SEOKJU CHO

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RESEARCH INTEREST

Deep Learning, Computer Vision, Correspondence on Video, Dense Visual Correspondence, Open-Vocabulary Recognition

EDUCATION

Korea University   Mar. 2022 - Present
Integrated M.S./Ph.D. in Computer Science and Engineering   *Seoul, Korea*

Yonsei University   Mar. 2018 - Feb. 2022
B.S. in Computer Science   *Seoul, Korea*

EXPERIENCE

Adobe   May 2024 - Aug. 2024 (Expected)
Research Intern   *San Jose, CA, United States*

- Mentors: Gabriel Huang, Joon-Young Lee

Adobe   June 2023 - Sep. 2023
Research Intern   *San Jose, CA, United States*

- Worked on "Revisiting Optical Flow for Long-Range Dense Tracking", presented at CVPR 2024
- Mentors: Joon-Young Lee, Gabriel Huang

PUBLICATION

Seokju Cho, Jiahui Huang, Seungryong Kim, and Joon-Young Lee, "FlowTrack: Revisiting Optical Flow for Long-Range Dense Tracking",
IEEE Conference on Computer Vision Pattern Recognition (**CVPR**), 2024.

Seokju Cho*, Heeseong Shin*, Sunghwan Hong, Anurag Arnab, Paul Hongsuck Seo, and Seungryong Kim, "CAT-Seg: Cost Aggregation for Open-Vocabulary Semantic Segmentation",
IEEE Conference on Computer Vision Pattern Recognition (**CVPR**), 2024. [Link]

Sunghwan Hong*, **Seokju Cho***, Seungryong Kim, Stephen Lin, "Unifying Feature and Cost Aggregation with Transformers for Dense Correspondence",
International Conference on Learning Representations (**ICLR**), 2024. [Link]

Jiuhn Song*, Seonghoon Park*, Honggyu An*, **Seokju Cho**, Min-Seop Kwak, Sungjin Cho, and Seungryong Kim, "DäRF: Boosting Radiance Fields from Sparse Inputs with Monocular Depth Adaptation",
Neural Information Processing Systems (**NeurIPS**), 2023. [Link]

Jihye Park*, Sunwoo Kim*, Soohyun Kim*, **Seokju Cho**, Jaejun Yoo, Youngjung Uh, and Seungryong Kim, "LANIT: Language-Driven Image-to-Image Translation for Unlabeled Data",
IEEE Conference on Computer Vision Pattern Recognition (**CVPR**), 2023. [Link]

Junyoung Seo*, Gyuseong Lee*, **Seokju Cho**, Jiyoung Lee, Seungryong Kim, "MIDMs: Matching Interleaved Diffusion Models for Exemplar-based Image Translation",
AAAI Conference on Artificial Intelligence (**AAAI**), 2023. [Link]

Seokju Cho*, Sunghwan Hong*, Seungryong Kim, "CATs++: Boosting Cost Aggregation with Convolutions and Transformers",
IEEE Trans. on Pattern Analysis and Machine Intelligence (**TPAMI**), 2023. [Link]

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* denotes equal contribution.

Sunghwan Hong, Jisu Nam, **Seokju Cho**, Susung Hong, Sangryul Jeon, Dongbo Min, and Seungryong Kim, "Neural Matching Fields: Implicit Representation of Matching Fields for Visual Correspondence",

Neural Information Processing Systems (**NeurIPS**), 2022. [Link]

Sunghwan Hong*, **Seokju Cho***, Jisu Nam, Stephen Lin, Seungryong Kim, "Cost Aggregation with 4D Convolutional Swin Transformer for Few-Shot Segmentation",

European Conference on Computer Vision (**ECCV**), 2022. [Link]

Seokju Cho*, Sunghwan Hong*, Sangryul Jeon, Yunsung Lee, Kwanghoon Sohn, Seungryong Kim, "CATs: Cost Aggregation Transformers for Visual Correspondence",

Neural Information Processing Systems (**NeurIPS**), 2021. [Link]

ACADEMIC SERVICES

Reviewer

- 2024 - CVPR
- 2023 - CVPR, NeurIPS

HONORS

Ministry of Science and ICT & National IT Industry Promotion Agency   Sep. 2021
3rd Place Award, AI Online Competition, Won 300M KRW

TECHNICAL STRENGTHS

DL, ML	PyTorch, Numpy, JAX
Programming	Python, JavaScript, C/C++
Web Framework	React, Node.js, Flask