SEOKJU CHO

seokju_cho@korea.ac.kr, Github, Homepage

RESEARCH INTEREST

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

EDUCATION

Korea University

Integrated M.S./Ph.D. in Computer Science and Engineering

Mar. 2018 - Feb. 2022

Yonsei University

B.S. in Computer Science

Seoul, Korea

Mar. 2022 - Present

Seoul. Korea

EXPERIENCE

Adobe

May 2024 - Aug. 2024 (Expected)

Research Intern

• Mentors: Gabriel Huang, Joon-Young Lee

Adobe

June 2023 - Sep. 2023

San Jose, CA, United States

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), Highlight, 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]

^{*} 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 3rd Place Award, AI Online Competition, Won 300M KRW

Sep. 2021

TECHNICAL STRENGTHS

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