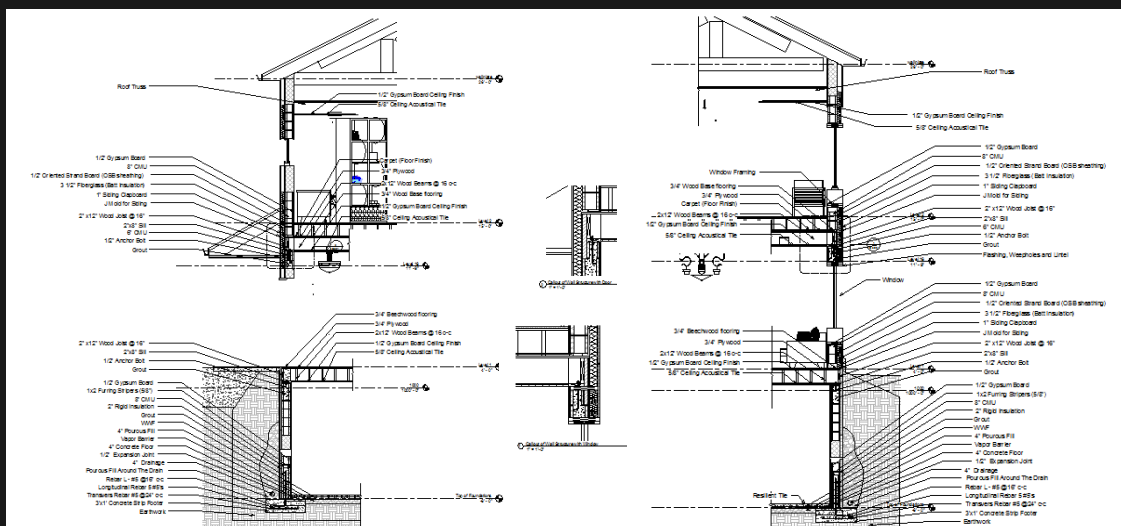
Section across south and north



Exterior rendering with site



Rendering of the kitchen



Detailed wall structure rebuilt and labeling (cut through door and window)



Custom brick texture and front door



Rendering of the dinning and living room



Rendering of the exterior



Custom clapboard texture

AE 222**{ Computer Aided Working Modeling }**

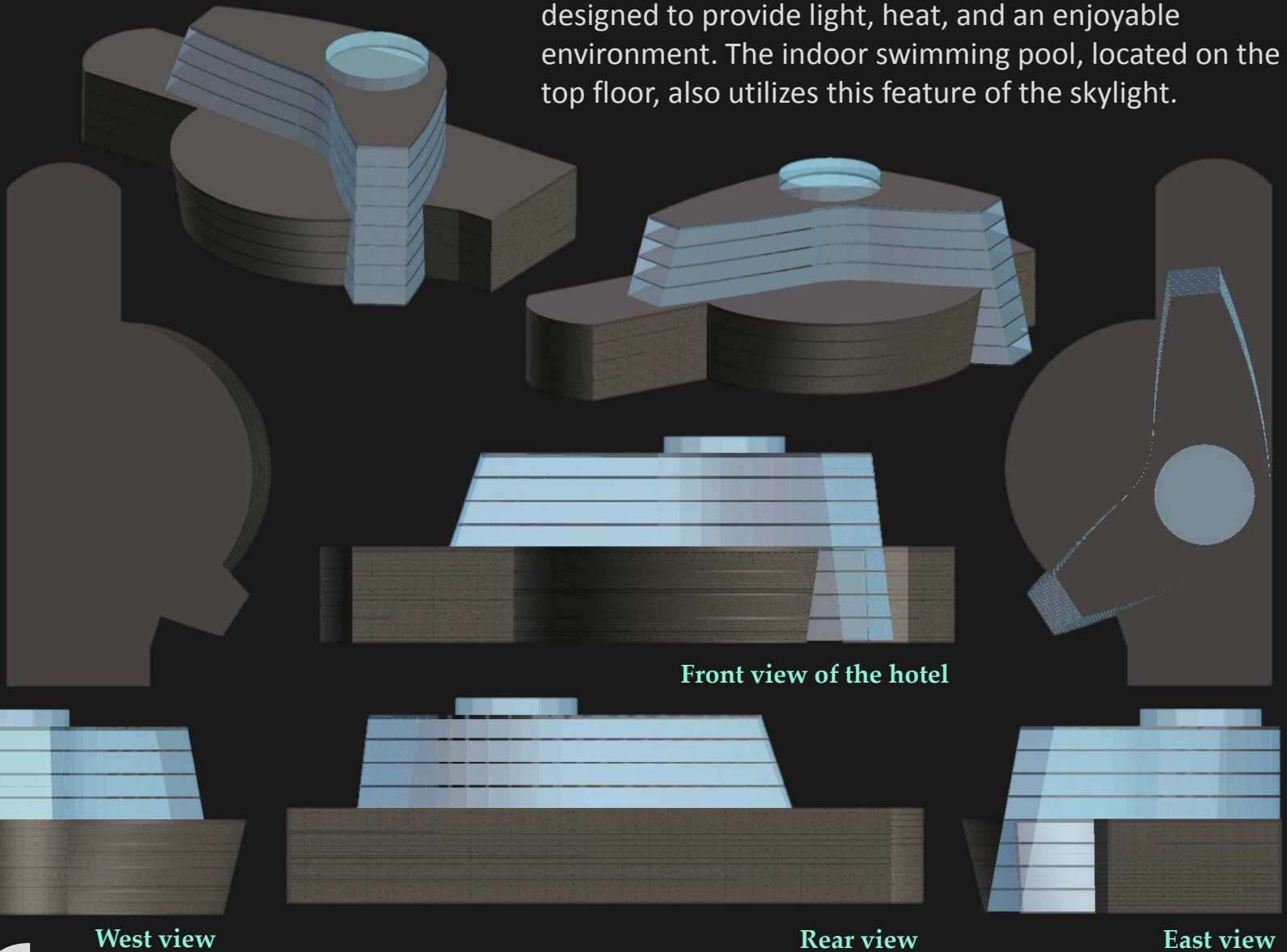
2014 Spring: In Class assignment

This project was assigned in class, after a lesson on massing and curtain wall system, and the purpose of it was to apply the concept of mass and create curtain systems in actual buildings.

The project required us to design and model a 7 to 8 story hotel which could be built in State College for parents and alumni.

According to the climate in State College, I designed a hotel with a combination of curtain and actual walls in order to prevent heat from leaking. There is a larger proportion of glass on the south side of the hotel for the maximum sunlight in each floor.

The up sloping wall on the front side of the hotel creates an overhang for the floors below. The skylight was designed to provide light, heat, and an enjoyable environment. The indoor swimming pool, located on the top floor, also utilizes this feature of the skylight.



AE 130A

{ Multidimensional Design and Research }

2014 Spring: Semester Project

This year-long project was completed during my second year architectural studio, I worked with a group of five teammates to design a student housing apartment which will be located in State College PA at the intersection of North Atherton street and Clay lane.

The general idea was to design a multipurpose facility with an underground parking lot, a chain of retail stores and whole foods market, and of course a separated residential space located above the complex.

In order to design a building in state college, we first did research on the solar angle, wind direction, building code for limitations and classification, and produced a visualization of the building in it's urban context.

We collaborated to model, design and refine the details of the building. Each of us were assigned specifically to a particular aspect of the design process: structure, MEP systems, exterior enclosure, circulation and residential floor plan.

R

Ps

A

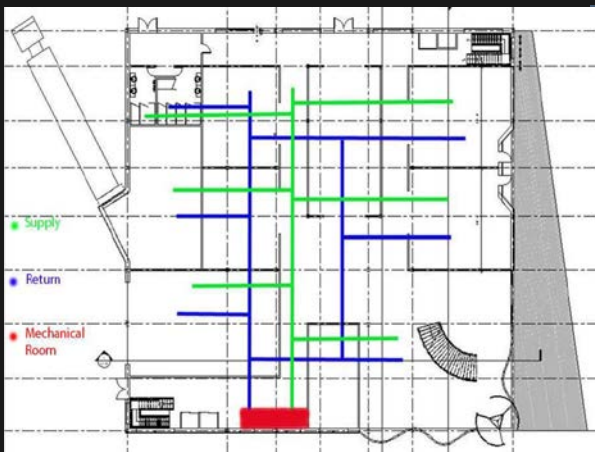


Exterior of the building



Section across south and north

Street view with building
photoshopped in

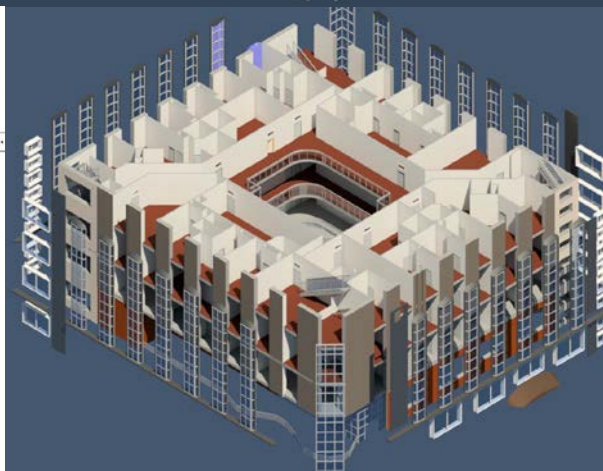
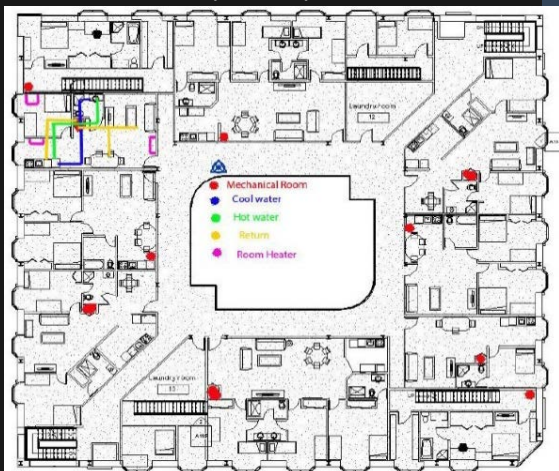
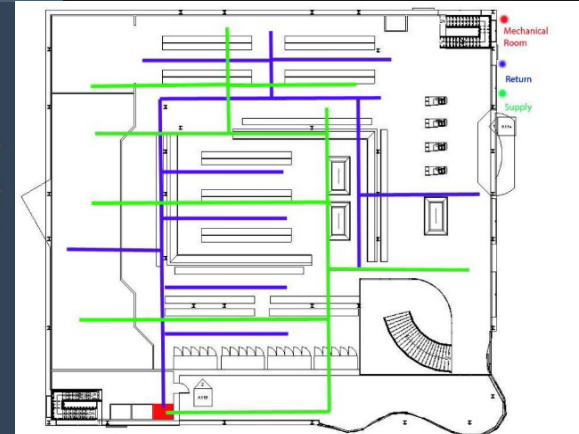
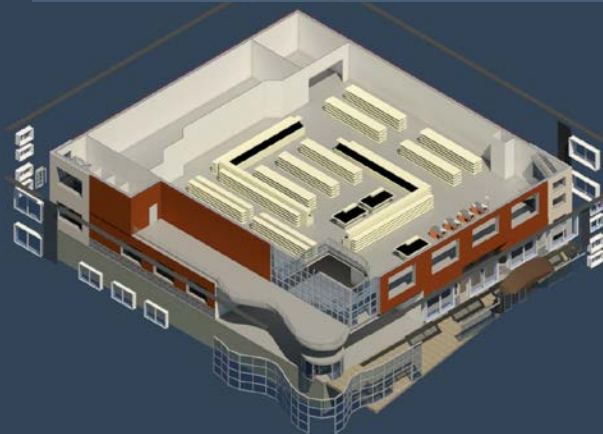


Ground Floor

The outside patio creates a nice place to stay during summer, and brings a transition for the building. A café on the corner acts as a public plaza surrounded by a curtain wall system to draw more attention. Retail stores, storages and bathrooms are located on the other three sides. The large staircase in the middle of the café leads the public and shoppers to the next level.

Second Floor

This floor is used for selling whole foods. Since most of the whole foods can't be exposed under the sun for an extended period of time. In order to prevent them from going bad, we only designed windows on one side for the second level, which is where the registers are located. The outdoor hall way on the south side is to be connected to a bridge across N. Atherton street and leads to campus, which creates a private path for residents.

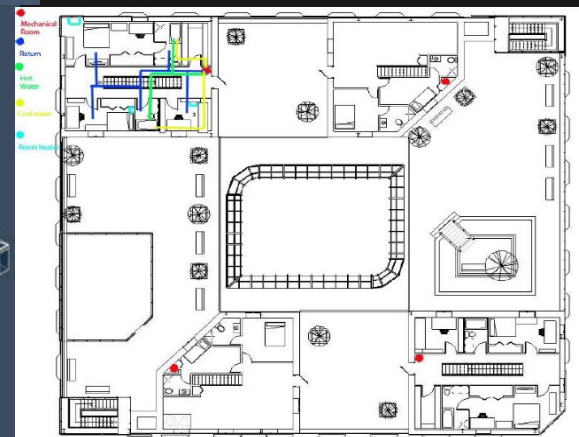
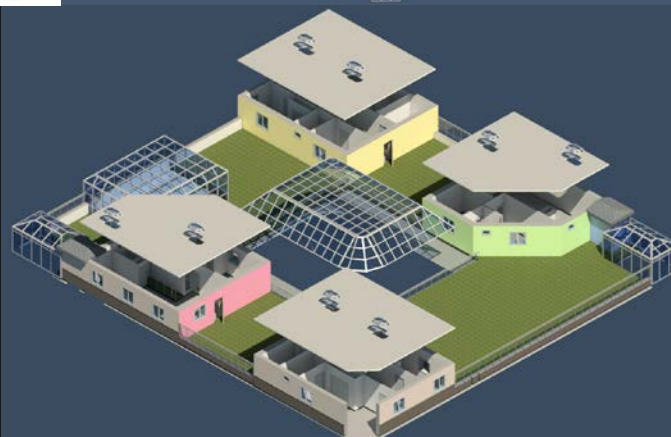


Residential Levels

In order for residents to have enough sunlight, a skylight was being designed at the middle with a cutout through roof and the top two levels and leave the bottom as a public space in the middle. There are 6 types of 12 apartments on each floor including 2 kinds of Complexes for 3 people or more (two stories), 2 kinds of Deluxe for 2 people or more, a kind of double and a kind of single. The layout of each floor is pretty much the same.

Roof Top

The Roof top is basically covered by walk-off roof mat, plants and greens. The 4 extrusions are the second level of Complexes apartments. The remaining areas are used as a public space which contains a community garden. The huge Glass top is used for the greenhouse, and the ones on the two corners are for circulations (stairs and elevators).



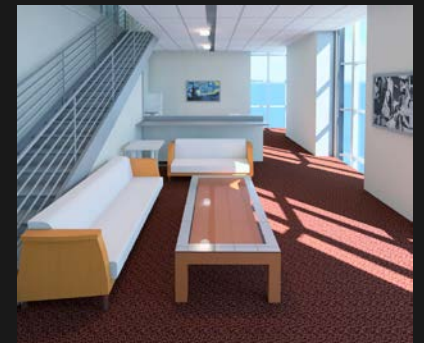
FEATURED DESIGNS

Conceptual 3D Jet-out Model



Rendered pictures of the features including the front door, whole foods market.

Each floor's extrusion; skylight on top of the roof; basic interior design.





AE 130

{ Multidimensional Design and Research }

2013 Fall: Semester Project

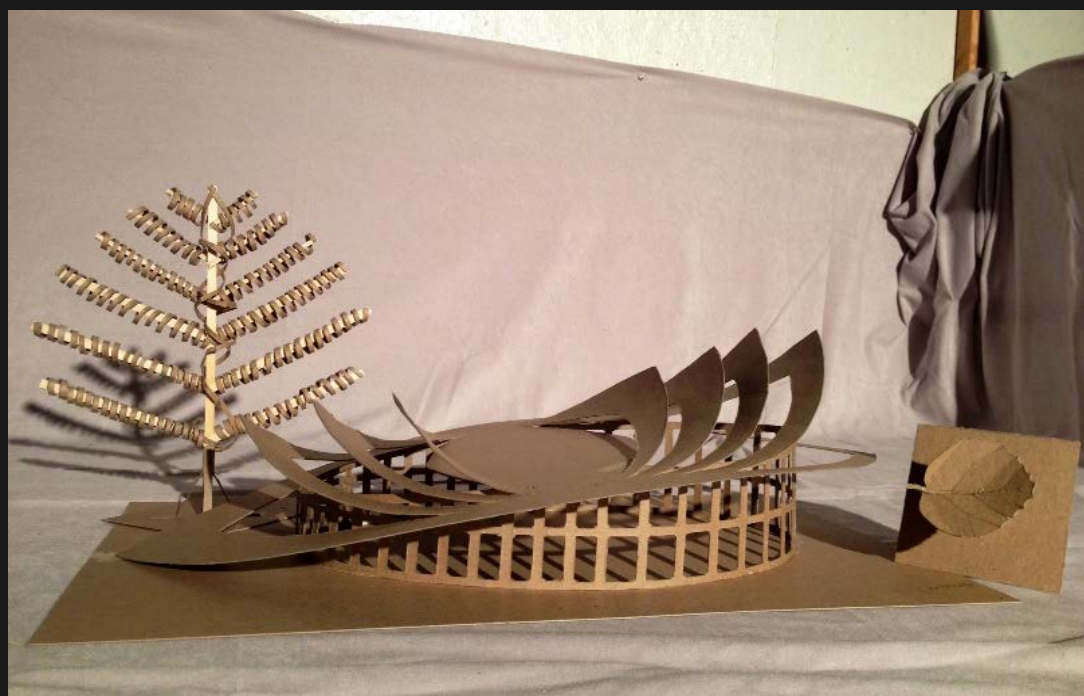
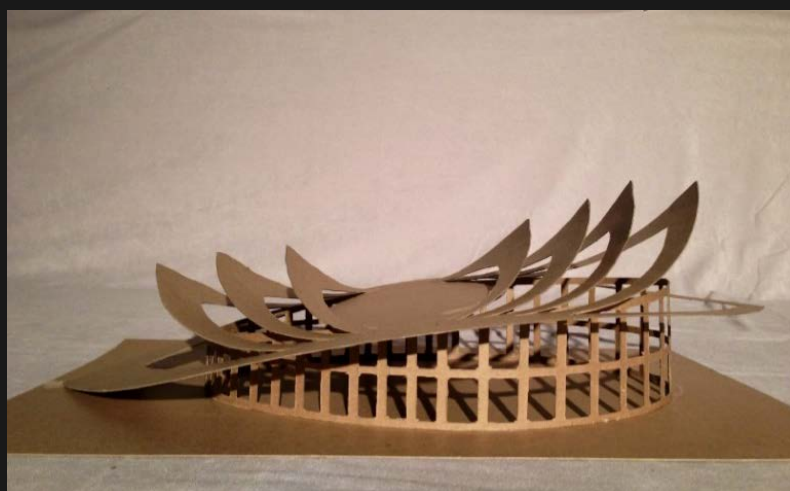
I took this class in the year I was first accepted into the AE major. It was the first time that I was exposed to a studio class. I was learning how to create, sketch, design and sense aesthetics, which are very important assets for us as engineers.

The class contained a series of projects, the first phase was to find an object in nature and model it with cupboards. Phase two was to reconstruct the object into something that is entirely different from our object in nature, while maintaining certain connections in between. For phase three, we were instructed to design an object that has no meaningful correlation to the first model of the object in nature. In other words, creating a model based on the physical resemblance. It promoted

our ability to instantaneously design an object without any correspondence, yet retaining the imagination and craftsmanship from the previous tasks.

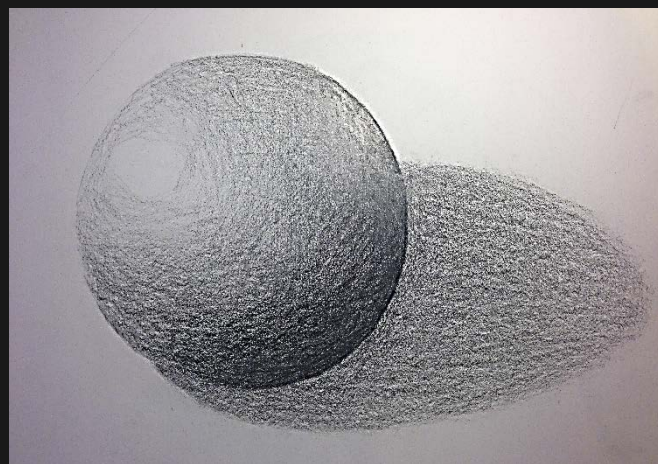
The pictures on the right depicts the three phases – a leaf, conceptual tree, and an arena.

The Arena, third phase, has a slanted roof, which resembles the shape of a leaf.

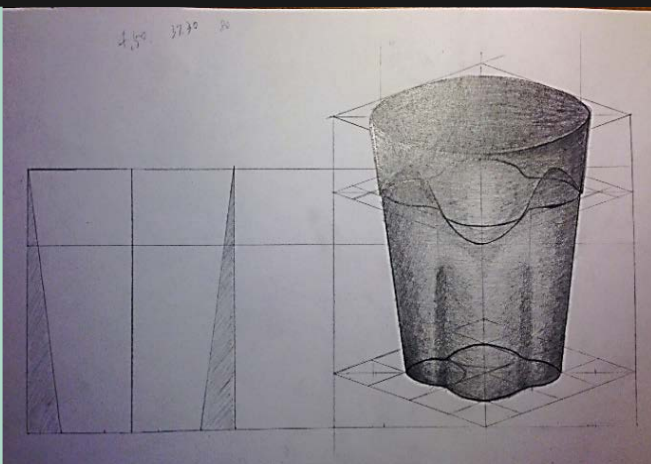


Sketching Shading and the Ortho-

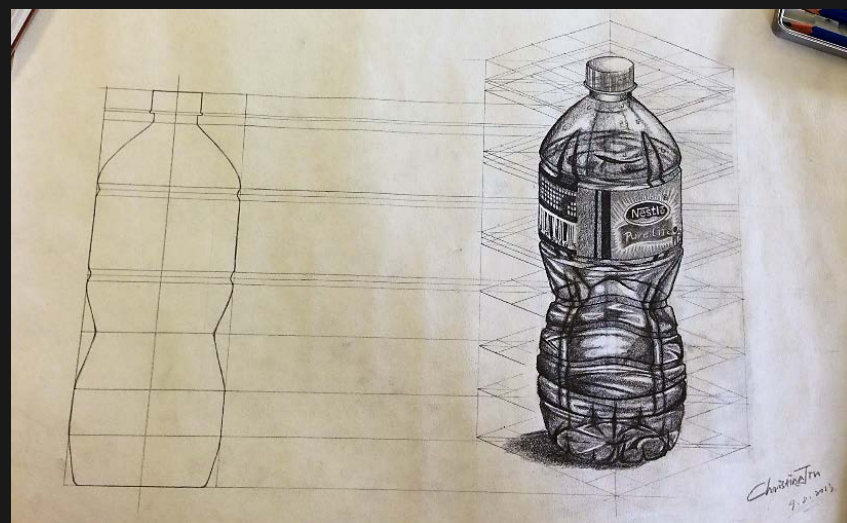
Basic Sketching and
Shading



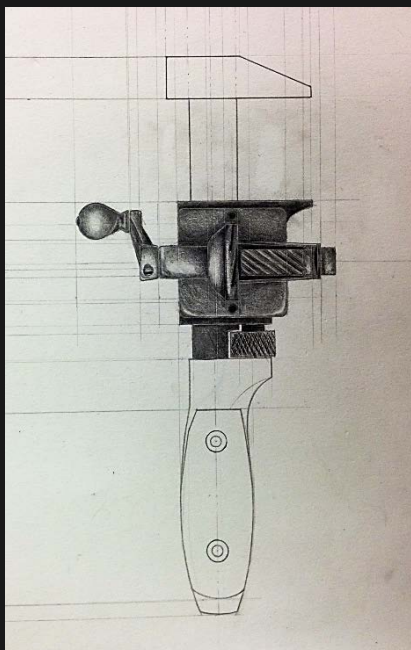
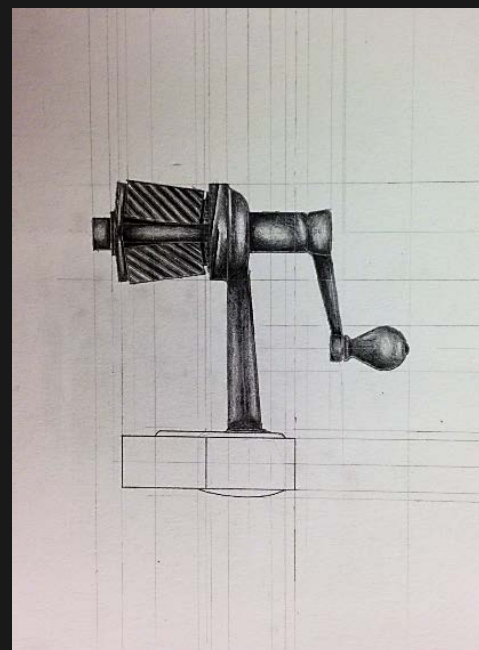
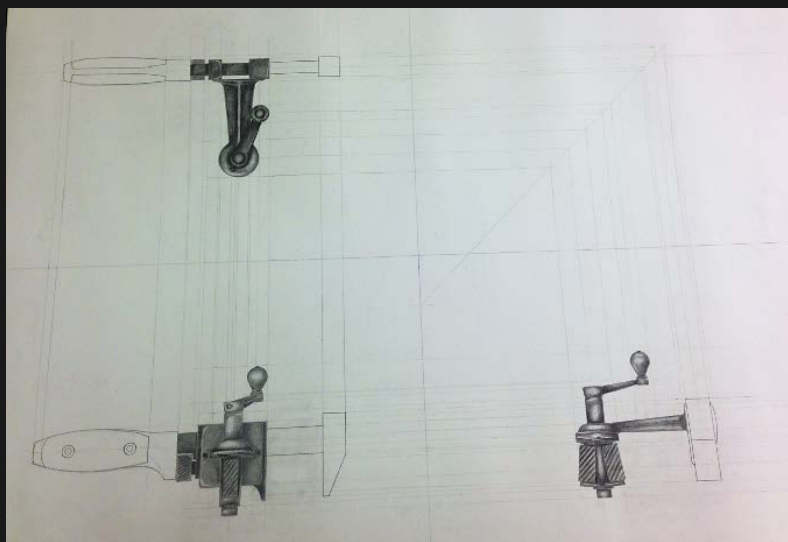
Primary Precise Sketching



Advanced Precise Sketching, Fully Shaded
with Details



Orthographic Three View Drawing of a
Hardware Tool, Partially Shaded





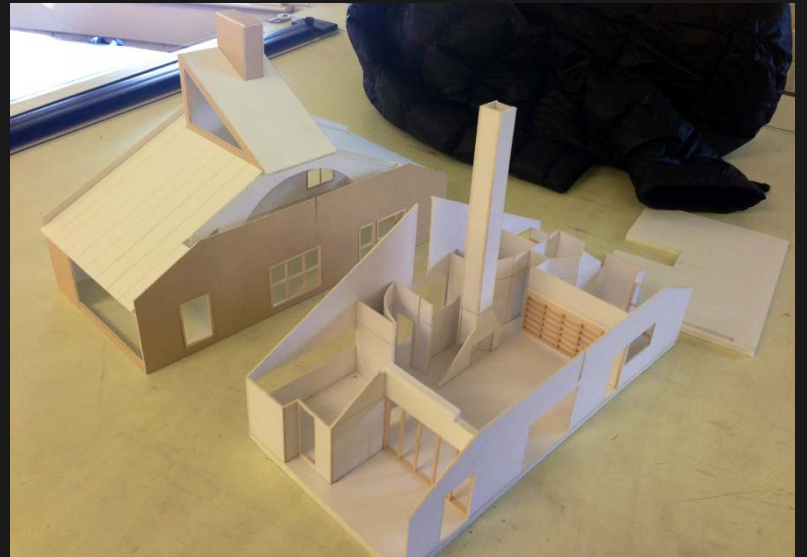
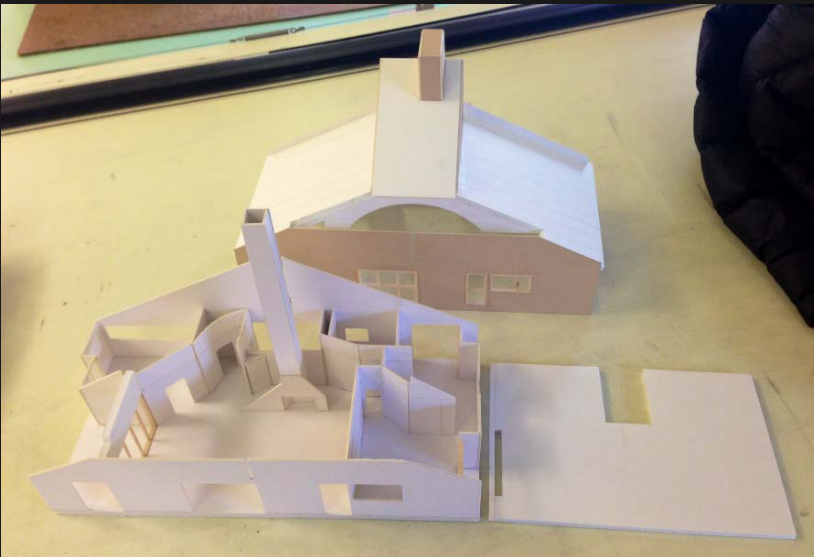
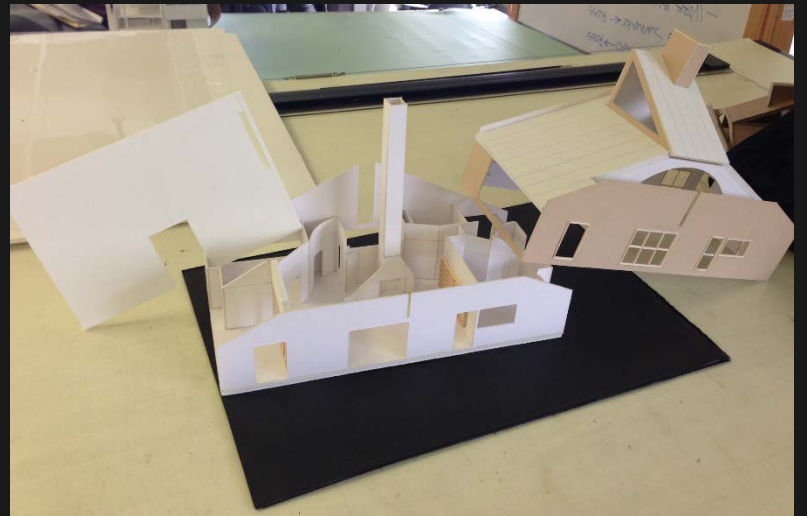
BACKGROUND OF MY MODEL

Architect: Robert Venturi – the pioneer of the post-modern architecture movement

Name of the Architecture: Vanna Venturi House

Location and date Opened: Chestnut Hill in Philadelphia, 1964

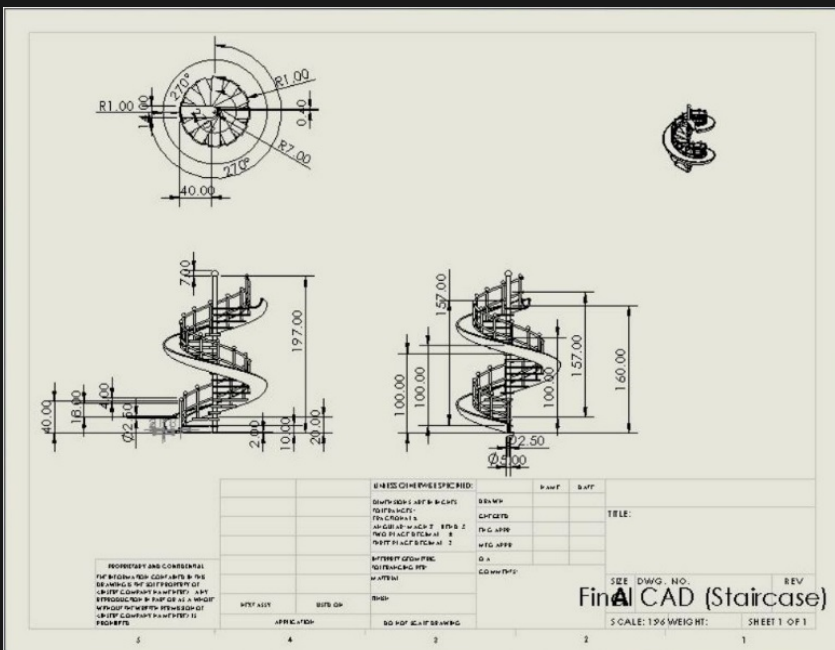
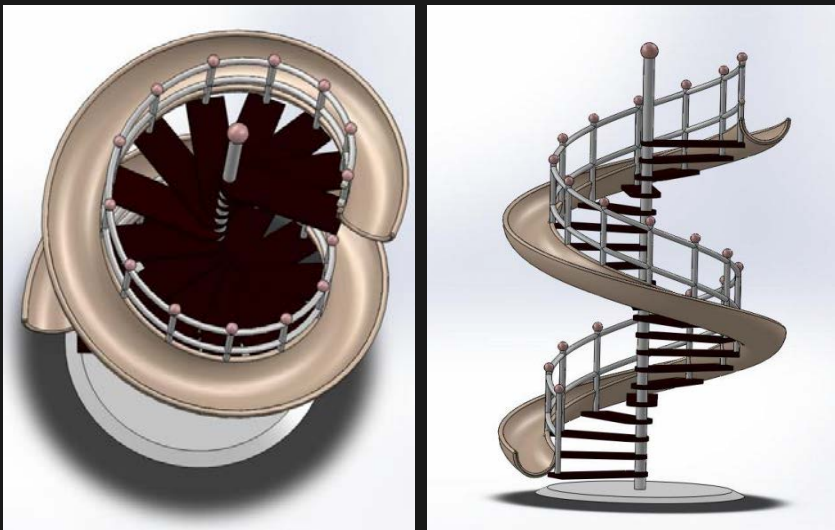
Awards: 25 Year Award, Listed as one of the “Ten Buildings that Changed America”



2012 Fall: Final Project

This objective was to design an object with the software that was taught during the semester - Solidworks I modeled a slide attached on the side to a staircase, which simply brings the joy to kids at home.

Without knowing all the parameters, I investigated data to construct a viable staircase. I have obtained valuable knowledge and skills in my first engineering class, and I have demonstrated my ability to acquire external resources to complete my project.





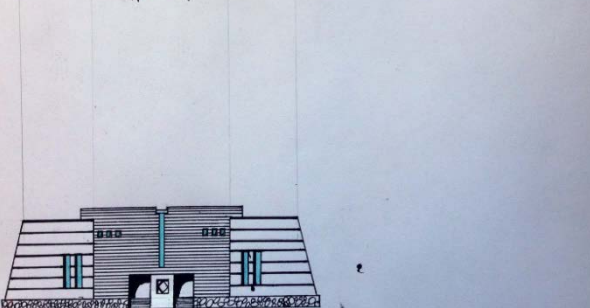
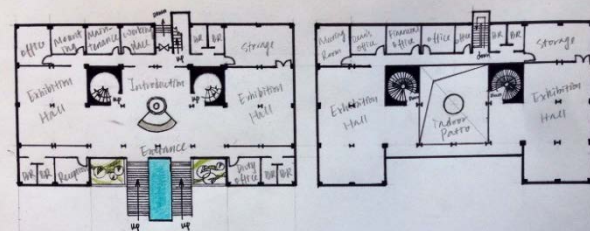
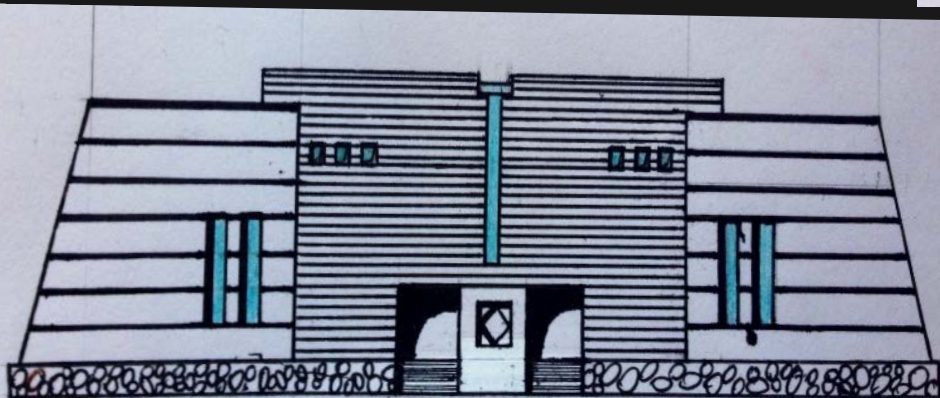
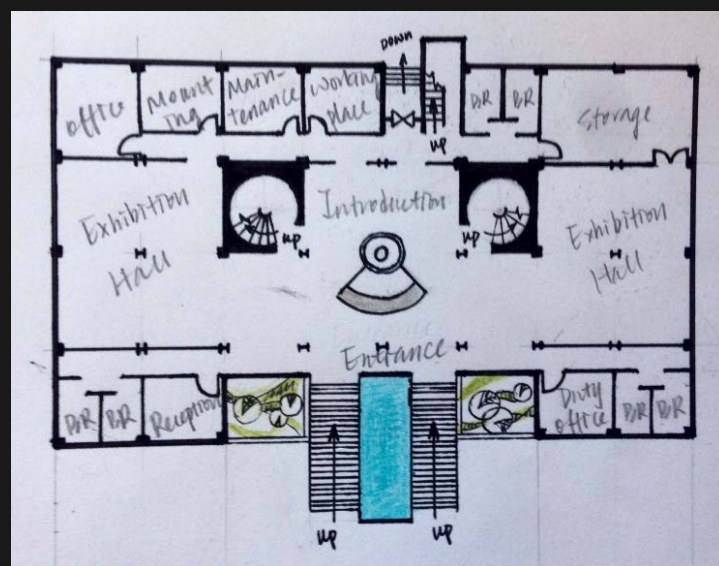
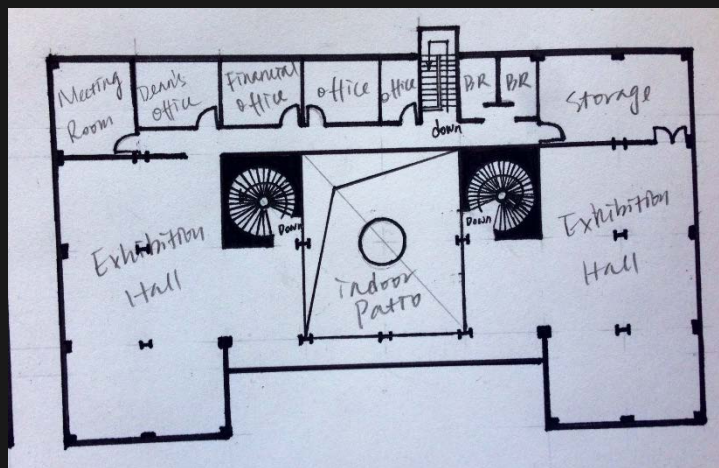
Inspiration of Exhibition Center

Although I do not specialize in design from the Arts and Architecture major, I find exterior and interior designing particularly interesting.

I enjoy reading related magazines and articles; I enjoy analyzing floor plans and other infrastructures. After all, the world around me is my inspiration.

Among all the computer programs, design tools, and software provided to me, I still prefer to sketch by hand. Even though the drafts may not be as accurate as other design resources, I enjoy the process of sketching out fine details of my vision. As a novice, I have yet to obtain the necessary skills to draft professionally. In the foreseeable future, I will be exposed to more concepts related to exterior and interior design to properly and independently sketch professional designs.

Most recent



TURTLE VILLAGE THAILAND



Traveling and photography are two of my biggest hobbies of all time, I absolutely love going to various places to experience various cultures and landscapes. Until this point, I've traveled to South Africa, Japan, Australia, Thailand, Mexico, United State, and, of course, China.

With a focus on shooting scenery and objects, I started practicing the techniques of photography not long ago. I appreciate the contrast of colors and also love to be creative. I also enjoy observing things from different angles to capture the scenery in different perspectives.



PHI PHI ISLAND THAILAND 2014



MARRIOT RESORT THAI



MAIKHAO BEACH THAILAND 2014



PHI PHI ISLAND THAILAND 2014



MAIKHAO BEACH THAI

JIUXIANG CHINA 2014



JIUXIANG CHINA 2014



DALI YUNNAN, CHINA 2014



JW MARRIOT
RESORT
THAILAND
2014



DALI YUNNAN, CHINA 2014



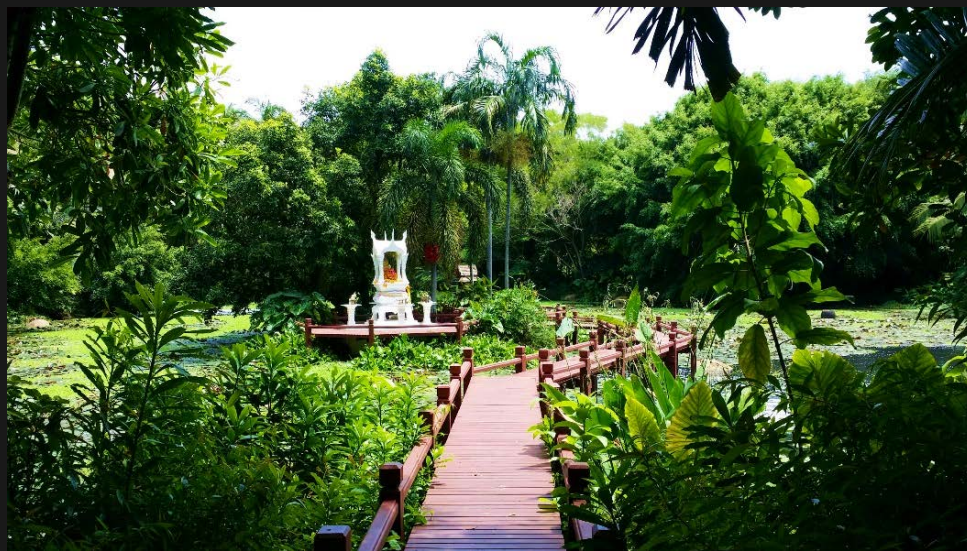
JW MARRIOT RESORT THAILAND 2014



JIUXIANG YUNNAN, CHINA 2014



WJ MARRIOTT RESORT THAI



FALL IN PENN STATE MAIN
CAMPUS PENNSYLVANIA 2013



FALL IN PENN STATE MAIN
CAMPUS PENNSYLVANIA 2013

DALI YUNNAN, CHINA 2014

