Woojung Han
Ph.D. Candidate @ MICV Lab, YONSEI

📞 +82 1037435016 ✉ dnwjddl@yonsei.ac.kr 🏠 Seoul, Korea

🎓 Google Scholar ✒ Blog GitHub in LinkedIn 𝕏 X/Twitter

Education

Dept. of Computer Science *Yonsei University*   **Seoul, Korea** *2022-Present*
Relevant Courses: Advanced image processing, Medical image analysis, Deep learning for natural language processing, Generative model and data synthesis, Machine learning and pattern recognition.
Dept. of Human Intelligence and Information Engineering *Sangmyung University*   **Seoul, Korea** *2017-2022*
Relevant Courses: C Programming, Python, Data Structure, Linear Algebra, Discrete Mathematics, Probability and Statistics, Algorithm, Big Data Analysis, Machine Vision Programming, Bio Sytstem, Open API Programming.

Conference (* Equal contribution)

1. Spatial Transport Optimization by Repositioning Attention Map for Training-Free Text-to-Image Synthesis, **Woojung Han**, Yeonkyung Lee, Chanyoung Kim, Kwanghyun Park, Seong Jae Hwang, <u>CVPR 2025</u>.
2. Distilling Spectral Graph for Object-Context Aware Open-Vocabulary Semantic Segmentation, Chanyoung Kim, Dayun Ju, **Woojung Han**, Ming-Hsuan Yang, Seong Jae Hwang, <u>CVPR 2025</u>. (paper)
3. EAGLE: Eigen Aggregation Learning for Object-Centric Unsupervised Semantic Segmentation, Chanyoung Kim*, **Woojung Han***, Dayun Ju, Seong Jae Hwang, <u>CVPR 2024</u>. (HIGHLIGHT, top **2.8%** of submitted papers.) (paper)(project page)
4. Advancing Text-Driven Chest X-Ray Generation with Policy-Based Reinforcement Learning, **Woojung Han***, Chanyoung Kim*, Dayun Ju, Seong Jae Hwang, <u>MICCAI 2024</u>. (EARLY ACCEPT& SPOTLIGHT, top **3.4%** of submitted papers.) (paper)(project page)
5. Effect of Time Window Size for Converting Frequency Domain in Real-Time Remote Photoplethysmography Extraction, Yu Jin Shin, **Woojung Han**, Kun Ha Suh & Eui Chul, *IHCI 2021*. (paper)

Journal

1. CoBra: Complementary Branch Fusing Class and Semantic Knowledge for Robust Weakly Supervised Semantic Segmentation, **Woojung Han**, Seil Kang, Seil Kang, Kyobin Choo, Seong Jae Hwang, <u>Pattern Recognition</u> [Impact Factor: 7.5], 2024. (elsevier) (paper)(project page)

Workshop Publications (* Equal contribution)

1. EAGLE: Eigen Aggregation Learning for Object-Centric Unsupervised Semantic Segmentation, Chanyoung Kim*, **Woojung Han***, Dayun Ju, Seong Jae Hwang, *CVPRW 2024*. *Casual and Object-Centric Representations for Robotics*

Professional Experience

M.S./Ph.D Student,   *(Medical Imaging and Computer Vision Lab)*   **Yonsei University, Korea** *03/2022 - present*
- Weakly Supervised Semantic Segmentation (WSSS).
- Unsupervised Semantic Segmentation (USS).
- Diffusion Models for Medical Imaging.

Bootcamp,   *(Google Developer)*   **Seoul, Korea** *06/2022 - 09/2022*
Google Machine Learning Bootcamp 2022.

Intern,   *(Algorithm Machine Intelligence Lab)*   **POSTECH, Korea** *06/2021 - 08/2021*
- Efficient human behavior understanding.
- Human mesh Recovery.

Intern,   *(Korea University Computer Vision Lab)*   **Korea University, Korea** *03/2021 - 06/2021*
- Hand Grasp Type Estimation.

Intern,   *(Pattern Recognition Lab)*   **Sangmyung University, Korea** *09/2018 - 11/2020*
- Real-time Remote photoplethysmography extraction.

Professional Services

Honors & Awards

- Lip Reading (2nd Prize) (Dec. 2021) - Graduation Project

- Medical Segmentation (3rd Prize) (Dec. 2021) - MAIC Surgical Instruments Segmentation

- Health Care Body Position (3rd Prize) (Feb. 2021) - Korea SW Central University Hackton

- Music Recommendation (4rd Prize) (Dec. 2020) - SM AI Competition

- Image Inpainting (2nd Prize) (Dec. 2020) - SM AI Competition

Certifications

- Tensorflow Developer Certificate (July. 2022) - Tensorflow

- YONSEI Medical Scientist Training Program (July. 2023) - Yonsei University

- Summer Program in University of Southern California (Aug. 2023) - [USC](USC)

Teaching Experience

Teacher *Samsung*
DX training, AI Project.

Teacher *Samsung*
AI, DX, Perceptron, AI Project.

Coach *NAVER+MOBULABS*
Basic of AI, AI Team Project Coach.

Coach *NAVER+MOBULABS*
Basic of AI, AI Team Project Coach.

Coach *NAVER+MOBULABS*
Basic of AI, AI Team Project Coach.

Coach *KT AIVLE*
Basic of AI, Machine Learning, Deep Learning.

Coach *LG Academy AI Camp*
Classification, RNN, Text Classification, Segmentation.

Outsourcing

- FaceSwap

Skills

- **Python**, Pytorch, Keras, Tensorflow.

- C, C++, Java, MATLAB.