## Xianglong He

 □ hxl23@mails.tsinghua.edu.cn **4** +86 183-8298-3933 ☐ Google Scholar □ XianglongHe.github.io **EDUCATIONS** Shenzhen International Graduate School, Tsinghua University 2023.08 - 2026.06M.Eng in Computer Technology GPA 3.83 / 4.00 Advisor: Prof. Chun Yuan Rank 12 / 75 Ocean University of China 2019.08 - 2023.06B.E. in Computer Science and Technology Overall Grades 96.57 / 100.00 Rank 4 / 269 **PUBLICATIONS** · GVGEN: Text-to-3D Generation with Volumetric Representation Xianglong He\*, Junyi Chen\*, Sida Peng, Di Huang, Yangguang Li, Xiaoshui Huang, **Project Page** Chun Yuan†, Wanli Ouyang, and Tong He† ECCV 2024 Propose 3D representation GaussianVolume, and introduce a two-stage native 3D generation methods. Effectively balance generation speed (~7 sec) and quality; Perform excellently quantitatively and qualitatively. · SparseFlex: High-Resolution and Arbitrary-Topology 3D Shape Modeling Xianglong He\*, Zi-Xin Zou\*, Chia-Hao Chen, Yuan-Chen Guo, Ding Liang, **Project Page** Chun Yuan†, Wanli Ouyang, Yan-Pei Cao, Yangguang Li† arXiv 2025 Introduce sparse structured SparseFlex and Frustum Voxel Training Strategy for high-resolution VAE. Improve performance by a large margin (80%+); Build a foundational model for 3D generation. MeshCraft: Exploring Efficient and Controllable Mesh Generation with Flow-based DiTs Xianglong He, Yangguang Li, Junyi Chen, Di Huang, Zexiang Liu, Xiaoshui Huang, Chun Yuan, Wanli Ouyang arXiv 2025 Propose a efficient and controllable native mesh generation method utilizing continuous diffusion model. Yield fast generation speed (for 35 times+), Perform better than baselines quantitatively and qualitatively. · Enhancing the Transferability via Feature-Momentum Adversarial Attack Xianglong He, Yuezun Li, Haipeng Qu, Junyu Dong Computers & Security Propose a transferable black-box attack method via the introduced feature-momentum guidance map. Achieve the best attack success rate (10%+) in 9 normal models and 5 adversarial models. · NOVA3D: Normal Aligned Video Diffusion Model for Single Image to 3D Generation Propose a novel Image-to-3D method via video generation models and the normal prior. ICME 2025 · PonderV2: Pave the Way for 3D Foundataion Model with A Universal Pre-training Paradigm Introduing a universal 3D pre-training paradigm via differentiable rendering. Submitted to T-PAMI · Learn to Learn Consistently for Few-Shot Image Classification · Propose a model-agnostic meta-learning framework via self-distilling. arXiv 2024 EXPERIENCES · Algorithm Intern for 3D Generation **VAST** @ 2024.11 — Present Cooperators: Yangguang Li, Zi-Xin Zou, Yan-Pei Cao, Yuan-Chen Guo, Chia-Hao Chen, Ding Liang · Research Intern for 3D Content Shanghai AI Laboratory @ 2023.01 — 2024.06 Cooperators: Xiaoshui Huang, Tong He, Di Huang, Junyi Chen, Wanli Ouyang · Research Assistant for AI Security Ocean University of China @ 2021.10 — 2022.10 Cooperators: Yuezun Li, Haipeng Qu AWARDS · CCF Elite Collegiate Award 2021 · National College Student Information Security Contest, First Prize (Rank 5/2136) 2021 · Langiao Programming Designing Contest (Python A Group), Second Prize 2022

## MISC

· **Services**: Reviewer for T-CSVT, MIR.

• Language: Mandarin (Native); English (Fluent, CET-6: 600/710)

· Langiao Programming Designing Contest (C++ A Group), Second Prize

2020

· **Programming**: Python, C++, LaTeX