CHAEHYEONG LEE

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https://sites.google.com/yonsei.ac.kr/hyeong

PBoulder, Colorado, US **\(\)**01(303)-258-6841

RESEARCH INTERESTS

Physical Oceanography

- Upper ocean mixing processes

Ocean Dynamics and Climate Sciences

- Ocean's heat budget and its change

EDUCATION

Ph.D student Aug. 2024 - present

Mar. 2022 - Aug. 2023

Department of Atmospheric and Oceanic Sciences,

University of Colorado Boulder

M.S. in Atmospheric Sciences

Yonsei University, Seoul, Republic of Korea

Advisor: Prof. Hajoon Song

Thesis: The Increasing Trend of Persistence of Sea Surface Temperature Anomalies due to Oceanic Processes

B.S. in Atmospheric Sciences

Mar. 2016 - Feb. 2022 Cumulative GPA 3.92/4.3

Yonsei University, Seoul, Republic of Korea

Graduation ranking (for 4years): 3/33 major GPA 4.03/4.3

EXPERIENCES

Research Experiences

Research Assistant Aug. 2024 - present

Department of Atmospheric and Oceanic Sciences,

University of Colorado Bouder

Aug. 2023 - Jul. 2024 Master's Degree Researcher

Air-Sea Modeling lab., Yonsei University, (PI: prof. Hajoon Song)

Dec. 2020 - Aug. 2023 Research Assistant

Air-Sea Modeling lab., Yonsei University, (PI: prof. Hajoon Song)

Combined Bachelor's-Master's Program

Teaching

Teaching Assistant

- Climate & Civilization (undergraduate course) spring 2023

- Physical Oceanography (undergraduate course) (in English) fall 2022

Others

Military services Apr. 2018 - Nov. 2019

Republic of Korea Army

AWARDS & SCHOLARSHIPS

- Third Prize (Outstanding Thesis Award), Yonsei University

- Full tuition scholarship for merit (18.6M KRW), Yonsei University

- High Honors (for High Academic Performance), Yonsei University

- Jilli Scholarship (2.3M KRW) (for High Academic Performance), Yonsei University

Jul. 2024

Mar. 2022 - Aug. 2023

Feb. 2022

Jun. 2020 - Jun. 2021

PUBLICATIONS

<u>Lee, C.</u>, Song, H., Choi, Y., Cho, A. & Marshall, J. Observed multi-decadal increase in the surface ocean's thermal inertia. *Nat. Clim. Chang.* (2025). https://doi.org/10.1038/s41558-025-02245-w

PRESENTATIONS

Chaehyeong Lee, Hajoon Song, Yeonju Choi, Ajin Cho* & John Marshall, Increasing sea surface thermal memory in the recent decades,

Feb. 2024

Ocean Science Meeting, New Orleans, LA, USA (poster)

<u>Chaehyeong Lee*</u>, Hajoon Song, Ajin Cho & Yong-jin Tak, The increasing trend of persistence of sea surface temperature in the past 40 years,

Dec. 2022

AGU Fall meeting, Chicago, IL, USA (poster)

<u>Chaehyeong Lee*</u>, Hajoon Song, Ajin Cho & Yong-jin Tak, Increasing persistence of sea surface temperature anomaly and duration of marine heatwaves,

Jun. 2022

The Korean Society of Oceanography Spring conference, Jeju, Korea (oral)

TECHNICAL SKILLS

Programming Python

Julia

Software & Tools MITgcm

MATLAB

PATENT

Hajoon Song & Chaehyeong Lee, Evaluation System and Method of persistence of Sea Surface Temperature anomalies using autocorrelation coefficient and Arctangent regressive model, Republic of Korea Patent Application 10-2022-0157159

Nov. 2022