Sihun Cha Ph.D. student, *Visual Media Lab* in KAIST
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EDUCATION & RESEARCH EXPERIENCE

Korea Advanced Institute of Science and Technology (KAIST) Daejeon, Korea
Ph.D. in Graduate School of Culture Technology Fall 2022 - 2026 (expected)
Supervisor: Junyong Noh

Korea Advanced Institute of Science and Technology (KAIST) Daejeon, Korea
Master in Graduate School of Culture Technology Fall 2020 - Spring 2022
Supervisor: Junyong Noh

Korea National University of Arts (K-Arts) Seoul, Korea
Bachelor of Fine Arts Spring 2013 - Spring 2020
(2 years of military service during student)

PUBLICATIONS

(* denotes equal contribution)

- **Sihun Cha**, Kwanggyoon Seo, Amirsaman Ashtari, Junyong Noh, Generating Texture for 3D Human Avatar from a Single Image using Sampling and Refinement Networks, Computer Graphics Forum,Vol. 42. No. 2. 2023.
- Amirsaman Ashtari*, Chang Wook Seo*, Cholmin Kang, **Sihun Cha**, and Junyong Noh. 2022. Reference Based Sketch Extraction via Attention Mechanism. ACM Trans. Graph. 41, 6, Article 207.
- **Sihun Cha**, Kwanggyoon Seo, Amirsaman Ashtari, Junyong Noh, Generating 3D Human Texture from a Single Image with Sampling and Refinement, ACM SIGGRAPH 2022 Posters. 2022. 1-2.
- Minki Hong*, YoungJun Choi*, **Sihun Cha***, “Anyway,”: Two-player Defense Game via Voice Conversation, Extended Abstracts of the 2021 Annual Symposium on Computer-Human Interaction in Play. 2021.

PUBLICATIONS (*In submission*)

- *(In submission)* Soyeon Yoon, Kwan Yun, Kwanggyoon Seo, **Sihun Cha**, Jung Eun Yoo, Junyong Noh, LeGO: Leveraging a Surface Deformation Network for Animatable Stylized Face Generation with One Example
- *(In submission)* Gihoon Kim, Kwanggyoon Seo, **Sihun Cha**, Junyong Noh, NeRFFaceSpeech: One-shot Audio-diven 3D Talking Head Synthesis via Generative Prior
- *(In submission)* Inyup Lee*, Yeonsoo Choi*, **Sihun Cha,** Seonghyeon Kim, Sunjin Jung, Junyong Noh, Deep Learning-Based Facial Retargeting Using Local Patches

PROJECTS

Development of Universal Fashion Creation Platform Technology for Avatar Personality Expression (KOCCA) June 2023 – Present

- Development of universal fashion creation technology and creative platform that enables general users self-expression through intuitive avatar creation
- Developing the AI model for text-guided image to 3d generation and research on reference-based image editing

METAVERSE ENTERTAINMENT Aug 2022 – Jan 2024

- Developing the AI model for 3D facial animation and research on motion retargeting techniques between human and character

A Deep Learning Based Immersive AR Content Creation Platform for Generating Interactive, Context, and Geometry Aware Movement from a Single Image (IITP) June 2021 – Dec 2022

- Development of user-friendly content production technology that enables general users to easily transform a single image into immersive AR content where background and characters within the image move and interact with real-world objects

Development of self-evolving AI Creation Platform Jun 2021 – Dec 2022

- Development of user-friendly animation creation platform through analysis of user input keywords and images for single creators

TECH TRANSFER

eNgine Visual Wave Method and apparatus for refining 3D texture 2022