



Jin Yukai

New Spring Fellowship

BASIC INFORMATION

Birth date:

July 3, 1998

Mobile:

+81 70-8448-0788

E-mail:

d233392@hiroshima-u.ac.jp

Author ID:

Orcid: 0000-0001-8483-9601

Scopus: 57837105300

SKILLS

Experimental Apparatus

FLIR, GRIMM

Software Skills

Python, SimaPro,

AutoCAD, QGIS

LANGUAGE

English (fluent), Japanese
(conversation), Chinese (native)

AWARDS

2020, 2022

Graduate Scholarship, GDUT

2023

SmaSo-X Scholarship, HU

2024

New Spring Fellowship, HU

EDUCATION

2023.10-

Ph.D. candidate

Hiroshima University, Japan

Social Innovation Science

2020.09-2023.06

Master

Guangdong University of Technology, China

Civil Engineering

2016.09-2020.06

Bachelor

Jiangxi Agricultural University, China

Civil Engineering

THESIS & DISSERTATION

Master's Thesis

1. **Yukai J.**, Prediction of Carbon Emission in The Pearl River Delta Based on Machine Learning, 2022

Doctoral Dissertation Title

1. **Yukai J.**, A deep learning approach to analyze future urban emission pathways.

RESEARCH ACHIEVEMENTS

Papers

1. Zhisheng L., **Yukai J.**, Xiguan L., et al., Thermography evaluation of defect characteristics of building envelopes in urban villages in Guangzhou, China. Case Studies in Construction Materials 2022, 17: e01373.
2. **Yukai J.**, Ayyoob S., Zhisheng L., Carbon Emission Prediction Models: A Review, Science of the Total Environment. 2024, 927, 172319.

Conference

1. **Yukai J.**, Ayyoob S., Predicting long-term building energy consumption using multiple feature clustering and machine learning: applications in Shanghai, China, the 16th International Conference on Applied Energy. Oral presentation, Nigata, 2024.

Patents

1. Zhisheng L, **Yukai J.**, PM2.5 prediction method and prediction model training method based on hybrid clustering, (No.2022102076495) March 3, 2022. (Chinese invention patent).
2. Zhisheng L, **Yukai J.**, A carbon emission prediction method based on deep learning, (No.202211247187.6), October 12, 2022. (Chinese invention patent).

RESEARCH PROJECTS

1. From October 1,2023 to September 30,2024, I led the SmaSo-X Challenge Project (Project Name. A deep learning approach to analyze future urban emission pathways).
2. From September 30,2021 to September 30,2023, I participated in the soft science research project of Guangdong Provincial Department of Housing and Urban-Rural Development (Project No. 2021-R2-283159).