Jeewon Yang

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EDUCATION

Korea Advanced Institute of Science and Technology Daejeon, South Korea
Bachelor of Engineering in Bio and Brain Engineering *Mar 2013 – Feb 2020*

Seoul National University Seoul, South Korea
Master of Engineering in Artificial Intelligence *Sep 2021 – Aug 2023*

Korea Advanced Institute of Science and Technology Daejeon, South Korea
Integrated Master-PhD Course in Artificial Intelligence *Feb 2024 –*

EXPERIENCE

Research Intern Feb 2020 – Aug 2020
Department of Brain and Cognitive Sciences, Seoul National University *Seoul, South Korea*

- Analyzing MRI image using MATLAB and FreeSurfer
- Analyzing electroencephalogram (EEG) data
- Conducting EEG tests
- Conducting Mini-Mental State Examination (MMSE)

Machine Learning Engineer Sep 2020 – June 2021
DeepBio *Seoul, South Korea*

- Predicting the risk of disease occurrence based on the health screening data and single nucleotide polymorphism (SNP) data using machine learning
- Experiments on knowledge distillation using image data (CIFAR-10 and CIFAR-100) for model compression

Research Intern June 2021 – Sep 2021
Bio-MAX Institute, Seoul National University *Seoul, South Korea*

- Analyzing multi-omics data
- Reproducing a paper on how to use machine learning for quantitative assessment on the degree of oncogenic de-differentiation

Natural Language Processing Intern July 2023 – Oct 2023
NCSOFT *Pangyo, South Korea*

- Augmentation of Korean-English parallel corpus based on dependency parsing
- Construction of common sense knowledge graph based on events extracted from raw text
- Data collection and analysis for developing conversational technologies
- Analysis and process for text data for developing language model and machine translation technologies

Image Segmentation Oct 2023 – Jan 2024
MeissaPlanet *Seoul, South Korea*

- 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 Internationanl Cancer Concerence (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)