

EDUCATION

Korea Advanced Institute of Science and Technology <i>Bachelor of Engineering in Bio and Brain Engineering</i>	Daejeon, South Korea Mar 2013 – Feb 2020
Seoul National University <i>Master of Engineering in Artificial Intelligence</i>	Seoul, South Korea Sep 2021 – Aug 2023
Korea Advanced Institute of Science and Technology <i>Integrated Master-PhD Course in Artificial Intelligence</i>	Daejeon, South Korea Feb 2024 –

EXPERIENCE

Research Intern <i>Department of Brain and Cognitive Sciences, Seoul National University</i>	Feb 2020 – Aug 2020 Seoul, South Korea
<ul style="list-style-type: none">Analyzing MRI image using MATLAB and FreeSurferAnalyzing electroencephalogram (EEG) dataConducting EEG testsConducting Mini-Mental State Examination (MMSE)	
Machine Learning Engineer <i>DeepBio</i>	Sep 2020 – June 2021 Seoul, South Korea
<ul style="list-style-type: none">Predicting the risk of disease occurrence based on the health screening data and single nucleotide polymorphism (SNP) data using machine learningExperiments on knowledge distillation using image data (CIFAR-10 and CIFAR-100) for model compression	
Research Intern <i>Bio-MAX Institute, Seoul National University</i>	June 2021 – Sep 2021 Seoul, South Korea
<ul style="list-style-type: none">Analyzing multi-omics dataReproducing a paper on how to use machine learning for quantitative assessment on the degree of oncogenic de-differentiation	
Natural Language Processing Intern <i>NCSOFT</i>	July 2023 – Oct 2023 Pangyo, South Korea
<ul style="list-style-type: none">Augmentation of Korean-English parallel corpus based on dependency parsingConstruction of common sense knowledge graph based on events extracted from raw textData collection and analysis for developing conversational technologiesAnalysis and process for text data for developing language model and machine translation technologies	
Image Segmentation <i>MeissaPlanet</i>	Oct 2023 – Jan 2024 Seoul, South Korea
<ul style="list-style-type: none">Image segmentation utilizing Segment Anything Model (SAM)Attempts to accurately measure the earthwork volume through image segmentation of satellite images of construction sites	

PUBLICATIONS

- Lee, Dohoon, Jeewon Yang, and Sun Kim. "Learning the histone codes with large genomic windows and three-dimensional chromatin interactions using transformer." **Nature Communications** 13.1 (2022): 6678.
- Lee, Dohoon, et al. "Metheor: Ultrafast DNA methylation heterogeneity calculation from bisulfite read alignments." **PLOS Computational Biology** 19.3 (2023): e1010946.

- Yang, Jeewon, et al. "Deep learning-based survival prediction using DNA methylation-derived 3D genomic information." **ACM-BCB 2023 (Top 10%)**.
- Kweon, Sunjun, et al. "EHRNoteQA: An LLM Benchmark for Real-World Clinical Practice Using Discharge Summaries." **Advances in Neural Information Processing Systems 37** (2024): 124575-124611

PRESENTATIONS

- The 49th Annual Meeting of Korean Cancer Association & 9th International Cancer Conference (June 2023).
 - Title: Deep learning-based survival prediction using DNA methylation-derived 3D genomic information.

TEACHING

- Teaching Assistant
 - Algorithm (Sep. 2022 - Dec. 2022)
 - Machine Learning for Healthcare (Mar. 2025 - Jun. 2025)

LANGUAGE

Korean

Fluent (Native)

English

Fluent (both written and verbal)

- TOEIC: 900 (2023/04/15)