

CHOI HYUN

✉ chlgusla1@gmail.com ☎ +82-10-5575-7049

📍 51, Sinchon-ro 11-gil, Seodaemun-gu, Seoul, Republic of Korea

EDUCATION

Yonsei University, Seoul, Korea

Candidate for B.S in Electrical and Electronic Engineering

Cumulative GPA: 3.66 / 4.5

Mar 2020 - Present

Expected graduation date: Aug 2026

RESEARCH INTERESTS

I study both the foundations and applications of AI, with a focus on systems that generalize across tasks and domains. While I value rigorous theory, I am especially driven by practical research that delivers real-world impact in robotics, healthcare, and autonomous systems.

RELEVANT COURSEWORK

Currently: Optimization Theory and Algorithms; Computer Vision; Distributed and Federated Learning

Completed: Deep Learning Lab (A+); NLP and ChatGPT (A+); Intro to Deep Learning and Applications (A+); Reinforcement Learning (A-); Data Structures and Algorithms (A-); Understanding and Applications of AI (A-); Introduction to Statistics (A0); Generative Models (P)

WORK EXPERIENCE

AI Intern, Genoray FlexLab (Medical Imaging Company)

Jun 2025 – Aug 2025

- Fine-tuned Segment Anything Model (SAM) for dental X-ray segmentation.
- Developed LoRA-based tuning strategies and integrated results into a semi-automatic labeling tool.

PROJECTS

CIFAR-100 Long-Tail Classification Project

Jun 2025 – Jul 2025

Course Project – DL project

- Built a hierarchical scheme clustering 100 classes into 20 superclasses with $L_{\text{class}} + \alpha \cdot L_{\text{superclass}}$.
- Applied two-stage retraining with class-balanced sampling and LDAM;
- Results:* Overall Top-1 48.8% \rightarrow 75.7%, Tail 36.6% \rightarrow 70.3%.

Speed Estimation from Road Scene Sequences

Nov 2024

Course Project – Introduction to Artificial Intelligenc, Yonsei University

- 3D-CNN + LSTM model for 6-frame sequences; ablations on dropout, LR schedulers, test-time normalization; $MAE = 1.82$.

NextGen Intelligent Drone Maintenance System

Apr 2024 – Jun 2024

Project Member – KG KAIROS

- Participated in an industry-academic collaborative project focusing on intelligent drone maintenance.
- Responsible for designing and operating an AGV (Automated Guided Vehicle) system for transporting drones to maintenance stations.
- Contributed to system integration between the AGV and drone diagnostic modules for efficient maintenance workflow.

CV-based Object Sorting Robot System

Apr 2024

Personal Project – Vision-Guided Robotic Conveyor System

- End-to-end pipeline: OpenCV detection + color/orientation classification; PLC conveyor (Modbus RTU) + My-Cobot grasp/stack.
- Angle-aware grasping via HSV segmentation and contour geometry.

AWARD & SCHOLARSHIP

- Team Project Excellence Award – KG KAIROS

Awarded 2nd place out of 43 teams in the industry-academic challenge for the project

“Next-Gen Intelligent Drone Maintenance System”, Jun 2024

SKILLS & PROFICIENCY

Programming: Python (Advanced)

ML/DL: PyTorch (Advanced), TensorFlow (Basic)

Tools: Linux, Notion

Languages: English (Advanced; TOEIC Speaking IH, Aug 2024), Korean (Native)

EXTRA-CURRICULAR

- Reinforcement Learning Tutoring (Yonsei University)

Mar 2025 – Jun 2025

Received tutoring covering key reinforcement learning algorithms and implementation techniques

- SK hynix Volunteer Program

May 2024 – Dec 2024

Mentored middle and high school students in basic Python programming and algorithmic thinking.

- Assistant Teacher at a Math Academy

Jan 2020 – Jun 2021, Jan 2023 – Dec 2023

Supported teaching and student management in high school math curriculum.