

RESEARCH INTERESTS

Computer Vision, Computational Photography, Machine learning, Robotics

EDUCATION

Korea University

B.S. Computer Science and Engineering

Seoul, South Korea

03/2022 - 08/2023

- Overall GPA : 4.33 / 4.5 (98.1 / 100)
- Got an A+ on Artificial intelligence, Introduction to convex optimization, Theory of computation, Discrete Mathematics, Special lecture for computer science, Computer Architecture

Korea University

B.Eng. Software Technology and Enterprise Program

Seoul, South Korea

03/2015 - 02/2022

- Major GPA : 4.15 / 4.5 (96.0 / 100)
- Military service, 09 2016 - 06 2018

Korea University

B.Eng. Chemical and Biological Engineering

Seoul, South Korea

03/2015 - 02/2022

WORK AND RESEARCH EXPERIENCE

Electronics & Telecommunications Research Institute (ETRI)

Research Intern @Visual Intelligence Research Section

Daejeon, South Korea

07-08/2021, 01-02/2022, 07-08/2022

- Participated in the DeepView Project, devise the new network called RDID-GAN to reconstruct de-identified image dataset using attention. Increased bbox and keypoint detection rate.
- Participated in the CAML Project, proposed the novel encoder to reconstruct 3D portrait images from 2D image dataset.

Computer Vision Laboratory, Korea University

Research Intern

Seoul, South Korea

09/2020 - 06/2021

- **Depth estimation:** Implement monocular depth estimation model using U-net architecture combined with depth network and pose network
- **3D reconstruction:** Reconstruct 2D image to 3D image using a transformer and SMPL

CONFERENCE & JOURNAL PUBLICATIONS

Conference publications

- Youngjoo Jo, **Wonseok Oh**, Jaegul Choo. 2023. Encoding 2D to 3D: EG3D Encoder for portrait image *IEEE Winter Conference on Applications of Computer Vision 2023 (WACV 2023)* (under review)
- **Wonseok Oh**, Kangmin Bae, Yuseok Bae. 2021. Visualization Comparison of GAN for Reconstructing De-identified Image Dataset using Attention. *Korea Software Congress 2021 (KSC 2021)* (domestic)

Journal publications

- **Wonseok Oh**, Kangmin Bae, Yuseok Bae. 2021. RDID-GAN: Reconstructing a De-identified Image Dataset to Generate Effective Learning Data. *Journal of Korean Institute of Information Scientists and Engineers 2021 (JOK 2021)* (domestic)

PATENTS

- Kangmin Bae, **Wonseok Oh**, "Method and image processing system to generate training data" Us Patent, Korean Patent (2021) (Patent Application)
- **Wonseok Oh**, "Dual Tube Wheel" Korean Patent Registration No. 1020110004742, (2011, granted)
- **Wonseok Oh**, "Mask that make used Hanji" Korean Patent Registration No. 1020100035593, (2010, granted)

AWARDS AND SCHOLARSHIPS

Semester High Honors

Korea University

2022

Excellence Mentor award_Personal Assistance service

Korea University

2022

Nation Work Scholarships(Government)

Korea University

2022

Special Scholarship for leaders

Korea University

2019, 2021, 2022

Work-Study Scholarship

Korea University

2019

SKILLS

Languages: English, Korean

Programming languages: Python, C/C++, Matlab, Kotlin

Documentation: Markdown, L^AT_EX

ML Tools: Pytorch, Tensorflow, Keras

EXTRACURRICULAR ACTIVITIES

Korea University Computer Club

Seoul, South Korea

Leader

Aug/2019 – present

- Make a club network and Make a website club website to operate the schedule of various sessions
- Open algorithm session for club members to develop the ability to implement data structures and coding ability

Korea University Innovation Center for Engineering Education

Seoul, South Korea

Regular Member

Sep/2020 – Feb/2022

- Organize a program for teenagers who are interested in scientific experiments
- Explain and help teenagers with the scientific facts and methods of the experiments

Korea University Language Exchange Division

Seoul, South Korea

Leader

Mar/2019 – Fed/2020

- Managed the various language clubs in Korea University merge and organized a language exchange program once a week
- Made the Korean reading class for foreign students who wants to understand Korean movies and K-pop

REFERENCES

Seungryong Kim

assistant professor

Email : seungryong_kim@korea.ac.kr

Korea University

Seongbin Park

professor

Email : hyperspace@korea.ac.kr

Korea University

Yongju Lee

Principal Researcher

Email : yongju@etri.re.kr

ETRI

Kimin Yun

Senior Researcher

Email : kimin.yun@etri.re.kr

ETRI