Kim Youwang
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EDUCATION

Pohang University of Science and Technology, POSTECH   Pohang, Korea
Integrated M.S. & Ph.D., Electrical Engineering   2026 (Expected)

Pohang University of Science and Technology, POSTECH   Pohang, Korea
B.S., Electrical Engineering   2020

RESEARCH INTERESTS

Goal – Advance real-time photorealistic simulation for next-gen. global communication & physical AI.
Keywords – Computer Vision, Computer Graphics, Generative AI

EXPERIENCE

(Incoming) Research Scientist Intern, Meta   Pittsburgh, PA
Meta Codec Avatars Lab (Manager: Chen Cao)   Jun. 2026 – Nov. 2026

(Incoming) Research Scientist Intern, NVIDIA   Remote, Korea
Real-Time Graphics Research (Managers: Aaron Lefohn)   Feb. 2026 – Jun. 2026

Research Scientist Intern, Meta   Pittsburgh, PA
Meta Codec Avatars Lab (Managers: Yaser Sheikh, Chen Cao)   Oct. 2024 – Mar. 2025

Visiting Ph.D. Student, Univ. of Tübingen   Tübingen, Germany
Real Virtual Humans group (Advisor: Gerard Pons-Moll)   Oct. 2023 – Mar. 2024

AWARDS AND HONORS

Best Poster Award, BMVC   2024
"MeTTA: Single-View to 3D Textured Mesh Reconstruction with Test-Time Adaptation"

Excellence Prize, Electronics Times ICT Paper Awards   2024
"Feed-Forward Photorealistic Style Transfer for Large-Scale 3D Neural Radiance Field"

Best Poster Award, POSTECH-KAIST Joint ML Workshop   2024
"Paint-it: Text-to-Texture Synthesis via Deep Convolutional Texture Map Optimization and ..."

Grand Prize (Minister's Award, $12K), Electronics Times ICT Paper Awards   2023
"CLIP-Actor: Text-Driven Recommendation and Stylization for Generating Virtual Human Avatars"

Outstanding Reviewer Award, ICCV   2023
Top 1.89% reviewer among 6990 reviewers

Winner ($4,000), Qualcomm Innovation Fellowship Korea (QIFK)   2022
"CLIP-Actor: Text-Driven Recommendation and Stylization for Animating Human Meshes"

International Computer Vision Summer School (ICVSS)   2022
"Unified 3D Mesh Recovery of Humans and Animals by Learning Animal Exercise"

PUBLICATIONS

Journal Articles

J04. **Kim Youwang***, T. Byun*, K. Ji-Yeon, S. Choi, T.-H. Oh, "CLIP-Actor-X: Text-driven 4D Human Avatar Generation via Cross-modal Synthesis-through-Optimization," *TPAMI, 2026 (Accepted)*.

J03. G. Kim, **Kim Youwang**, L. Hyoseok, T.-H. Oh, "FPGS: Feed-Forward Semantic-aware Photorealistic Style Transfer of Large-Scale Gaussian Splatting," *IJCV, 2026 (Accepted)*.
(Excellence Prize at the Electronics Times ICT Paper Awards 2024)

J02. **Kim Youwang**, L. Hyun*, K. Sung-Bin*, S.-K. Nam, J.-H. Joo, T.-H. Oh, "A Large-Scale 3D Face Mesh Video Dataset via Neural Re-parameterized Optimization," *TMLR*, 2024.
(Top 5.0% TMLR papers in 2 years – Transferred to ICLR 2025)

J01. D. H. Ryou, **Kim Youwang**, T.-H. Oh, "Multi-stage Adaptive Rank Statistic Pruning for Lightweight Human 3D Mesh Recovery Model," *The Visual Computer Journal (TVCJ), Springer*, 2023

Conference Papers (acceptance rates typically 3%~25%)

C12. A paper on "Feed-forward monocular 3D avatar generation", *submitted*.

C11. A paper on "Efficient monocular 3D avatar generation", *submitted*.

C10. A paper on "Vision-based robot state estimation", *submitted*.

C09. **Kim Youwang**, L. Hyoseok, G. Pons-Moll, T.-H. Oh, "Dress-up: Generating Animatable Clothed 3D Humans via Latent Modeling of 3D Gaussian Texture Maps," *ICCV Workshop on Computer Vision for Fashion, Art, and Design*, 2025.
(Oral presentation)

C08. J. Cho, **Kim Youwang**, H. M. Yang, T.-H. Oh, "Robust 3D Shape Reconstruction in Zero-Shot from a Single Image in the Wild," *CVPR*, 2025.

C07. **Kim Youwang**, L. Hyun*, K. Sung-Bin*, S.-K. Nam, J.-H. Joo, T.-H. Oh, "A Large-Scale 3D Face Mesh Video Dataset via Neural Re-parameterized Optimization," *ICLR*, 2025.
(Invited as a poster presentation – Top 5.0% TMLR papers in 2 years invited)

C06. K. Yu-Ji, H. Ha, **Kim Youwang**, J. Surh, H. Ha, T.-H. Oh, "MeTTA: Single-View to 3D Textured Mesh Reconstruction with Test-Time Adaptation," *BMVC*, 2024.
(Best Poster Award at BMVC 2024)

C05. **Kim Youwang**, T.-H. Oh, G. Pons-Moll, "Paint-it: Text-to-Texture Synthesis via Deep Convolutional Texture Map Optimization and Physically-Based Rendering," *CVPR*, 2024.
(Best Poster Award at POSTECH-KAIST joint ML workshop 2024)

C04. G. Kim, **Kim Youwang**, T.-H. Oh, "Feed-Forward Photorealistic Style Transfer for Large-Scale 3D Neural Radiance Field," *AAAI*, 2024.

C03. **Kim Youwang***, K. Ji-Yeon*, T.-H. Oh, "CLIP-Actor: Text-Driven Recommendation and Stylization for Animating Human Meshes," *ECCV*, 2022.
(Winner of the Electronics Times ICT Paper Awards 2023, Winner of the Qualcomm Innovation Fellowship Korea, 2022)

C02. J. Cho, **Kim Youwang**, T.-H. Oh, "Cross-Attention of Disentangled Modalities for 3D Human Mesh Recovery with Transformers" *ECCV*, 2022.

C01. **Kim Youwang**, K. Ji-Yeon, K. Joo, T.-H. Oh, "Unified 3D Mesh Recovery of Humans and Animals by Learning Animal Exercise," *BMVC*, 2021.
(Invited to ICVSS 2022)

PATENT

(US 20240273798A1) Text-driven motion recommendation and neural mesh stylization system and a method for producing human mesh animation using the same

(KR 10-2886014) Method and apparatus for motion animating and mesh stylization using text-driven motion recommendation

(KR 10-2459293) Method and apparatus for generating mesh model of human or quadrupeds

(KR 10-2416218) Method and apparatus for obtaining segmentation of object included in image frame

PROFESSIONAL ACTIVITIES

Reviewer for Journals

IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) – 2024, 2025

ACM TOG / SIGGRAPH ASIA – 2024

International Journal of Computer Vision (IJCV) – 2024, 2025

Transactions on Machine Learning Research (TMLR) – 2025

IEEE Transactions on Multimedia (TMM) – 2023

Reviewer for Conference Papers

IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) – 2024, 2025

IEEE/CVF International Conference on Computer Vision (ICCV) – 2023 (Outstanding Reviewer), 2025

European Conference on Computer Vision (ECCV) – 2024, 2026

Conference on Neural Information Processing Systems (NeurIPS) – 2024, 2025

IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) – 2026

British Machine Vision Conference (BMVC) – 2024

REFERENCE

Tae-Hyun Oh, Associate Professor, KAIST, Korea
Relationship: M.S. & Ph.D. advisor
email: thoh.kaist.ac.kr@gmail.com

Kyungdon Joo, Associate Professor, UNIST, Korea
Relationship: Collaborator
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