Jiwoo Hong

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Education

Yonsei University

B.S. in Computer Science, Mathematics

Cumulative GPA: 4.02/4.30

University of California, Berkeley

Exchange Student, Mathematics

GPA: 3.93/4.00

Sejong Academy of Science and Arts

Mar 2017 - Feb 2020

Highschool for Gifted Students in Math and Science

Research Experience

Yonsei University

Mar 2024 - Present

undergraduate Intern (Advisor: Jinkyu Jeong)

Operating system optimization

Honors

 Merit-based scholarship
 2020-2, 2021-2, 2021-2, 2022-1, 2023-1, 2024-1

 Outstanding Scholarship for Academic-Industrial Cooperation
 2024-1

 High Honors
 2020-2

 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

Privacy-Preserving Diffusion Models: Integrating Differential Privacy for Secure Image Generation

 Mar 2024 - June 2024

Software Capstone Design course

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

Exploring Recommendation Systems: A Multi-Modal Approach to GNN-Based Models Sep 2023 – Dec 2023 Software Capstone Design course

- order of concatenation significantly affects the performance of a multimodal recommendation system
- visual, acoustic, and text features are sequentially connected shows a substantial performance improvement of 66.7% in precision and 61.4% in NDCG comparing to baseline

Korean AI competition Finalist

Aug 2023 - Nov 2023

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

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

Conact Sep 2022 – Dec 2022

Software Engineering course

• Develop a mobile app for clothing recommendations

- implement an AI model that extracts and combines image and text features using CLIP
- Received 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

Educate Japanese student about Science

Tutor

 $Engineering\ Mathematics (2)$

Sep 2024 - Present

Sep 2023 - June 2024

Teaching peer students about Mathematics

YAI
Student Club learning about artificial intelligence

Learn about computer vision, reinforcement learning