Chanyoung Kim

CONTACT Information ↑ Homepage: https://kochanha.github.io/

in LinkedIn: https://www.linkedin.com/in/chanyoung-kim/

E-mail: chanyoung@yonsei.ac.kr, chanyoung@ieee.org

RESEARCH INTERESTS

Visual Foundation Models

- Aligning vision-language models for generalizable visual understanding (CVPR 2025)
- Unsupervised spectral learning of image representations (CVPR 2024, 2025)
- Task-specific adaptation of foundation model features (CVPR 2024, 2025)

Generative Models

- Controllable text-to-image synthesis (CVPR 2025; MICCAI 2024, 2025)
- Audio-visual representation-guided image generation (CVPR 2022; ECCV 2022)

EDUCATION

M.S. & Ph.D. in Artificial Intelligence, Yonsei University, Seoul, Korea 2023–2028 Advisor: Prof. Seong Jae Hwang

- Collaborating with Prof. Ming-Hsuan Yang (UC Merced & Google DeepMind)
- Collaborating with Dr. Roberto Alcover-Couso (Amazon)

B.S. in Intelligent Mechatronics Eng., Sejong University, Seoul, Korea 2017–2023

RESEARCH EXPERIENCE

Medical Imaging & Computer Vision Lab, Yonsei University

Graduate Research Assistant

2023-Present

Computer Vision Lab, Korea University

Undergraduate Research Intern

2021 - 2022

Collaborated with Dr. Wonmin Byeon (NVIDIA Research)

ACADEMIC SERVICE

Conference (Workshop) Organizing Committee

MICCAI Student Board - Local Student Liaison Officer

- Organizing workshops, webinars, and conference events for MICCAI 2025
- Check out our events [HERE]

Conference Reviewer

- CVPR 2024, 2025 - NeurIPS 2025 - ECCV 2024

Conference Publications

Chanyoung Kim, Dayun Ju, Woojung Han, Ming-Hsuan Yang, Seong Jae Hwang, "Distilling Spectral Graph for Object-Context Aware Open-Vocabulary Semantic Segmentation", CVPR 2025 [PDF] (Short version at CVPRW 2025 - Transformers for Vision)

Chanyoung Kim*, Dayun Ju*, Jinyeong Kim, Woojung Han, Roberto Alcover-Couso, Seong Jae Hwang, "Pathology-Aware Adaptive Watermarking for Text-Driven Medical Image Synthesis", MICCAI 2025 (Early Acceptance, AR \leq 9%) [PDF]

Chanyoung Kim*, Woojung Han*, Dayun Ju, Seong Jae Hwang, "EAGLE: Eigen Aggregation Learning for Object-Centric Unsupervised Semantic Segmentation", CVPR 2024 (Highlight, AR $\leq 2.8\%$) [PDF] (Short version at CVPRW 2024 - Causal and Object-Centric Representations for Robotics)

Woojung Han*, Chanyoung Kim*, Dayun Ju, Yumin Shim, Seong Jae Hwang, "Advancing Text-Driven Chest X-Ray Generation with Policy-Based Reinforcement Learning", MICCAI 2024 (Spotlight, AR $\leq 3.4\%$) [PDF]

Woojung Han, Yeonkyeong Lee, **Chanyoung Kim**, Seong Jae Hwang, "Spatial Transport Optimization by Repositioning Attention Map for Training-Free Text-to-Image Synthesis", **CVPR** 2025 [PDF] (Short version at **CVPRW** 2025 - Generative Models for Computer Vision)

Seung Hyun Lee, Gyeongrok Oh, Wonmin Byeon, **Chanyoung Kim**, Wonjeong Ryoo, Sang Ho Yoon, Hyunjun Cho, Jihyun Bae, Jinkyu Kim, Sangpil Kim, "Sound-Guided Semantic Video Generation", *ECCV* 2022 [PDF]

Seung Hyun Lee, Wonseok Roh, Wonmin Byeon, Sang Ho Yoon, **Chanyoung Kim**, Jinkyu Kim, Sangpil Kim, "Sound-Guided Semantic Image Manipulation", *CVPR* 2022 [PDF]

Wonseok Roh, Gyusam Chang, Seokha Moon, Giljoo Nam, **Chanyoung Kim**, Younghyun Kim, Jinkyu Kim, Sangpil Kim, "ORA3D: Overlap Region Aware Multi-view 3D Object Detection", **BMVC** 2022 [PDF]

Preprints

Seung Hyun Lee*, **Chanyoung Kim***, Wonmin Byeon, Sang Ho Yoon, Jinkyu Kim, Sangpil Kim, "LISA: Localized Image Stylization with Audio via Implicit Neural Representation", arXiv Preprint [PDF]

Donghyun Kim, Hyunah Ko, **Chanyoung Kim**, Seong Jae Hwang, "Fourier Decomposition for Explicit Representation of 3D Point Cloud Attributes", arXiv Preprint [PDF]

Workshop Publications

Seung Hyun Lee, Nahyuk Lee, **Chanyoung Kim**, Wonjeong Ryoo, Jinkyu Kim, Sang Ho Yoon, S. Kim, "Audio-Guided Image Manipulation for Artistic Paintings", **NeurIPSW** 2022 - ML for Creativity and Design

Honors and Awards

Excellent Academic Paper Award (Fall 2024)

LAB Start-up 2022

Korea University

Korea University π -ville Demo Day 2021

Sejong Scholarship for Outstanding GPA
Seoul PM Hackathon

XXIII Pyeongchang Olympic Winter Games

Yonsei University

Korea University

Sejong University

Seoul Metropolitan City

TEACHING EXPERIENCES

Yonsei University

- TA: "Deep Learning Introduction and Applications" (Spring 2024, 2025)
- TA: "Computer Vision" (Fall 2023)

Samsung Electronics

• Lecturer: "Introductions to Data Science" (Aug. 2023)

Skills

Programming

• Python, Deep Learning Frameworks (Pytorch, Pytorch Lightning, TensorFlow), Python Libraries (Diffusers, Hugging Face, MMCV, Scikit-Learn, etc.), Shell Script, Git, LATEX

Languages

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

References

Prof. Seong Jae Hwang (PhD Advisor), Associate Professor, Yonsei University

Prof. Ming-Hsuan Yang, Professor & Research Scientist, UC Merced & Google DeepMind

Dr. Wonmin Byeon, Research Scientist, NVIDIA Research

Dr. Roberto Alcover-Couso, Applied Scientist, Amazon