

Computer Science and Electrical Engineering | Undergraduate Student @ HGU, South Korea

**Areas of Interest:** Vision understanding, Computer Vision/Graphics, Multi-Modal AI

## EDUCATION

### B.S. AI Computer Science Engineering Major, Handong Global University

GPA: 4.14/4.5 (Overall), 4.26/4.5 (Major)

Advisor: Injung Kim

**Pohang, Korea**

Feb 2019 — Aug 2025

### McLean High School

Diploma with High Honors

**McLean, VA, USA**

Aug 2015 — Aug 2018

## RESEARCH

### Undergraduate Research Engineer

- DLLAB(Deep Learning LAB) @ Handong Global University
- Enhancing dash cam video image quality for license plate identification
- Dash cam video recognition and de-identification for privacy protection
- Advised by Professor In-Jung Kim

**Pohang, Korea**

Aug 2023 — Jan 2025

## PUBLICATIONS

1. Kihyun Na, Junseok Oh, **Youngkwan Cho**, Bumjin Kim, Sungmin Cho, Jinyoung Choi, and InJung Kim

“MF-LPR2 : Multi-frame license plate image restoration and recognition using optical flow”

(*Computer Vision and Image Understanding*, 2025)

## AWARDS & HONORS

- **National Science & Technology Scholarship**
  - Scholarship to support undergraduates with strong academic performance in science and engineering, with the purpose of developing future leaders in those fields
- **Academic Excellence Scholarship**
  - Merit-based Scholarship
- **SW-Mileage Scholarship**
- **Academic Excellence Scholarship**
  - Admission with highest distinction

**Aug 2023 — Jan 2025**

**Aug 2022 — Aug 2024**

**Jan 2022 — Jul 2024**

**Jan 2019**

## PROJECTS

### Multi-Image Super-Resolution & Restoration

- Deep Learning LAB @ Handong Global University
- Deep Learning based Multi Frame Image Restoration using Optical Flow
- Advised by Professor In-Jung Kim

**Aug 2023 — Jan 2025**

**Aug 2023 — Dec 2023**

### Semantic Segmentation and Object Recognition

- Deep Learning LAB @ Handong Global University
- Human face & License plate recognition and De-identification within dash cam video
- Advised by Professor In-Jung Kim

## EXPERIENCE

### PRINCIPAL SUBJECTS

**Mar 2023 — Dec 2024**

HGU, Korea

- GEK10082 / Linear Algebra
- ITP20010 / Computer Vision
- ITP20002 / Discrete Mathematics
- ECE30007 / Introduction to AI Project
- ECE30021 / Operating Systems
- ECE30086 / Computer Networks
- ECE30087 / Probability and random processes

### TA Experience

**Aug 2024 — Dec 2024**

HGU, Korea

- ECE10020 / Introduction to Engineering Design

### IT Overseas Volunteer Club Member

**Aug 2023 — Jan 2024**

HGU, Korea

- Code Cross Club

### PPS Camp Participant

**Jan 2023, Aug 2023, Jan 2024**

HGU, Korea

- Regularly solving code problems during university summer and winter breaks

### Pytorch Camp Participant (held by Prof. In-Jung kim)

**Dec 2022 — Jan 2023**

HGU, Korea

- Learning basic PyTorch concepts and basic Python code utilizing PyTorch

### Machine Learning Camp Participant (held by Prof. Charmgil Hong)

**Aug 2022**

HGU, Korea

- Learning the concepts and applications of Machine Learning

## TECHNICAL SKILLS

<b>Language</b>	Python, C++, Java	3 years
	JS, HTML, CSS, Flutter, SQL, Assembly	4 months
<b>Frameworks</b>	PyTorch, OpenCV	1.5 year
<b>TOEFL, TOEIC</b>	100, 980	