Chanyoung Kim

Contact Information

Homepage: https://kochanha.github.io/
LinkedIn: https://www.linkedin.com/in/chanyoung-kim/
Google Scholar: https://scholar.google.com/citations?user=cUK7XFIAAAAJhl=en
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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 & trustworthy T2I models (CVPR 2025; MICCAI 2024, 2025)
- Audio-visual representation-guided image generation (CVPR 2022; ECCV 2022)

Work Experience

The Boeing Company — Seoul, South Korea
AI/ML Research Intern @ Boeing AI — Aug 2025 – Dec 2025

Education

Yonsei University — Seoul, South Korea
M.S. in Artificial Intelligence — Sep 2023 – Present
Advisor: Prof. Seong Jae Hwang

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

Sejong University — Seoul, South Korea
B.S. in Intelligent Mechatronics Engineering — Mar 2017 – Feb 2023

- Undergraduate Intern @ Computer Vision Lab, Korea University

Academic Service

Conference (Workshop) Organizing Committee

- MICCAI Student Board
  - Organizing workshops, webinars, and conference events for MICCAI Conference

Conference Reviewer

- CVPR 2024, 2025, 2026
- NeurIPS 2025
- ICCV 2025
- ECCV 2024

Journal Reviewer

- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)
- International Journal of Computer Vision (IJCV)

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] (Highlight 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] (Oral presentation at *MICCAI* 2025 Workshop - *MSB EMERGE*)

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

Hyo-Jung Jung*, Dayun Ju*, **Chanyoung Kim**, Seong Jae Hwang, Chena Lee, Younjung Park,"Multimodal Deep Learning with Anatomically Constrained Attention for Screening MRI-Detectable TMJ Abnormalities From Panoramic Images", npj Digital Medicine *Unver Review*

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

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* [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)	Yonsei University
LAB Start-up 2022	Korea University
Korea University π-ville Demo Day 2021	Korea University
Sejong Scholarship for Outstanding GPA	Sejong University
Seoul PM Hackathon	Seoul Metropolitan City
XXIII Pyeongchang Olympic Winter Games	Republic of Korea Government

Teaching Experiences

Yonsei University

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

Elice - Samsung Electronics
- Lecturer: "Introductions to Data Science" (Aug. 2023)

Elice - Lotte Corporation
- TA: "Introductions to Data Science" (Apr. 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
- Native speaker in Korean

References

Prof. Seong Jae Hwang: Thesis Advisor
Associate Professor at Yonsei University

Prof. Ming-Hsuan Yang: Collaborator & Mentor
Professor & Research Scientist at UC Merced & Google DeepMind

Dr. Wonmin Byeon: Collaborator
Research Scientist at NVIDIA Research

Dr. Roberto Alcover-Couso: Collaborator
Applied Scientist at Amazon