Chanyoung Kim

Curriculum Vitae

chanyoung@yonsei.ac.kr | linkedin.com/in/chanyoung-kim| github.com/kochanha

RESEARCH INTERESTS

Machine learning, Deep learning, Computer vision Semantic Segmentation, Multi-modal representation learning

EDUCATION

Yonsei University

M.S. in Artificial Intelligence

Advisor: Prof. Seong Jae Hwang

Sejong University

B.S. in Intelligent Mechatronics Engineering

(2 years of absence for mandatory military service)

Seoul, Republic of Korea Sep. 2023 – Present

Seoul, Republic of Korea

Mar. 2017 - Feb. 2023

Publications (* Equal contribution)

[1] W.Han*, C.Kim*, D.Ju, Y.Shim, S.J.Hwang, "Advancing Text-Driven Chest X-Ray Generation with Policy-Based Reinforcement Learning", Medical Image Computing and Computer Assisted Intervention (MICCAI) 2024 (Early Accepted, top 11% of submissions) [PDF]

[2] C.Kim*, W.Han*, D.Ju, S.J.Hwang, "EAGLE: Eigen Aggregation Learning for Object-centric Unsupervised Semantic Segmentation", *IEEE/CVF Conference on Computer Vision and Pattern Recognition* (CVPR) 2024 (Hightlights, top 2.8% of submissions) [PDF]

[3] W.Roh, G.Chang, S.Moon, G.Nam, C.Kim, Y.Kim, S.Kim, J.Kim, "ORA3D: Overlap Region Aware Multi-view 3D Object Detection", The British Machine Vision Conference (BMVC), 2022 [PDF]

[4] S.H.Lee, G.Oh, W.Byeon, C.Kim, W.J.Ryoo, H.Choi, S.H.Yoon, J.Bae, J.Kim, S.Kim, "Sound-Guided Semantic Video Generation", European Conference on Computer Vision (ECCV) 2022 [PDF]

[5] S.H.Lee, W.Roh, W.Byeon, S.H.Yoon, C.Kim, J.Kim, S.Kim, "Sound-Guided Semantic Image Manipulation", IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2022 [PDF]

Workshop Publications

[6] S.H.Lee, N.Lee, C.Kim, W.Ryoo, J.Kim, S.Yoon, S.Kim "Audio-Guided Image Manipulation for Artistic Paintings", NeurIPS 2022-Machine Learning for Creativity and Design Workshop

PREPRINTS (* Equal contribution)

[7] S.H.Lee*, C.Kim*, W.Byeon, S.H.Yoon, J.Kim, S.Kim, "LISA: Localized Image Stylization with Audio via Implicit Neural Representation", arXiv 2022 [PDF]

RESEARCH EXPERIENCE

Medical Imaging & Computer Vision Lab @ Yonsei University

Advisor: Prof. Seong Jae Hwang

- Semantic Segmentation
- Multi-modal Image Synthesis

Computer Vision Lab @ Korea University

Advisors: Prof. Jinkyu Kim and Prof. Sangpil Kim

- Multi-modal Representation Learning (joint research with Dr. Wonmin Byeon @ NVIDIA Research)
- 3D Computer Vision with Event Camera (joint research with Dr. Giljoo Nam @ Meta Reality Lab)

Mar. 2023 – Present

Feb. 2021 - Dec. 2022

ACADEMIC SERVICE

Conference Reviewer

- European Conference on Computer Vision (ECCV) 2024
- IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR) 2024
- IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) 2023

TEACHING EXPERIENCE

Yonsei University

- Teaching Assistant: "Deep Learning Introduction and Applications" (Spring 2024)
- Teaching Assistant: "Computer Vision", (Fall 2023)

Elice - Samsung Electronics

Aug. 2023

• Lecturer: Data Analysis and AI Course for Samsung Electronics Executives and Employees

Elice - LOTTE Corporation

Apr. 2023

• Teaching Assistant: Python Course for LOTTE Group Executives and Employees

LG CNS - Korea University

Jul. 2021, Mar. 2022

• Teaching Assistant: Anomaly Detection Course for LG CNS Executives and Employees

Project Experiences

Personal Privacy Free Autonomous Flight Drone Platform with Event Vision

Jul. 2021 - Feb.2022

• Funded by National Research Foundation of Korea (NRF) and George Washington University

Real-time Object Detection for Embedded Systems on Drones

Sep. 2021 – Dec. 2021

• Proposed a light-weight object detector for drone vision.

Ultra-Light Weight Image Classification Model for Edge Computing Systems

Feb. 2021 – Jun. 2021

- Developed light weight food image classification model for oven.
- Funded by GE Appliances a Haier company

Awards & Honors

LAB Start-up 2022	1st Place Feb. 2022
Korea University π -ville Demo Day 2021	2nd Place Sep. 2021
Sejong Scholarship for Outstanding GPA	<i>3rd Place</i> Sep. 2021
2020 International Robot Contest	5th Place Nov. 2020
Seoul PM Hackathon	5th Place Jun. 2019
XXIII Pyeongchang Olympic Winter Games	Medal of Contribution Feb. 2018

SKILLS

Programming

- Fluent in Python, Deep Learning Frameworks (Pytorch, Pytorch Lightning, TensorFlow), Python Libraries (Diffusers, Hugging Face, Scikit-Learn, etc.), Shell Script, Git, LATEX
- Have foundation for C, Photoshop

Languages

- Native speaker in Korean
- Fluent in English (2 years at Mckinley School, Pasadena, CA, United States (2006 2008))