

## Education

### Korea University

Mar. 2022 – Present

*Undergraduate*

*Seoul, Korea*

- › B.S. in Computer Science and Engineering
- › GPA: 4.49 / 4.5 (for 4 semesters, Major GPA: 4.5/4.5)

## Interests

**Representation Learning and Multimodality** Representation Learning, Multimodal Generative Models

**Computer Vision** Image Translation, Video Tracking, Diffusion, 3D Vision

## Honors & Awards

### Grand Prize, iNThon (Korea University College of Informatics Datathon)

Nov 2023

- › Datathon hosted by Korea University College of Informatics
- › Prize ₩3,000,000 and a chance to train in Silicon Valley
- › Developed a language model for commonsense reasoning with data augmentation and re-ranking method

### President's Award, Korea University

Spring 2023, Fall 2023

- › Award given to an undergraduate student with GPA 4.5/4.5 for two consecutive semesters

### Sencond Place, the 2nd AIKUTHON

Apr 2023

- › Datathon with 10 teams composed of AIKU members.
- › News Summarizing with KoBART, Score: 0.978

### People's Choice Award, 2023 East Asia GDSC Global Hackathon "The Bridge"

Feb 2023

- › Hackathon held in Japan with 54 GDSC members from Korea and Japan
- › Award given to the team that receives the most votes from hackathon participants
- › Cultural facilities recommendation service, Contribution to data collection and search algorithm implementation

### Dean's Award, Korea University

Fall 2022

- › Award given to an undergraduate student with GPA 4.5/4.5 for a semester

## Extracurricular Activity

### AIKU (AI Academy of Korea University)

Sep 2022 – Present

*Technical & Academic Administrator (Jan 2023 – Dec 2023)*

*Seoul*

*President (Dec 2023 – )*

- › Korea University's first undergraduate deep learning academy, participated as a founding member and elected the 3rd president
- › Participated in various projects, sessions, and weekly paper reading seminar

### GDSC KU (Google Developer Student Club, Korea University)

Sep 2022 – Present

*Crew (Sep 2022 – Dec 2022), Core (Jan 2023 – )*

*Seoul*

- › Participated in various AI projects
- › Application of Linear Algebra / AI Session instructor for junior members

### KUCSA (Korea University Computer Science Academy)

Mar 2022 – Present

*Senior*

*Seoul*

- › Participated in various projects and sessions

## 🔗 Projects

### Horang Studio

Aug 2023 - Sep 2023

- › AI profile picture generation service for Korea, Yonsei University student using Pretrained Stable Diffusion, supported by Kakao Brain
- › Contribution to idea research, hyperparameter tuning and prompt engineering

### Development of Image Translation Latent Diffusion Models

Aug 2023 - Oct 2023

- › Finetuned LDMS semantic map conditioned with ControlNet for unsupervised and unpaired synthetic-to-real image translation
- › Industry-University cooperation project with Korea University CVLAB, participated as AIKU Team Leader, contribution to code implementation

### DiscoRF

Mar 2023 - Jun 2023

- › Proposed TensorRF with adversarial loss and real-synthesized image discriminator for better high-frequency details
- › DATA302 (Introduction to Computer Vision and its Application) Term project, Contribution to code implementation, experiments, etc.

### IConZIC

Mar 2023 - Jun 2023

- › Proposed Image-Conditioned Zero-shot Image Captioning Model (IConZiC), for faster convergence and stable generation of image caption by utilizing Gibbs sampling and ViLT
- › COSE461 (Natural Language Processing) Term project, Contribution to idea development, code implementation, experiments, etc.

### MelitsUp & @tune

Sep 2022 - Aug 2023

- › Developed a music recommendation service images provided by users and lyrics, using pre-trained image captioning model (BLIP-2) and sentence embedding models (KoSBERT, KoSimCSE, ...)
- › Team leader, contribution to idea planning, data collection, model implementation, fine-tuning, experiments, prototype development, and implementing prompt generation

### PyTrader

Jul 2022 - Sep 2022

- › Developed an algorithm-based automatic stock trading program
- › Contribution to asynchronous processing, implementation of automated algorithms, and UI improvement

## 🔧 Courseworks

### Computer Science & Data Science

- › Computer Programming (C, Python)
- › Linear Algebra, Probability and Statistics
- › Data Structure, Discrete Mathematics, Algorithms, Computer Architecture
- › Machine Learning, Artificial Intelligence, Deep Learning, Data Science, Advanced Machine Learning
- › Introduction to Computer Vision and its Application, Natural Language Processing
- › Interactive Visualization, Computer Graphics

### Industrial Engineering

- › User Experience and Artificial Intelligence

## ⚙️ Skills

**Programming Languages** Python, C++, JavaScript(Beginner), Dart(Beginner)

**Frameworks & Tool** PyTorch, Flutter, Git, Figma

**Languages** Korean(Native), English(Proficient)