

# Liangchen Li

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📅 Date of Birth: April 2000 | 🌐 <https://github.com/VVM-hub>



## EDUCATION

University of Science and Technology of China  
Ph.D. in Mathematics  
B.S. in Mathematics

Hefei, China  
Sep. 2022 – Present  
Sep. 2018 – Jun. 2022

- Mentor: **Prof. Juyong Zhang**
- Related Coursework: Computer Aided Geometric Design, Computer Graphics, Finite Element Method, Numerical Analysis, Mathematical Analysis, Numerical Algebra

## RESEARCH INTERESTS

### 3D Computer Vision & Graphics

- Differentiable Rendering
- 3D Generative Models
- Scene Modeling and Representing
- Human-Object Interaction and Pose Estimation

Open to Exploring New Research Domains beyond Current Interests

## SKILLS & HOBBIES

**Programming** Python, C++

**English** TOEFL 105 (R30/L29/S19/W27)

**Tools** pytorch,  $\LaTeX$ , Markdown, Matlab, Mathematica, Adobe (Illustrator, Premiere, Photoshop)

## RESEARCH EXPERIENCE

### Shape from Semantics: 3D Shape Generation from Multi-View Semantics 2025

- **Liangchen Li**, Caoliwen Wang, Yuqi Zhou, Bailin Deng, Juyong Zhang
- Tried to add a random optimization algorithm to the 3D Gaussian scene representation to improve the camera tracking and rendering effects.
- *Project Page* | *Paper Link*

### Joint Deblurring and 3D Reconstruction for Macrophotography 2024

- Yifan Zhao, **Liangchen Li**, Yuqi Zhou, Kai Wang, Yan Liang, Juyong Zhang
- Proposed a joint deblurring and 3D reconstruction method for microscopic imaging.
- Accepted by **PG 2025**. *Paper Link*

### $L_0$ -Sampler: An $L_0$ Model Guided Volume Sampling for NeRF 2023

- **Liangchen Li**, Juyong Zhang
- Proposed the  $L_0$ -Sampler, an enhanced sampling strategy that concentrates sampling by shaping  $w(t)$  to approximate the  $L_0$  distance form.
- Accepted by **CVPR 2024**
- *Project Page* | *Code Link*

### A Dataset for Human-Object Interaction Volumetric Video Generation 2025

- As the leading researcher. Advisor: Prof. Juyong Zhang.
- Proposed a high-fidelity dataset and a more flexible pipeline for 4D scene generation on the human-object interaction scene.