Hyun-Woo Kim

PERSONAL INFORMATION

Nov.04.1995
37, Almata-gil, Dongjak-gu,
Seoul, Republic of Korea

GitHub: github.com/khw11044
E-mail: khw11044@gmail.com
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EDUCATION

Hansung University — Seoul, Korea

College of IT Engineering — Mar. 2015 - Feb. 2021

- B.S. in Division of IT Convergence Engineering
- Advisor: Professor Hee-seok Oh
- GPA: 3.57 / 4.50 (90.7 / 100)

Korea University — Seoul, Korea

Department of Artificial Intelligence — Mar. 2021 - Feb. 2023

- M.S. in Artificial Intelligence
- Adviser: Professor Seong-Whan Lee
- Laboratory: PRML Laboratory
- Area of Study: Computer Vision
- GPA: 4.13 / 4.50 (96.3 / 100)

KT AIVLE SCHOOL — Seoul, Korea

AI Track — Feb. 2024 - Aug. 2024

PUBLICATIONS

[1] **Hyun-Woo Kim**, Gun-Hee Lee, Myeong-Seok Oh, and Seong-Whan Lee, "Cross-View Self-Fusion for Self-Supervised 3D Human Pose Estimation in the Wild," in *Proceedings of the Asian Conference on Computer Vision*, 2022. **(Oral)**

[2] **Hyun-Woo Kim**, Gun-Hee Lee, Woo-Jeoung Nam, Kyung-Min Jin, Tae-Kyung Kang, Geon-Jun Yang, and Seong-Whan Lee "MHCanonNet: Multi-Hypothesis Canonical lifting Network for self-supervised 3D human pose estimation in the wild video," in *Pattern Recognition*, 2024.

[3] Geon-Jun Yang, Jun-Hee Kim, **Hyun-Woo Kim**, Gun-Hee Lee and Seong-Whan Lee, "EGPose: Explicit and Geometric Self-Supervision for 3D Human Pose Estimation," in *Procedia Computer Science*, 2023.

[4] Kyung-Min Jin, Gun-Hee Lee, Woo-Jeoung Nam, Tae-Kyung Kang, **Hyun-Woo Kim**, and Seong-Whan Lee, "Masked Kinematic Correlation with Hierarchical Attention for Pose Estimation," in *Neural Networks*, 2024.

RESEARCH INTERESTS

- 3D Human pose estimation, Multi-camera calibration
- Retrieval-augmented generation (RAG)
- Mesh reconstruction, Reconstruction of 3D avatars
- 3D Gaussian Splatting (3DGS)
- Stable Diffusion, SF3D

Grants and Honors

[1] The 2nd KOTRA Public Data Utilization Success Story Contest [PA]
Excellence Award (KOTRA) Aug. 2024

[2] 2021 Miso Artificial Intelligence Model Development Challenge [PA]
Grand Prize (MSIT, NIPA, MiSo) Dec. 2021

[3] 2020 Open-Source Software Developer Competition [PM]
Sponsor Prize (MSIT, NIPA) Nov. 2020

[4] The 16th Hansung Engineering Competitive Exhibition [PM]
Silver Prize (Hansung Univ.) Sep. 2020

[5] The 16th Hansung Engineering Competitive Exhibition [PM]
Bronze Prize (Hansung Univ.) Sep. 2020

[6] The 1st Hansung University C&C Festival [PM]
Bronze Prize (Hansung Univ.) Jul. 2020

[7] The 15th Hansung Engineering Competitive Exhibition [PM]
Bronze, Sponsor Prize (Hansung Univ.) Sep. 2019

Patents

[1] **Hyun-Woo Kim**, Tae-Hyun Kim, and Jin-Myeong Je. Image-based anti-drone detection device and method using deep learning model. Korea Patent 10-2020-0080646, 2020.

Industry Collaborative Projects

Development of AI based Golf Swing Analysis Algorithm for Golf Training

Korea University - VoiceCaddie May. 2021 - Oct. 2021

- Golf pose estimation model, action localization, and annotation tool
- Python, C++, Pytorch and OpenCV

Development of High-Resolution Unstructured Plenoptic Video Authoring/Play Platform Technology for Large-Scale Spaces

Hansung University - ETRI Jul. 2020 - Nov. 2020

- Visual Object Tracking algorithms comparison and performance verification
- Python, Pytorch

Work Experience

Korea University Research and Business Foundation AI Research Center
- I worked as a junior researcher at an AI research center. 2023

Skills

Computer Programming
- Python and C/C++

Frameworks
- PyTorch, Tensorflow, Keras, AirFlow, Django, Docker, FastAPI

Languages
- Korean (Mother tongue)
- English (OPIc - Intermediate High)