# JISU NAM

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#### RESEARCH INTEREST

Diffusion Models, Text-to-Image/Video Customization, Image Matching

#### **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** May. 2024 - Aug. 2024

Research Intern San Jose, California

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

Project: Encoder-based Consistent Human Character Customization

Naver Cloud Apr. 2023 - Oct. 2023

Research Intern Seoul, Korea

Mentors: Seunggyu Chang, Heesu Kim, DongJae Lee

Project: Training-free Semantically Consistent Text-to-Image Customization [C4]

### **PUBLICATION**

(P: Preprint, C: Conference, \*: Co-first author, ‡: Co-corresponding author)

### [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: Image Matching, Point Tracking

## [P2] 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 $Preprint,\ 2024$ 

Keywords: Diffusion Models, Talking Head Generation

# [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> *IEEE Conference on Computer Vision Pattern Recognition* (**CVPR**), 2024

Keywords: Diffusion Models, Text-to-Image Customization, 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: Diffusion Models, Image Matching

### [P1] 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>

Preprint, 2022

Keywords: Diffusion Models, Face Swapping

# [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: Image Matching, Few-shot Segmentation

### **HONORS**

33th Artificial Intelligence and Signal Processing, IEIE  $Best\ Paper\ Award$ 

2023