

Ahhyun Lucy Lee

📍 Seoul, Korea ✉ ahhyun724@snu.ac.kr ☎ +821049099247 in Ahhyun Lucy Lee 🌐 yahyune

Education

Seoul National University Integrated M.S. and Ph.D. Program in Brain and Cognitive Sciences Seoul, Korea	Sep '24 – Current
Princeton University Visiting Student Research Collaborator, Department of Psychology Princeton, NJ, USA	Apr '26 – Sep '26
Pohang University of Science and Technology (POSTECH) Bachelor of Science in Life Science, Minor in Computer Science and Engineering Pohang, Korea	Mar '19 – Aug '24
University of Illinois Urbana-Champaign (UIUC) Non-degree Exchange Semester, Department of Psychology Champaign, IL, USA	Jan '23 – May '23

Publications

† First author * Corresponding author

BAT-CLIP: Trimodal Alignment of Brain, Audio and Text Suhyun Kim [†] , Jinmo Han [†] , Danny Dongyeop Han [†] , Ahhyun Lucy Lee, Jewoon Lee, Yonghyeon Gwon, Chun Kee Chung, Saewoong Bahk, Nam Soo Kim, Jiok Cha*	<i>Under review</i>
DIVER-1 : Deep Integration of Vast Electrophysiological Recordings at Scale Danny Dongyeop Han [†] , Yonghyeon Gwon [†] , Ahhyun Lucy Lee [†] , Taeyang Lee, Seongjin Lee, Jubin Choi, Sebin Lee, Jihyun Bang, Seungju Lee, David Keetae Park, Shinjae Yoo*, Chun Kee Chung*, Jiok Cha* Paper Link	<i>Under review</i>
DIVER-0: A Fully Channel Equivariant EEG Foundation Model Danny Dongyeop Han [†] , Ahhyun Lucy Lee [†] , Taeyang Lee [†] , Yonghyeon Gwon [†] , Sebin Lee [†] , Seongjin Lee [†] , David Keetae Park, Shinjae Yoo*, Jiok Cha*, Chun Kee Chung* <i>preprint</i> arXiv:2507.14141	2025
Exploring the diagnostic potential of EEG theta power and interhemispheric correlation of temporal lobe activities in Alzheimer's Disease through random forest analysis. Ahhyun Lucy Lee [†] , Eunjin Hwang* & Jeongeun Hwang* <i>Computers in biology and medicine</i> , 192, 110248. DOI: 10.1016/j.combiomed.2025.110248	2025
NeuroBabyLM: A Benchmark for Brain Alignment in Language Models Trained on Developmentally-Plausible Datasets Ahhyun Lucy Lee [†] , Danny Dongyeop Han [†] , Nikunj Agarwal, Kijung Son, Jiok Cha*	<i>In progress</i>
Few-Shot Deep Learning Reveals Brain-Based Markers of PTSD of Sexually Assaulted Adolescents Seoyoung Lim [†] , Ahhyun Lucy Lee, Ana Carolina Coelho Milani, Jiok Cha*	<i>In progress</i>
Enhancing psychiatric disorder diagnosis: integrating multilabel metadata with contrastive	<i>In progress</i>

learning on T1 structural MRI

Danny Dongyeop Han[†], Ahhyun Lucy Lee[†], Junbeom Kwon, Jiook Cha^{*}

Conferences

DIVER-0 : A Fully Channel Equivariant EEG Foundation Model

Danny Dongyeop Han[†], Ahhyun Lucy Lee[†], Taeyang Lee[†], Yonghyeon Gwon[†],
Sebin Lee[†], Seongjin Lee[†], David Keetae Park, Shinjae Yoo^{*}, Jiook Cha^{*}, Chun Kee Chung^{*}

ICML 2025 Workshop
on GenBio (Spotlight)

[arXiv:2507.14141](https://arxiv.org/abs/2507.14141)



Enhancing psychiatric disorder diagnosis: integrating multilabel metadata with contrastive learning on T1 structural MRI

Danny Dongyeop Han[†], Ahhyun Lucy Lee[†], Junbeom Kwon, Jiook Cha

OHBM2025 (Poster)

Exploring the Diagnostic Potential of EEG Theta Power and Interhemispheric Correlation of Temporal Lobe Activities in Alzheimer's Disease through Random Forest Analysis

Ahhyun Lucy Lee[†], Eunjin Hwang^{*} & Jeongeun Hwang^{*}

SMB 2024 (Poster)

The Impact of Low Motion Smoothness on Auditory Processing

Ahhyun Lucy Lee[†], Jinhee Kim, You Jeong Hong, Kyung Myun Lee^{*}, Kyogu Lee^{*}

ICMPC17 (Oral)

Research & Internship Experience

Internship in Lablup (Opensource cloud computing and AI service company)

Seoul, Korea
Jan '24 – Aug '24

- Conducted research on the topic "Exploring the Diagnostic Potential of EEG Theta Power and Interhemispheric Correlation of Temporal Lobe Activities in Alzheimer's Disease through Random Forest Analysis"

Internship in MARG (Music and Audio Research Group, SNU)

Suwon, Korea
Jul '21 – Aug '23

- Conducted independent research on "Effect of Beat Coordination of Simultaneous Dance Stimuli on Sound Perception in Audiovisual Dance," developing a real-world observation into a novel research question.
- Designed and implemented experimental paradigm using PsychToolbox in MATLAB and performed statistical analysis in R.
- Presented research findings at the 17th International Conference on Music Perception and Cognition (ICMPC17).

Honors and Awards

National Science and Engineering Undergraduate Scholarship

Mar '19 – Aug '24

- Awarded full-ride national scholarship (KOSAF) for future scientists and engineers based on high school academic excellence.
- Maintained scholarship throughout undergraduate program with consistent strong academic performance.

Genexine Research Award

Apr '21

- Awarded to top undergraduate researchers for outstanding achievement.

Language

English (Professional, TOEFL ibt 107/120), Korean (Native)

References

Jiok Cha

Seoul National University, Department of Psychology (affiliated to SNU Interdisciplinary Program in Artificial Intelligence and SNU Brain and Cognitive Sciences Department) / Building 16M, Room 512 / 02-880-8618 / connectome@snu.ac.kr / [lab site](#)

Seung Tae Baek

Pohang University of Science and Technology, University of Science and Technology, Department of Life Sciences /BioTech Center Room 108, POSTECH / 054-279-2360 / sbaek@postech.ac.kr / [lab site](#)

Joonseok Lee

Seoul National University, Graduate School of Data science, Building 43, Room 507/ 054-279-2360 / joonseok@snu.ac.kr / [lab site](#)