## JISU NAM

jisunam@kaist.ac.kr, Github, Homepage

#### RESEARCH INTEREST

I am interested in general perception for images and videos, particularly correspondence in image and video (image matching and point tracking). Recently, I have been working on large-scale image/video generative models, analyzing their learned representations in the context of correspondence—ultimately to understand, enhance, and manipulate the synthesis process.

#### **EDUCATION**

Korea Advanced Institute of Science and Technology (KAIST)

Sep. 2024 - Present

M.S./Ph.D. in Artificial Intelligence

Seoul, Korea

Supervisor: Seungryong Kim

Korea University

Sep. 2022 - Aug. 2024 (Incompleted)

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

Seoul, Korea

Supervisor: Seungryong Kim

Korea University

Mar. 2018 - Aug. 2022

B.S. in Biomedical Engineering and Artificial Intelligence (Double Majors)

Seoul, Korea

#### **EXPERIENCE**

Adobe Research

May. 2025 - Aug. 2025 (Expected)

Research Intern

San Jose, California

Mentors: Yang Zhou

Adobe Research

May. 2024 - Aug. 2024

Research Intern

San Jose, California

Mentors: Yang Zhou, Zhan Xu, Jing Shi, Difan Liu, Feng Liu

Project: Foundation Model for Consistent Full-Body Human Generation [C7]

Naver Cloud

Apr. 2023 - Oct. 2023

Research Intern

Seoul, Korea

Mentors: Seunggyu Chang, Heesu Kim, DongJae Lee

Project: Training-free Semantically Consistent Image Generation [C4]

#### **PUBLICATION**

(P: Preprint, C: Conference, J: Journal, \*: Co-first Author, ‡: Co-corresponding Author)

[P1] Appearance Matching Adapter for Exemplar-based Semantic Image Synthesis

Siyoon Jin, **Jisu Nam**, Jiyoung Kim, Dahyun Chung, Yeong-Seok Kim, Joonhyung Park, HeonJeong Chu, Seungryong Kim

arXiv, 2025

Keywords: Controllable Image Synthesis, Image Matching

[C7] Visual Persona: Foundation Model for Full-Body Human Customization

**Jisu Nam**, Soowon Son, Zhan Xu, Jing Shi, Difan Liu, Feng Liu, Seungryong Kim<sup>‡</sup>, Yang Zhou<sup>‡</sup> Conference on Computer Vision Pattern Recognition (CVPR), 2025

Keywords: Foundation Model, Consistent Image Generation

### [J1] DiffFace: Diffusion-based Face Swapping with Facial Guidance

Kihong Kim\*, Yunho Kim\*, Seokju Cho, Junyoung Seo, **Jisu Nam**, Kychul Lee, Seungryong Kim<sup>‡</sup>, KwangHee Lee<sup>‡</sup>

Pattern Recognition (PR), 2025

Keywords: Face Swapping, Diffusion Model

# [C6] MoDiTalker: Motion-Disentangled Diffusion Model for High-Fidelity Talking Head Generation

Seyeon Kim\*, Siyoon Jin\*, Jihye Park\*, Kihong Kim, Jiyoung Kim, **Jisu Nam**, Seungryong Kim Association for the Advancement of Artificial Intelligence (**AAAI**), 2025

Keywords: Talking Head Generation, Diffusion Model

### [C5] Local All-Pair Correspondence for Point Tracking

Seokju Cho, Jiahui Huang, **Jisu Nam**, Honggyu An, Seungryong Kim<sup>‡</sup>, Joon-Young Lee<sup>‡</sup> European Conference on Computer Vision (**ECCV**), 2024

Keywords: Point Tracking

# [C4] DreamMatcher: Appearance Matching Self-Attention for Semantically-Consistent Text-to-Image Customization

**Jisu Nam**, Heesu Kim, DongJae Lee, Siyoon Jin, Seungryong Kim<sup>†</sup>, Seunggyu Chang<sup>‡</sup> Conference on Computer Vision Pattern Recognition (CVPR), 2024

Keywords: Consistent Image Generation, Image Matching

### [C3] Diffusion Model for Dense Matching

**Jisu Nam**, Gyuseong Lee, Sunwoo Kim, Hyeonsu Kim, Hyoungwon Cho, Seyeon Kim, Seungryong Kim

International Conference on Learning Representations (ICLR), 2024 (Oral, 1.2% acceptance rate)
Keywords: Image Matching, Diffusion Model

# [C2] Neural Matching Fields: Implicit Representation of Matching Fields for Image Matching

Sunghwan Hong, **Jisu Nam**, Seokju Cho, Susung Hong, Sangryul Jeon, Dongbo Min, Seungryong Kim Neural Information Processing Systems (**NeurIPS**), 2022

Keywords: Image Matching, Implicit Neural Representation

# [C1] Cost Aggregation with 4D Convolutional Swin Transformer for Few-Shot Segmentation

Sunghwan Hong\*, Seokju Cho\*, Jisu Nam, Stephen Lin, Seungryong Kim

European Conference on Computer Vision (ECCV), 2022

Keywords: Few-shot Segmentation, Image Matching

### **HONORS**

37th Workshop on Image Processing and Image Understanding, KIBME $Best\ Paper\ Award$	2025
37th Workshop on Image Processing and Image Understanding, KIBME $Best\ Poster\ Presentation\ Award$	2025
Qualcomm Innovation Fellowship 2024, Qualcomm $Winner$	2024
33th Artificial Intelligence and Signal Processing, IEIE Best Paper Award	2023