Sihun Cha Ph.D. student, KAIST

chacorp@kaist.ac.kr | Homepage | Google Scholar | South Korea

Education

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

Ph.D. in Graduate School of Culture Technology

Aug 2022 - 2026 (expected)

- Supervisor: Junyong Noh

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

Master in Graduate School of Culture Technology

Aug 2020 - Aug 2022

- Supervisor: Junyong Noh

Korea National University of Arts (K-Arts)

Seoul, Korea

Bachelor of Fine Arts

Feb 2013 - Feb 2020

Experience

Visual Media Lab

Daejeon, Korea Jan 2021 - **Present**

Research Assistant
- Topic: 3D Facial Animation, 3D Human Generation, Texture Generation

- Supervisor: Junyong Noh

Mandatory Military Service

Uljin, Korea

ROK Army sergeant, honorable discharge June 2015 - Mar 2017

Publication

(* denotes equal contribution)

LAFA: Leveraging Local Segment for Mesh-agnostic Audio-driven 3D Facial Animation

(Under review)

Sihun Cha, Kwanggyoon Seo, Junyong Noh

Mesh Agnostic Audio-Driven 3D Facial Animation

(Under review)

Kwanggyoon Seo*, Sihun Cha*, Hyunho Nah, Inyup Lee, Junyong Noh

Deep Learning-Based Facial Retargeting Using Local Patches

(Under review)

Inyup Lee*, Yeonsoo Choi*, **Sihun Cha**, Seonghyeon Kim, Sunjin Jung, Junyong Noh

NeRFFaceSpeech: One-shot Audio-diven 3D Talking Head Synthesis via Generative Prior

Gihoon Kim, Kwanggyoon Seo, Sihun Cha, Junyong Noh

CVPRW 2024

LeGO: Leveraging a Surface Deformation Network for Animatable Stylized Face Generation with One Example

CVPR 2024

Soyeon Yoon, Kwan Yun, Kwanggyoon Seo, Sihun Cha, Jung Eun Yoo, Junyong Noh

Generating Texture for 3D Human Avatar from a Single Image using Sampling and

Refinement Networks

Eurographics 2023

Sihun Cha, Kwanggyoon Seo, Amirsaman Ashtari, Junyong Noh

Reference Based Sketch Extraction via Attention Mechanism

SIGGRAPH Asia 2022

Amirsaman Ashtari*, Chang Wook Seo*, Cholmin Kang, Sihun Cha, and Junyong Noh

Generating 3D Human Texture from a Single Image with Sampling and Refinement

SIGGRAPH 2022

Sihun Cha, Kwanggyoon Seo, Amirsaman Ashtari, Junyong Noh

CHI Play 2021

Posters

"Anyway,": Two-player Defense Game via Voice Conversation

Minki Hong*, YoungJun Choi*, Sihun Cha*

Tech Transfer

eNgine Visual Wave 2022

Method and apparatus for refining 3D texture

Patent

Apparatus and method for generating 3d object texture map, and recording medium storing instructions to perform method for generating 3d object texture map

2024

US Patent App. 18/170,589

Project

Development of Universal Fashion Creation Platform Technology for Avatar Personality Expression (KOCCA)

June 2023 – **Present**

- Project Manager
- Development of universal fashion creation technology and creative platform that enables general user's self-expression through intuitive avatar creation

Development of Core SW Technology for Realistic 3D Facial Animation Generation

Aug 2022 - Jan 2024

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

3D Cinemagraph for AR Contents Creation (IITP)

June 2021 – Dec 2022

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

Development of self-evolving AI Creation Platform (KOCCA)

June 2021 – Dec 2022

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

Teaching Assistant

• Sep -2023 TA, GCT522 Computer Graphics Theory and Application	KAIST, GSCT
Mar-2023 TA, KAIST Cultural Festival	KAIST, GSCT
Sep -2022 TA, KAIST Cultural Festival	KAIST, GSCT
• Sep -2021 TA, GCT576 Social Computing	KAIST, GSCT