Juin Yau Lim

Passionate sustainable practitioner that seek solutions with modern approaches

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EXPERIENCE

Argonne National Laboratory, USA — *Postdoctoral Appointee*

Aug. 2024 - PRESENT

Conducting research and providing solutions to stakeholders which align towards the interest of the Dept. of Energy (US).

Greenverse Co., MY — *Research Engineer (Hybrid)*

June 2023 - June 2024

Led research initiavete on sustainable hazardous waste (HW) management, and assisted in commencement of large-scale integrated HW plants.

Korea University, KR — *Research Professor & Fellow*

March 2023 - March 2024

Conduct research related to decarbonization technologies focusing on biochar, and analyzing the ESG performance of top 200 corporations in South Korea.

EDUCATION

Kyung Hee University (Global), KR — *PhD*

Feb. 2019 - Feb. 2023

Major: Applied Environmental Science & Engineering   [CGPA: 4.0/4.3]

Thesis: *Comprehensive guidance on the improvement of nationwide renewable energy penetration considering overall sustainability alongside with system reliability: Power-to-X, Microalgae Biorefinery, and Hydrogen*

University of Nottingham, MY — *M.Eng.*

Sept. 2014 - June 2018

Major: Chemical & Environmental Engineering   [CGPA: 3.7/4.0]

Thesis: *Fertilizer Formulation in Oil Palm Plantation with Life Cycle Assessment and P-graph Optimization.*

PROJECTS

BKT Co., KR
Sept. 2020 - Oct. 2022

Digitalization of modern nitrogen recovery wastewater treatment plant based on two-stage partial nitrification - Anammox process.

Samsung Display, KR
May 2021 - Dec. 2021

Assess the performance & analyze reaction kinetics and pathway of combustion chamber under vary operating conditions..

Samsung Electronics, KR
May 2020 - Dec. 2020

Proposing optimal operating conditions for burning chamber and scrubber in compliance of air discharge limits for the semiconductor industry.

SKILLS

Advanced data analysis

Python, Matlab, & GAMS

AI, optimization, modeling

Life-cycle analysis

Techno-economic analysis

PORTFOLIO

35 publications at top tier research journal article

4 research articles in submissions/reviews.

10 main participation in conferences.

AWARDS

Postdoctoral Fellowship

Korea University, 2023–2024

Brain Korea 21+

South Korea, 2019–2023

Presidential Scholarship

South Korea, 2019–2021

LANGUAGES

Native & fluent:

English, Chinese, Malay, Cantonese, Hokkien, & Hakka

Intermediate: Korean

MAIN INTEREST

Renewable Energy

Sustainability Enhancement

Artificial Intelligence

Resources Management

Process System Engineering