Kyungseo **Kwon**

JUNIOR, DEPARTMENT OF ARTIFICIAL INTELLIGENCE, YONSEI UNIVERSITY

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Education

Yonsei University   *Seoul, S.Korea*
B.S. IN ARTIFICIAL INTELLIGENCE   *Mar. 2022 - Expected Feb. 2026*
- GPA: 3.74 / 4.3 (Overall), 3.77 / 4.3 (Major)

Research Interests

- **Medical Imaging with Deep Learning**
- **Computer Vision**: NeRF, Liif
- **Reinforcement Learning**: Skill-prior learning
- **Multimodal Learning**

Experience

2024 CS / AI Yonsei - USC Summer Program   *California, USA*
ONE OF 6 REPRESENTATIVES OF THE CS/AI UNDERGRADUATE STUDENTS   *Jul. 2024 - Aug. 2024*
- Students were chosen by professors through English interview and academic competency.
- Attended AI and data science lectures in a two-week program at the University of Southern California (USC), supported by national funding.

Medisys Lab, Yonsei University (Advisor: Prof. Jongduk Baek)   *Seoul, S.Korea*
UNDERGRADUATE RESEARCH INTERN   *Sep. 2023 - PRESENT*
- Have been reading and summarizing papers of Computer Vision and Medical Image field.
- Learning GPU acceleration by CUDA programming and managing the lab's GPU server.
- Recently studying to apply attention mechanism to sinogram data with my mentor, Minwoo Yu.

Course & Personal projects

Yonsei Time Table Service (Individual, Link)   *Seoul, S.Korea*
FROM CCO4150: SW/AI BUSINESS DESIGNING   *May. 2024 - Jun. 2024*
- Developed a user-friendly time table creation service which allows students to create schedules with no class days and find courses based on available mileage.
- Gained experience in project design, product testing and evaluation (MVT, MVP), debugging (Postman), and full-stack web development (HTML, JavaScript, CSS).
- Achieved the 2nd highest score out of 42 students in final evaluation.

GenCruit Service (Team)   *Seoul, S.Korea*
YONSEI 1ST GENAI COMPETITION   *Oct. 2023 - Dec. 2023*
- Developed a web service (GenCruit) using GPT-4 and DALL-E APIs to generate recruitment posters for business owners.
- Performed prompt engineering and designed the web interface by Figma.
- Won the silver medal among 6 teams in final.

Low-Dose CT Scan Denoising using Neural Networks (Individual)   *Seoul, S.Korea*
ASSIGNMENT TO EVALUATE UNDERGRADUATE INTERNS OF MEDISYS LAB   *Aug. 2014 - Apr. 2016*
- Applied UNet, Red-CNN, and Uformer architectures at low-dose CT scans for denoising.
- Learned how to make high-quality PPT (add Region of Interest (ROI), etc.), image quality metrics and their differences (PSNR, SSIM), and side effect of using different upsampling methods.

Hangeul OCR Model (Team, Link)
Seoul, S.Korea
FROM AAI3201: INTRODUCTION TO DEEP LEARNING THEORY AND PRACTICE
Nov. 2023 - Dec. 2023
- Made a Hangeul OCR model trained at the grapheme-level that can accurately detect full characters, due to their fixed positions.
- Improved upon previous model that were trained only with commonly-used Hangeul characters, by also detecting uncommon ones.

Bone Segmentation using UNet (Team)
Seoul, S.Korea
ASSIGNMENT TO EVALUATE UNDERGRADUATE INTERNS OF MEDISYS LAB
Oct. 2023 - Dec. 2023
- Made bone segmentation model using UNet structure and the Mayo dataset.
- Got the best result for both qualitative and quantitative analysis among three teams. (4 students each)

Kimchi Dataset Classification (Individual, Link)
Seoul, S.Korea
FROM AAI3201: INTRODUCTION TO DEEP LEARNING THEORY AND PRACTICE
Oct. 2023 - Nov. 2023
- Made 11 class Kimchi image classifier using dataset from AIHub, both in MLP and CNN.
- Focused on getting basic abilities: learned how to build neural network, compared the effect of using various loss functions and regularizations.

Honors & Awards

2023 **Silver Prize** Yonsei 1st GenAI Competition *Seoul, S.Korea*
Won the silver medal among 6 teams in final.

2023 **Best Tutor Award (OOP)** 2023-1 Yonsei Eagle Tutoring Program *Seoul, S.Korea*
28 out of 78 teams got awarded. Evaluated by tutees' grade and steadiness.

Program Committees

2024 **Program Director** Freshman Tutoring Program (Department of AI) *Seoul, S.Korea*
2023 **Program Director** Freshman Tutoring Program (Department of AI) *Seoul, S.Korea*

Extracurricular Activities

Yonsei GongSaRang (BallLove) Basketball Club
Seoul, S.Korea
CLUB MEMBER
Sep. 2024 - PRESENT
- Playing basketball at gym in Yonsei University every saturday morning.

AI Freshman Tutoring Program, Yonsei University
Seoul, S.Korea
TUTOR & PROGRAM DIRECTOR
Jul. 2023 - PRESENT
- Established and currently working as the first student tutor in AI department.
- Teaching major courses: OOP, Machine Learning, Probability to Freshmen and Sophomores during summer and winter break.
- Tutors only can teach courses in which they've got A.

Teaching & Learning Innovation Center, Yonsei University
Seoul, S.Korea
EAGLE TUTOR
Mar. 2023 - PRESENT
- Teaching OOP every first semester to students with a submajor in Computer Science.

MintonIs Badminton Club
Seoul, S.Korea
CLUB MEMBER
Jan. 2023 - Oct. 2023
- Played badminton (doubles) with people from various universities every weekend.

Skills

Computer Languages
- C, C++, Python, Kotlin, JavaScript, HTML, CSS, MATLAB

Language

- Korean: Native
- English: Intermediate (TOEIC 895 / 990)

Ability & Hobby

- Flute: Played in Daeduk youth orchestra for 3 years (Nov. 2012 - Oct. 2015)
- Soccer: Center back player of A - AIDA team (department of AI, Mar.2022 - PRESENT)