

Yukai Jin
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Education

2023-26* **Ph.D.**, Social Innovation Science, Hiroshima University, Japan
2020-23 **M.Eng.**, Civil Engineering, Guangdong University of Technology, China
2016-20 **B.Eng.** Civil Engineering, Jiangxi Agricultural University, China

Research Experience

2025 Visiting Assistant Research, Yale University, (Advisor: [Prof. Karen Seto](#))
2024 Research Assistant, Hiroshima University, (Advisor: [Prof. Ayyoob Sharifi](#))
2024-25 Teaching Assistant, Hiroshima University, (Advisor: [Assoc. Prof. Shunsaku Komatsusaki](#))

Awards & Honors

2025 HU Spring Award (JPY¥ 120,000)
2024-26 New Spring Fellowship (JPY¥ 5,700,000)
2023-24 SmaSo-X Scholarship (JPY¥ 150,000)
2022 Graduate Scholarship First (CNY¥ 10,000)
2020 Graduate Scholarship Third (CNY¥ 6,000)

Projects

- P1. **Jin, Yukai & Shao, Y.** *Predicting CO2 Emission Reductions of Electric Vehicles in European Cities*, HU Spring Research Project, Japan Science and Technology Agency (JST), Japan. 2025.
– Amount: JPY¥ 1,000,000
– Roll: PI.
- P2. **Jin, Yukai.** *Predicting CO emissions for global cities from 2021 to 2100*, HU Spring Study Abroad Project, Japan Science and Technology Agency (JST), Japan. 2024.
– Amount: JPY¥ 1,000,000.
- P3. **Jin, Yukai.** *A deep learning approach to analyze future urban emission pathways*, SmaSo-X Challenge Project Research Grant, Hiroshima University, Japan. 2023.
– Amount: JPY¥ 200,000.

*Expected.

Publications

Journal Articles

- J1. **Jin, Yukai** & Sharifi, A. Machine learning for predicting urban greenhouse gas emissions: A systematic literature review. *Renewable and Sustainable Energy Reviews* **215**. <https://doi.org/10.1016/j.rser.2025.115625> (2025).
– Impact Factor = 16.3 (Q1).
- J2. **Jin, Yukai**, Sharifi, A., Li, Z., Chen, S., Chen, S. & Zhao, S. Analyzing particulate matter characteristics of the subway system: Case study of Guangzhou. *Case Studies in Chemical and Environmental Engineering* **10**. <https://doi.org/10.1016/j.cscee.2024.100953> (2024).
- J3. **Jin, Yukai**, Sharifi, A., Li, Z., Chen, S., Zeng, S. & Zhao, S. Carbon emission prediction models: A review. *Science of The Total Environment* **927**. <https://doi.org/10.1016/j.scitotenv.2024.172319> (2024).
– Highly Cited Paper
– Impact Factor = 8.1 (Q1).
- J4. Li, Z., **Jin, Yukai**, Liang, X. & Zeng, J. Thermography evaluation of defect characteristics of building envelopes in urban villages in Guangzhou, China. *Case Studies in Construction Materials* **17**. <https://doi.org/10.1016/j.cscm.2022.e01373> (2022).
– Impact Factor = 6.5 (Q1).

Peer-reviewed Conference Proceedings

- C1. **Jin, Yukai** & Sharifi, A. *Predicting long-term building energy consumption using multiple feature clustering and machine learning: applications in Shanghai, China* in *Proceedings of the 16th International Conference on Applied Energy, 2024, Niigata, Japan* **54** (2024). <https://doi.org/10.46855/energy-proceedings-11538>.

Working papers

- W1. Sharifi, A., **Jin, Yukai** & Aboagye, P. D. *Urban Climate Change Research: Trends, Regional Disparities, and Future Research Needs* @ Urban Climate. 2025.

Presentations

- T1. **Jin, Yukai** & Sharifi, A. *Predicting long-term building energy consumption using multiple feature clustering and machine learning: applications in Shanghai, China*, 16th International Conference on Applied Energy (ICAE2024), Niigata, Japan. 2024.

Teaching

Hiroshima University

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| 2024 | Teaching Assistant, Public Administration and Management (CODE: WMH01501) |
| 2025 | Teaching Assistant, Public Administration and Management (CODE: WMH01501) |

Last updated: April 14, 2025