



RATCHAPOL TANGSAKUL



THAMMASAT DESIGN SCHOOL

Contact

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Works (Portfolio) : <https://bit.ly/3yAc82t>
 Works (In Motion) : <https://bit.ly/3yojPZo>

Education

2010 - 2016 Suankularb Wittayalai Nonthaburi / 3.16 GPA
 2016 Kasetsart University Bachelor of Economic (ECON) - Resign
 2017 - 2022 Thammasat University Bachelor of Architectural and Planning (APTU) - Graduated in 2022 / 3.25 GPA

Profile & Objective

I am a creative graduated bachelor student based on Bangkok, a city with diverse of dimensions and improvement possibilities, willing to explore a way to fit in the local life to the surface of nature-verse elaborately. In order to approach the bold, I was experiencing in parametric tools, digital fabrication, cognition and keeping the Architect's conventional skills always on, moving, with passion to learn to the kernel. Now I am looking for the place where I'll be able to grow and do our best.

Skills

Competent	Rhinoceros Grasshopper Parametric Twinmotion 2021	<ul style="list-style-type: none"> - Core design tool. Developing Plug-in //Human Clay//(2022), Good in Data Management, Standard Tools, Kangaroo2, Lunchbox, Anemone , Lb/hb. Mesh Manipulation, Performative Design, Generative Design, Conceptual Design, Context Analysis and going deep in to more. - Cinematic Animation Video, Realistic Rendering, Environment Design, Lighting, Seasonal/Local Scene.
Convenient	Hand Sketching Autocad 2022 Rhinoceros 3D v.7 V-Ray for Rhino Enscape 3D Printing (Flexible Hardware)	<ul style="list-style-type: none"> - Good quick sketch in Detail, Conceptual, Impression to compress data and communicate. - Standard tools plus block editable, flexible component. Good Plotter and Systematic work. - Non repetitive part modelling with standard tools, sub-D, Mesh tools, do conceptual diagram and Render. - Create Material, ambient managing, standard using to bring a realistic or conceptual production. - Large scale project rendering in realistic environment. - By having my own 3dprinter to experiment a fabrication/physical possibility of design/architecture. Performative physical model study, experiment in Clay/ABS/PLA/Resin print in small to medium scales and serious hobby.
Experienced	Adobe Photoshop 2022 Laser Cutting (Hardware Flexible) Robotic Fabrication (ABB)	<ul style="list-style-type: none"> - tools creating, standard skills. post production/realistic/impression/conceptual/monotone styles rendering. - Manage sufficient craft area, create cutting file by manually and parametrically, element marking/identify. - Experienced in ABB robot in the cycle, basic coding in robot studio, solutioning, running and basic maintenance. Can adptive expanding possibility by apply the parametric phase in a design (Grasshopper) by create a set of scripting to synchronize and be friendly to explore and create the system support tools (Hardware) to work with.
Standard	Hand Modelling Adobe Package (Ind/Ai) Autodesk Revit 2023 Google Sketchup 2022 MS Office	<ul style="list-style-type: none"> - Have a standard in skill. - Have a standard in skill (Presentation plate, layout, object tools, path tools and sense of layout). - Initiative skill in environment simulation, conceptual modelling, construction drawing and continue learning. - Quick massing generate, site model, plug-in, rendering synchronize. - Basic in Presentation, documentation and construction's BOQ.

Personality

- A Critical Good Learner with Always Opened Mind.
- Patiently Composed Move to be Goal Archiving.
- In Situation Quick-Witted.
- Naturally Rational.
- Bold.
- High Leadership and Responsibility.
- Cross Functional Team-Player.
- Working Systematically to Finish the Job on Time.
- Elements/Sequences Exploding Perception.

Hobby & Area of Interest

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| <ul style="list-style-type: none"> - Digital Fabrication - Environmental Friendly Design - Local Material Especially Clay - Science - Urban - Multi Scales Design - Sci-Fi Fiction - Parametric Tools - Light to Medium Roasted Coffee | <ul style="list-style-type: none"> - Crafting Activities - Reading - Brewing - 3D Printing - Integrative Talk - Politics - Business - Architectural Technology |
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Projects in Portfolio

Y-O House (Academic work including in portfolio)

2018

Category : Residence
 Area : 300 Sq.m.
 Location : Chiang-rak Pathum Thani, Thailand.

About : Exploring the mean of transparency theory of the transparency book of Robert Slutsky by the case study of Mies Van De Rohe's Villa Tugendhat. by knowing the transparency means we have known the boundary and an elements positioning in a diverse distances to perceive the dimension's scales. The house is faced to the North East direction and from this mean a good orientation to front to by the environmental way. From the theory, the First floor is created by an X-X and Y-Y wall direction from the center of function with almost opened floor plan and the Second one ,to be able to sense the transparency in another dimension(Z), was voided in center of an offsetted corridor.

Category : Pavilion

Area : 200 Sq.m.

Location : Samed, Rayong, Thailand.

Phenomena is the key to bring a sense of place in the physical way admired to the Nature. The site is set to free to select located on the cape Lam-Yah the place approaching by about 2 kilometers from parking is full of natural occurrence ,Wind, Shade from trees, Sound of ocean wave and smell of salty destination.

Key Roles

- On-Site observation and records a natural phenomena by collect some of extremely occasion to produce the key essay to extract to the concept
- Perform an environmental and user analysis what happened in sequentially to create the architectural condition rhythmically.
- Using Origami method to collect all the rhythm and to be designed on 2D ground what can editable and be approachable in constructive.
- Design a presentation plate/platform synchronizing from the sequenced concept and be one of the 7 best project in term the class and exhibited on a Tds. student exhibition.

Gaysorn Tower Installation (Academic work including in portfolio)

2020

Category : Installation

Area : - Sq.m.

Location : Bangkok, Thailand.

About : One of a experienced projects in my chose parametric studio to learning a parametric thinking and integrated to the Physic with a friendly approach. The Project is open mind concept to commercialize an architectural technology to be close to us.

Key Roles

- Technically created by a semi-manual modelling method with a simple box and then transforming step by step to softing edge.
- Using physical based Kangaroo2 component to straining an installation.
- Logically arrange a surface's program by separated to a various groups that can be perceived in holistic.
- Applying a commercial function merging with the abstract by analysing a users viewpoint.
- Rendered by mixed cartoon mood to be tangible by a persons in another corners.

Low-Rise Condominium (Academic work including in portfolio)

2020

Category : Low-rise Condominium

Area : 7,400 Sq.m.

Location : Rama IX, Bangkok, Thailand.

About : The Project was created between the Covid-19 pandemic, to bring a condominium where users can live a life in and feel the comfy normal in the new normal.

Key Roles

- Generatively created a series of schematics to a various way by mixing a form of various case studies where majority is on an arrangement of positive and negative space.
- Select and manipulating a units and an public opening to fit in user to a position/system where a foot step to the outside is normally welcome.
- Minimize a public space to spread into a grouped zone to reduced the risk and gave management
- Created a holistic connectivity with a vertical continuity program where linking a user place by place by reducing too much contact risk.
- Designed a unit types that can collapse an activities of new-normal user especially their own working area and full-option of living like a home.
- Manage a room pricing to be able to reach by Gen Y user in medium segment while the project making the margin in the meantime
- Provide main community space, Pool, climbing rock, co- working space, running loop, Gym, playground and others, where dynamic and non-dynamic activities can be converge.

Samkhok Tourist Information Center (Academic work including in portfolio)

2020

Category : Public

Area : 1,359 Sq.m.

Location : Samkhok, Pathum Thani, Thailand.

About : The place that people come from along the Country to learn about the history and faith. The place was one of the major origin of a cross culture, Thai - Peguan(Mon), beginning and this procreate a technology we have called Mon-Brick and The Famous clay pottery that were influencing in various industries. The design was aimed to expand a local material and activities boundary.

Key Roles

- Extracting a core values of the place by searching in a history and both user tourism and local into two point, Physical and Abstract.
- Shape the concept to create solution in a confluence of old elements, people as well and new activitied by breaking to a points.
- Display the performance by layering a brick into a free-form visitor perception that wrapped in a public program on the ground and The Second being a viewpoint of Thai-Mon temple, by created and oriented the enclosure to match the direction of the center and a temple
- Mimic the traditional house adjustment concept of Thai-Mon house layouting where a house located with randomly/logically height
- Pay an attention to create an architecture where people can feel connect in a multi dimension by an Architectural Form and Space.

MQDC Civic Center (Competition work including in portfolio)(Participant : Pitcha Khemanuwong)

2021

Category : Public

Area : 17,557 Sq.m.

Location : Bangkok, Thailand.

About : The Program is a competition of Magnolia Quality Development.co.,Ltd. MQDC+C (civic center) is located in the center of Bangkok in-between the both largest airport of the capital. The potential of this project is to be one of the most important landmark of the country that communicate to peoples, coming, with a novel ways.

Key Roles

- Researching of Thaiys stratagem(A tree covered by colorful fabric) by digging down to the beginning and using a positive result to transform to an architectural concept to offer The Uniquely Thai proposition from the organizer.
- Metaphor design by using the holistic mass to be the tree and create a multi dimensional circulation paths to provide each site's contacts to be a foyer of leading the user to program analyzed by the context.
- Placing each program from an existing contexts used to by not to disrupt the district and be facilitate to universal user.
- Manage and provide almost of design process by scripting a parametric script to separate each parts to be adjustable in the holistic relation such as Facade, Main Structure, Sub Structure, Roofing and Circulation Paths.
- Instruct

Category : Public / High-rise

Area : 100,000+ Sq.m.

Location : Bangkok, Thailand.

About : The Academic Proposition is aimed to propose the office building in mixed-use on the site where opposite the AIA capital center on Ratchadaphisek Road to stand after the pandemic in-between the decreasing of office rental demand. The Most challenging project of our team at the moment by designing a tower to provide not only a floor space but mixed/cross function of diverse programs and in 100,000sq.m. of GFA in 3 months.

Key Roles

- Analyzing a possibility of the project.
- Searching a major demand by founded a demand hidden in a set of number telling a significantly increasing of small businesses number especially in an individual workers wanting a small appropriate price and space to running the cloud and ground business channel
- Design a holistic program by extracting a users by their scales or definitions of business from individuals to conventional offices and research through each business activities to provide a space/course with most value for user.
- Created a system providing in multi-purpose architectural parametric. The building can transform each part with on-process running and another part will be adjusted to keep the 100,000sq.m. manipulatable
- Design an environmental and emotional friendly green space to reach not only legal within the core script to the building
- Provide a structural solution to a non-typical floor building by parametrically program and place a load transferring wall, steel supported curtain-wall to each floors.

Evaporative Yard (Competition work including in portfolio)(Participant : Pacha Suraruk and Pudticha Laosirijit)

2022

Category : Public

Area : 2,105 Sq.m.

Location : Sai-ma, Nonthaburi , Thailand.

About : Based on ASA Competition Co-Exist with Co-Area. The Project was originating by the discussion in the topic, why we are not walking outside much especially on the space where infrastructure left be hide, space under the troll, when we have no need to do, So we want to involve to push our propose.

Key Roles

- Solutioning about 2 topics.
- Firstly, The temperature is too much height, so used them to do their jobs, change the chemical bond of water decrease the energy, affecting the temperature to balance. Using the local material, Clay, in a duty of in-between element of water and air with most porosity and cheap.
- Secondly, Solve a infrastructure's waste area by provide a program referenced from local activities, street food, not only to create a lively place but reduce a plague from being on the footpath way.
- Leading the team to reaching a parametric tools to be able to create a set of design what can increasing an evaporative performance by multi-method simulating a by a software made schematics to developed to the performance goal.
- Create a set of script about that another designers or associates can utilize to their local landscape.
- Develop the system continue to the **Human Clay project**.

Project Clay (Academic work including in portfolio)

2020

Category : Installation

Area : 24 Sq.m.

Location : Khaoyai, Korat, Thailand.

About : An experimental project to explore a possibility of forming clay by using a parametric script parallelize with fabrication hardware machine. This project studies about a stage of clay relative to a stitching possible to connect each unit together to be shaded and sense playing to the light to create an architectural decorative element.

Key Roles

- Provide a wide range of clay forming methods and deciding to use a non typical pushing one to explore
- Do main conceptual to metaphor a leaf and branch of tree playing with light creating a dynamic shade
- Design a hardware tooling working together with 3D printer and an action methods
- Elaborately develop a set of work, clay, step by step in a topics of clay stage, pressing tools, pressing depth related to the goal
- Advance design a holistic process from design to fabrication process by using grasshopper specially in generative way
- Invent to a process manipulating hard-clay to being in a stage of plastic
- Produce a G-code language to communicate to the machine to be moving based on a crated path way

Human Clay (Academic work including in portfolio)(Participant : Pacha Suraruk)

2020

Category : Low-rise Condominium

Area : 2,105 Sq.m.

Location : Sai-ma, Nonthaburi , Thailand.

About : An intention to develop the original **Evaporative Yard** to expand a potential of the project in The Major and another ways willing to in vole in an local environmental intervention by provide more relation with people activating in the place.

Key Roles

- Applying the original grasshopper script to an architectural elements, stair, column, station to potentially response to people needs.
- Site insight analysis and simulation, Wind, View, Sun to propose a conditions of placing elements.
- Invent to establish the system ,parametric script, that synchronize a clay printing design to an ABB Robot in the whole process.
- Associate in designing a 5 parametric Cluster ,Hammer Pattern, Stair Pattern, Seat Pattern, Double Hammer Pattern, Dynamic Hammer Pattern what can create or utilize from a single line curve
- Develop a set of cluster to be related by an environmental simulation such as wind analysis, heat analysis, view percent.
- Create a connection of clay in the physical and software to be joined with timber to bring more construction potentials to the project.

Extracurricular

Construction Volunteer at Bang-Kruay Local Government (Extracurricular)

2017 - 2021

Key Responsibilities

- Practice a steel joint welding method to involve into the party's jobs.
 - Support the electrical group to solve an electrical wiring problems.
 - Help the local cleaning the street desolated under the bridge.
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Owner, Co-Founder of Kinburger (Extracurricular)

2017 - 2022

Key Responsibilities

- Establish a streetfood restaurant from 10,000thb investment
 - Business planning by Design a major strategy from using all countable and non-self-made material to be verifiable and reduce the human resource.
 - Provide and negotiate to a suppliers in in term of business coverage.
 - Restaurant design and construction management/Contractor providing, negotiate.
 - Manage a general strategy to be one of The Top 10% in Wongnai's Lineman.
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Baan Maneerin Construction Drawing and Managing (Extracurricular)

2021

Key Responsibilities

- Design an expanding renovation space to serve a family expansion by mostly concern to an elderly design.
 - Manage a construction cost to the economy budget.
 - Provide a contractor and negotiate to the proper contract detail.
 - Work with both party to reach the goal
 - Construction site survey.
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