

# Curriculum Vitae

## Hyun-Jeong Lee

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### Education

(Ph.D. Student) Environmental Management, Graduate School of Environmental Studies, Seoul National University, Present

(M.S.) Oceanography, Chonnam National University, August 2022

(B.S.) Earth System and Environmental Science, Chonnam National University, February 2021

### Research Interest

Deep Learning-Based Inverse Modeling, Deep Learning-based 4DVAR Data Assimilation

### Publications

[1] Ham, Y. G., Lee, H. J., Jo, H. S., Lee, S. G., Cai, W., & Rodrigues, R. R. (2021). Inter-Basin Interaction Between Variability in the South Atlantic Ocean and the El Niño/Southern Oscillation. *Geophysical Research Letters*, 48(15), e2021GL093338. <https://doi.org/10.1029/2021GL093338>

### Presentations

[9] Hyun-Jeong Lee, Dongjin Cho, Yoo-Geun Ham, “*Deep learning based inverse modeling for daily CO estimations*”, The Korean Society of Climate Change Research Conference, Busan, 2025

[8] Hyun-Jeong Lee, Yoo-Geun Ham, “*Unsupervised Deep Learning for Modeling  $B^{-1}$  in Variational Data Assimilation*”, The Fall Meeting of Korean Meteorological Society, Changwon, 2025

[7] Hyun-Jeong Lee, Dongjin Cho, Yoo-Geun Ham, “*Deep learning based inverse modeling for daily CO estimations*”, AOGS (Asia Oceania Geosciences Society) Annual Meeting, Singapore, 2025

[6] Hyun-Jeong Lee, Dongjin Cho, Yoo-Geun Ham, “*Deep learning based inverse modeling for daily CO estimations*”, The Spring Meeting of Korean Meteorological Society, Seoul, 2025

[5] Hyun-Jeong Lee, Yoo-Geun Ham “*Deep learning based inverse modeling for daily CO estimations*” 2024 NUIST-SNU Joint Workshop on Climate and Atmospheric Sciences, Nanjing, Dec, 2024

[4] Hyun-Jeong Lee, Yoo-Geun Ham “*Deep Learning-based Inverse Modeling for Daily Carbon Monoxide (CO) Concentration Prediction Correction*”, The Autumn Meeting of Korean Meteorological Society, Busan, Oct, 2024

[3] Hyun-Jeong Lee, Yoo-Geun Ham, Jeong-Hwan Kim “*Deep learning for detecting anthropogenic fingerprints in daily land surface temperature*”, 2024 AMOS(The Australian Meteorological and Oceanographic Society) 30th Conference, Canberra, Feb, 2024

[2] Hyun-Jeong Lee and Yoo-Geun Ham, Jeong-Hwan Kim. “*Deep learning for detecting anthropogenic fingerprints in daily land surface temperature*”, The Fall Meeting of Korean Meteorological Society, Busan, Oct, 2023

[1] Hyun-Jeong Lee and Yoo-Geun Ham, “*Inter-Basin Interaction Between Variability in the South Atlantic Ocean and the El Niño/Southern Oscillation*”, The Fall Meeting of Korean Meteorological Society, Online, Oct, 2021

### **Awards**

Excellent Presentation Award, The Fall Meeting of Korean Meteorological Society 2024