

Jiahao Luo

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Education

University of California, Santa Cruz

Santa Cruz, CA, USA

Ph.D. in Computer Science and Engineering

advised by prof. James Davis

Sep 2021 - Jul 2027

University of California, Santa Cruz

Santa Cruz, CA, USA

M.S. in Electrical and Computer Engineering

Sep 2018 - Jun 2020

Beijing University of Post and Telecommunications (BUPT)

Beijing, China

B.Eng. in Electronic Engineering

Sep 2014 - Sep 2018

Research Interests

Generative 3D/4D for riggable avatars — text/vision-conditioned 3D/4D generation, semantic meaningful 4D deformation, feed forward deformable Gaussian splatting, and real-time retargeting for animals & humans.

Positions Held

Research Intern

Sep 2024 - Dec 2025

Snap Inc. | Mentor: Jian Wang, Hsin-Ying Lee

Santa Monica, CA

- Developed [T2Bs](#), the first pipeline to turn text prompts into character blendshape sequences for animal heads; bridges diffusion video priors → riggable 3D for controllable animation (ICCV 2025 & Snap HeadMorph product version 3).
- Developing a feed-forward T2Bs variant for animal-head blendshape prediction and a real-time retargeting pipeline.

Research Intern

Jun 2024 - Sep 2024

Flawless AI | Mentor: Kyle Olszewski

Santa Monica, CA

- Developed a fast and high-quality relighting method on realistic 3D Gaussian human head avatar

Computer vision engineer

Oct 2020 - Aug 2021

Bellus3D | Mentor: Eric Chen

Campbell, CA

- Developed 3D human face shape regression network from RGB images to assist mobile capture

Current Research (preparing submission for CVPR 2026)

Feed forward animal head blendshapes via human conditioned registration and real-time retargeting

Jun 2025 - present

3D human reconstruction with multiple in-the-wild images

Jul 2025 - present

Publications

[T2Bs: Text-to-Character Blendshapes via Video Generation](#)

Jiahao Luo, Chaoyang Wang, Michael Vasilkovsky, Vladislav Shakhrai, Di Liu, Peiye Zhuang, Sergey Tulyakov, Peter Wonka, Hsin-Ying Lee, James Davis, Jian Wang

[ICCV 2025](#)

[SplatFace: Gaussian Splat Face Reconstruction Leveraging an Optimizable Surface](#)

Jiahao Luo, Jing Liu, James Davis.

[WACV 2025 Oral](#)

[Snapmoji: Instant Generation of Animatable Dual-Styled Avatars](#)

Eric Ming Chen, Di Liu, Sizhuo Ma, Michael Vasilkovsky, Bing Zhou, Qiang Gao, Wenzhou Wang, Jiahao Luo, Dimitris N. Metaxas, Vincent Sitzmann, Jian Wang

[Disjoint Pose and Shape for 3D Face Reconstruction](#)

Raja Kumar*, Jiahao Luo*, Alex Pang, James Davis.

[ICCV workshop 2023 \(Co-first author\)](#)

[How much does input data type impact final face model accuracy?](#)

Jiahao Luo, Fahim Hasan Khan, Issei Mori, Akila de Silva, Eric Sandoval Ruezga, Minghao Liu, Alex Pang, James Davis.

[CVPR 2022 Oral](#)

[How accurate is 2-view stereo to reconstruct a 3D face model?](#)

Jiahao Luo, Eric Ruezga, James Davis.

ICIP 2022

[DuelGAN: A Duel Between Two Discriminators Stabilizes the GAN Training](#)

Jiaheng Wei, Minghao Liu, **Jiahao Luo**, Andrew Zhu, James Davis, Yang Liu.

ECCV 2022

- A multiple-discriminators solution to improve the stability of generative adversarial network. DuelGAN employs a Duel-GAME to maintain a delicate balance between agreement and disagreement. This strategic approach effectively mitigates model collapse during training, leading to better image quality.

[Low-light Image Enhancement Using Chain-consistent Adversarial Networks](#)

Minghao Liu, **Jiahao Luo**, Xiaohan Zhang, James Davis, Yang Liu.

ICPR 2022

- A GAN solution for low-light image enhancement. It achieves the best numerical and human evaluations performance compared to baseline deep learning methods and Gamma Correction.

[Face Models: How good does my data need to be?](#)

Jiahao Luo, Fahim Khan, Issei Mori, Akila de Silva, Eric Ruezga, James Davis.

ICIP 2021

[Impedance Compensation of the Welding Area of the RF Connector and Microstrip Line](#)

Ziren Wang, Jinchun Gao, Hafiz Muhammad Bilal, **Jiahao Luo**, Xiaoming Li.

ICCCAS 2018

Skills

Generative 3D/4D
Retargeting

Head Avatar (animal & human)
Surface Encoding

Feed Forward Deformable GS
Riggable representations

Reviewer Services

ICCV 2025, CVPR 2025, ACM MM 2025, WACV 2026, BMVC 2025, ECCV 2024, BMVC 2024

Award

- **WACV 2025 Oral presentation** **Feb 2025**
- **CVPR 2022 Oral presentation** **Jun 2022**
- **UCSC Chancellor's fellowship** **Mar 2021**