Wonseok Oh

prbs5kong.github.io

Email: 5kong@korea.ac.kr September 4, 2022

#### RESEARCH INTERESTS

Computer Vision, Computational Photography, Machine learning, Robotics

**EDUCATION** 

Korea University

Seoul, South Korea

03/2022 - 08/2023

B.S. Computer Science and Engineering

- 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

Seoul, South Korea

B.Eng. Software Technology and Enterprise Program

03/2015 - 02/2022

- Major GPA : 4.15 / 4.5 (96.0 / 100)

- Military service, 09 2016 - 06 2018

Korea University

Seoul, South Korea

B.Enq. Chemical and Biological Engineering

03/2015 - 02/2022

Work and Research Experience

Electronics & Telecommunications Research Institute (ETRI)

Daejeon, South Korea

Research Intern @Visual Intelligence Research Section

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

Seoul, South Korea

Research Intern

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, <u>Wonseok Oh</u>, 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, <u>Wonseok Oh</u>, "Method and image processing system to generate training data" Us Patent, Korean Patent (2021) (Patent Appication)
- Wonseok Oh, "Dual Tube Wheel" Korean Patent Registration No. 1020110004742, (2011)
- Wonseok Oh, "Mask that make used Hanji" Korean Patent Registration No. 1020100035593, (2010)

### 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, LATEX

ML Tools: Pytorch, Tensorflow, Keras

## EXTRACURRICULAR ACTIVITIES

## Korea University Computer Club

Seoul, South Korea

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

Leader

Leader

Seoul, South Korea 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 Email: seungryong\_kim@korea.ac.kr

assistant professor Korea University

Seongbin Park Email: hyperspace@korea.ac.kr

professor

Yongju Lee

Korea University
Email: yongju@etri.re.kr

Principal Researcher ETRI

Kimin Yun Email : kimin.yun@etri.re.kr
Senior Researcher ETRI