



AEKKASIT THOKAEW

CIVIL ENGINEER

I am a recent civil engineering graduate with internship experience in construction companies. I am committed to enhancing my skills and knowledge to excel in challenging roles.

PORTFOLIO

2024

MY PROJECT

PORTFOLIO

PROJECT NAME "ENHANCING ENERGY EFFICIENCY USING BIM"

WORK FLOW

- Analyzing light distribution for optimized and energy-efficient lighting.
- Conducting airflow analysis for increased comfort and energy savings.
- Solar cell analysis to determine placement and energy generation for clean and sustainable energy production.

OUTCOMES

- Integrating data from Lighting Analysis, CFD, and Dynamo for comprehensive and accurate insights.
- Fine-tuning the BIM model to enhance energy efficiency.
- Delivering clear and efficient results that emphasize a detailed understanding of energy dynamics.

Senior Project

Civil Engineering

ENHANCING ENERGY EFFICIENCY USING BIM

INSIGHT PROJECT

Implemented Revit's Lighting Analysis for interior lighting assessment, integrating results into the BIM model. Utilized Revit's CFD module for airflow analysis, understanding its impact on energy usage and comfort

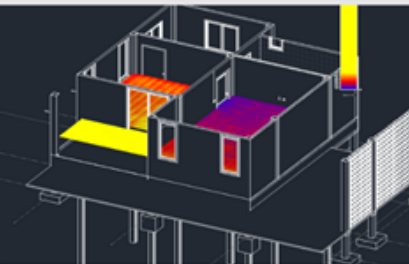
Employed Dynamo in Revit for solar cell placement analysis. Integrated findings for a holistic energy analysis covering lighting, airflow, and solar cell energy.

Delivered clear, efficient results emphasizing a comprehensive understanding of energy dynamics.

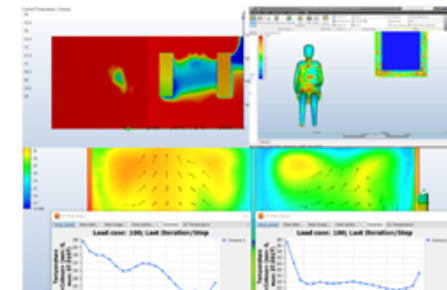
"Lighting & Airflow analysis, Solar Cells, integrated into BIM for holistic energy insights."

Our Team
Aekkasit Thokaew
Parit Paengtawee
Attawat Nutibenjaphol

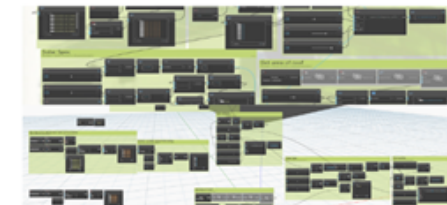
Use Lighting Analysis from Revit to analyze interior lighting within the building. Integrate the results of Lighting Analysis into the BIM model to understand light distribution within the building throughout the day.



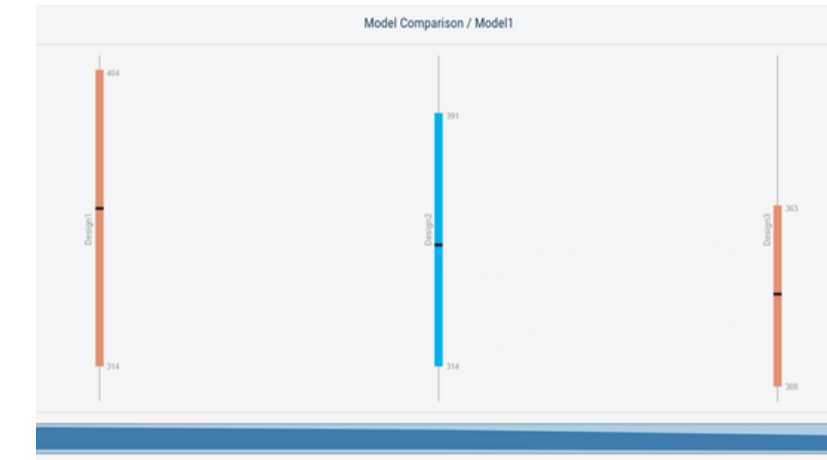
Utilize Computational Fluid Dynamics (CFD) module in Revit to analyze airflows inside and around your structure. Extract data from CFD to comprehend airflows, temperature distribution, and other behaviors affecting energy usage and comfort conditions in the building.



Use Dynamo in Revit to analyze the installation of solar cells. Create scripts in Dynamo to simulate and plan the positioning and installation of solar cells on your model.



Combine results from Lighting Analysis, CFD, and Dynamo to analyze energy usage comprehensively, covering lighting, airflow, and energy generated by solar cells.



This project will have a wide impact on the future use of energy.

2023-2024

MY CERTIFICATES

PORTFOLIO

CERTIFICATES

AUTODESK REVIT – KICK STARTER

Udemy Certificate



Certificate no: UC-20a70e41-64d2-4f20-81c8-d8485afbcac4
Certificate url: ude.my/UC-20a70e41-64d2-4f20-81c8-d8485afbcac4
Reference Number: 0004

CERTIFICATE OF COMPLETION

Autodesk Revit - Kick Starter

Instructors **Steve Clancy**

Aekkasit Thokaew

Date **March 3, 2024**

Length **8 total hours**

CERTIFICATES

THE COMPLETE AUTOCAD 2018-21 COURSE

Udemy Certificate



Certificate no: UC-5fec8f67-8ed2-4f15-bdf4-9dd1ee71513b
Certificate url: [ude.my/UC-5fec8f67-8ed2-4f15-bdf4-9dd1ee71513b](https://udemy.com/certificate/UC-5fec8f67-8ed2-4f15-bdf4-9dd1ee71513b)
Reference Number: 0004

CERTIFICATE OF COMPLETION

The complete AutoCAD 2018-21 course

Instructors **Jaiprakash Pandey**

Aekkasit Thokaew

Date **March 1, 2024**

Length **18 total hours**

CERTIFICATES

คอร์สเรียน EXCEL ฉบับแจ้งเกิด

Udemy Certificate



Certificate no: UC-0c600adc-a107-4b73-aac1-e58ef923fa68
Certificate url: ude.my/UC-0c600adc-a107-4b73-aac1-e58ef923fa68
Reference Number: 0004

CERTIFICATE OF COMPLETION

คอร์สเรียน **Excel** ฉบับแจ้งเกิด

Instructors **Veerachai Junhunkit**

Aekkasit Thokaew

Date **March 5, 2024**

Length **16 total hours**