

Jiwoo Hong

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website : <https://sites.google.com/view/jiwoo-hong?usp=sharing>

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Education

Yonsei University

B.S. in Computer Science, Mathematics

University of California, Berkeley

Exchange Student, Mathematics

Sejong Academy of Science and Arts

Highschool for Gifted Students in Math and Science

Mar 2020 - Present

Cumulative GPA: 4.02/4.30

January 2023 - May 2023

GPA: 3.93/4.00

Mar 2017 - Feb 2020

Research Experience

Yonsei University

Undergraduate Intern (Advisor: Jinkyu Jeong)

Mar 2024 - Present

- Researching about to store key-value pairs in RocksDB

Honors

Merit-based scholarship

2020-2, 2021-2, 2022-1, 2023-1, 2024-1

Outstanding Scholarship for Academic-Industrial Cooperation

2024-1

High Honors

2020-1

Honors

2021-2, 2022-2, 2024-1

Skills

Technical skills

Python, Pytorch, C/C++, Java, Linux, R

Language skills

Native Korean, Fluent English(OPIc IH)

Projects

Exploring Recommendation Systems: A Multi-Modal Approach to GNN-Based Models

Sep 2023 – Dec 2023

Software Capstone Design course

- Revealing that the **order of concatenation** significantly affects the performance of a multimodal recommendation system
- Achieving 66.7% increase in precision and 61.4% increase in NDCG over the baseline by sequentially connecting visual, acoustic, and text modalities

Korean AI competition Finalist

Aug 2023 - Nov 2023

speech recognition : Closer through sound: Specialized speech recognition for the elderly and children

- **Improving recognition quality** from cer 0.424 to cer 0.339
- 10 teams are selected as finalist among 110 teams

Privacy-Preserving Diffusion Models: Integrating Differential Privacy for Secure

Mar 2024 - June 2024

Image Generation

Software Capstone Design course

- Identifying the potential to balance data privacy and model performance using DP-SGD

Conact

Sep 2022 – Dec 2022

Software Engineering course

- Developing a mobile app for clothing recommendations
- implementing an AI model that extracts and combines image and text features using CLIP
- Receiving the **best reviews**

Sleep stage classification based on machine learning, Yonsei University

Jan 2022 – Feb 2022

ABC Lab, Yonsei University

- Conducting Data Preprocessing and research based on Machine learning using neural data

Extracurricular

Global Science Museum Exploration Program

Jan 2019

Teaching Japanese student about Science

Tutor

Engineering Mathematics(2)

Sep 2024 - Present

Teaching peer students about Mathematics

YAI

Sep 2023 - June 2024

Student Club learning about artificial intelligence

Learning about computer vision, reinforcement learning