## **Hvun-Woo Kim**

PERSONAL INFORMATION

Nov.04.1995 37, Almata-gil, Dongjak-gu,

Seoul, Republic of Korea

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*Homepage:* hyunew

**EDUCATION** 

#### **Korea University**

Seoul, Korea

Department of Artificial Intelligence

• 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)

## **Hansung University**

Seoul, Korea

College of IT Engineering

Mar. 2015 - Feb. 2021

Mar. 2021 - Feb. 2023

• B.S. in Division of IT Convergence Engineering

· Advisor: Professor Hee-seok Oh

• GPA: 3.57 / 4.50 (90.7 / 100)

#### **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*, 2023.
- [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*, 2022. (Accepted)
- [5] Tae-Kyung Kang, Gun-Hee Lee, Woo-Jeoung Nam, **Hyun-Woo Kim**, Kyung-Min Jin, and Seong-Whan Lee, "Calibrated Attention Masking Network for Temporal Action Localization," in *Pattern Recognition*, 2022. (Under Review)

# GRANTS AND HONORS

[1] 2021 Miso Artificial Intelligence Model Development Challenge [PA] Grand Prize ( MSIT, NIPA, MiSo )

Dec. 2021

[2] 2020 Open-Source Software Developer Competition [PM] Sponsor Prize (MSIT, NIPA)

Nov. 2020

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

Sep. 2020

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

Sep. 2020

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

[6] 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.

# RESEARCH INTERESTS

- 3D Human pose estimation
- 3D Point cloud
- Mesh reconstruction
- Reconstruction of 3D avatars
- Reconstruction of animation-ready 3D clothed humans
- Virtual try on
- · Stable Diffusion
- Multi-camera calibration

#### RESEARCH EXPERIENCE

## 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

#### Color Image based Visual Object Tracking Algorithm Implementation and Verification

Hansung University - ETRI

Jul. 2020 - Nov. 2020

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

#### TEACHING EXPERIENCE

LikeLionMake a Git portfolio that the interviewers like

Online lecturer

Online lecturer

• Make a GitHub blog in a day

2021

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Online lecturer

• Learn by Doing, 3D Human Pose Estimation and Practical Project Inflearn

Inflearn

Inflearn

2023 Online lecturer

• Learn by Doing, Golf swing Event Detection Using Human Pose

2023

# SKILLS Computer Programming

• Python, JavaScript, Java and C++

#### **Deep Learning Frameworks**

• PyTorch, Tensorflow, and Keras

#### Languages

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