Guying Lin

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EDUCATION

Carnegie Mellon University

PA, USA

 $PhD\ in\ Computer\ Science$

Sept. 2024 - Present

• Advisor: Prof. Minchen Li

The University of Hong Kong

HK, China

MPhil in Computer Science

Sept. 2022 - Aug. 2024

• Advisors: Prof. Wenping Wang and Prof. Taku Komura

• Fully funded by HKU postgraduate scholarship

Zhejiang University

Zhejiang, China

Bachelor of Engineering

Sept. 2018 - July 2022

• CHU KOCHEN Honors College

• Cumulative GPA: 3.94/4.00 (top 5%)

Publications

Preprints

1. **Guying Lin***, Lei Yang* (equal contributions), Congyi Zhang, Hao Pan, Yuhan Ping, Guodong Wei, Taku Komura, John Keyser, Wenping Wang. Patch-Grid: An efficient and feature-preserving neural implicit surface representation. Neural Parametric Surfaces for Shape Modeling. Arxiv 2308.13934.

Status: Provisionally accepted by ACM Transactions on Graphics (TOG) with revisions.

2. Lei Yang, Yongqing Liang, Xin Li, Congyi Zhang, **Guying Lin**, Alla Sheffer, Scott Schaefer, John Keyser, Wenping Wang. Neural parametric surfaces for shape modeling. Arxiv 2309.09911.

Status: Under review by ACM Transactions on Graphics (TOG).

Conference Proceedings and Journal Articles:

- 1. **Guying Lin***, Lei Yang* (equal contributions), Yuan Liu, Congyi Zhang, Junhui Hou, Xiaogang Jin, Taku Komura, John Keyser, Wenping Wang. On Optimal Sampling for Learning SDF Using MLPs Equipped with Positional Encoding. IEEE Transactions on Visualization and Computer Graphics (TVCG), 2025.
- 2. Congyi Zhang*, **Guying Lin*** (equal contribution), Lei Yang, Xin Li, Taku Komura, Scott Schaefer, John Keyser, Wenping Wang. Surface extraction from neural unsigned distance fields. Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV), 2023
- 3. Lingting Zhu, **Guying Lin**, Jinnan Chen, Xinjie Zhang, Zhenchao Jin, Zhao Wang, Lequan Yu. Large Images are Gaussians: High-quality Large Image Representation with Levels of 2D Gaussian Splatting. The Annual AAAI Conference on Artificial Intelligence (AAAI), 2025
- 4. Peng Wang, Yuan Liu, **Guying Lin**, Jiatao Gu, Lingjie Liu, Taku Komura, Wenping Wang. ProLiF: Progressively-connected Light Field network for efficient view synthesis. Computers & Graphics, 2024.
- 5. Lingting Zhu, Zhao Wang, Zhenchao Jin, **Guying Lin**, Lequan Yu. Deformable endoscopic tissues reconstruction with gaussian splitting. International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI EARTH), 2024.

RESEARCH EXPERIENCES

Computer Graphics and Visualization Lab at HKU

July 2022 - Aug. 2024

- Advisor: Prof. Wenping Wang
- Research Area: Neural implicit surface representation
 Explore a series of topics in neural implicit representation, aiming at developing versatile, efficient, and feature-preserving representations.

TEACHING EXPERIENCES

Teaching Assistant at HKU

Sept. 2022 - Feb. 2024

• Courses: Computer Vision, Java Programming

AWARDS

- {2019-2020, 2020-2021, 2021-2022} Scholarship for Pilotage (CHU KOCHEN Honors College Outstanding Students Awards)
- 2019-2020 WangLaoJi Scholarship
- 2020-2021 ZJU First-grade Scholarship
- 2021-2022 Zhejiang Provincial Government Scholarship
- 2019 Second Class Prize in Mathematics Competition for College Students in Zhejiang Province
- 2022 Honored Graduate of CHU KOCHEN Honors College
- 2022 Honored Graduate of Zhejiang University

Personal

- Languages: Mandarin (native), English (fluent; TOEFL: 110)
- Technical Skills: Python, C++, Unreal Engine4, Substaince 3D Painter, Maya, Unity, Zbrush, React
- Hobbies: Sketch, Watercolor Painting, Chinese Calligraphy, Latin Dance, Cooking
- Extracurricular Activities: Intern journalist at Qianjiang Evening News, Minister of ZJU Youth Volunteer Association