

Yaoan Gao (高耀安)

Ph.D. Candidate at Zhejiang University

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EDUCATION

Zhejiang University (ZJU)

Ph.D. in Computer Science and Technology

Hangzhou, China

September 2022 - Present

- Advisor: Prof. Weiwei Xu
- Lab: State Key Laboratory of CAD&CG, Zhejiang University
- Interest: Inverse Rendering, Real-Time Rendering

Xi'an Jiaotong University (XJTU)

BSc in Automation

Xi'an, China

September 2018 - July 2022

- GPA: 3.98/4.3

University of Wisconsin-Madison (UW-Madison)

Visiting Internation Student Program

Madison, U.S.

September 2019 - December 2019

- GPA: 4.0/4.0

SKILLS

Programming : Python (PyTorch), C/C++ (OpenGL / CUDA / OptiX), Matlab, Latex...

Software : PhotoShop, Premiere Pro, Unity, Blender, Maya, Substance Painter...

Language: Chinese (native), English (as working language), Japanese(some knowledge of)

PUBLICATIONS

<i>TOG</i>	SAILOR: Synergizing Radiance and Occupancy Fields for Live Human Performance Capture Zheng Dong, Ke Xu, Yaoan Gao , Qilin Sun, Hujun Bao, Weiwei Xu*, Rynson W.H. Lau	2023
<i>ICCRD</i>	Comparison and Analysis between Different Versions of FXAA Yaoan Gao , Pingping Lin, Renzi Liu	2022

EXPERIENCE

Ant Group

Algorithm Intern

Hangzhou, China

April 2023 - Present

- Exploring how to reconstruct and drive high-quality digital human, mainly in large-scale dynamic scenes

RESEARCH PROJECTS

Light field renderer that supports aperture and depth of field

June 2021 - September 2021

- Implemented a system that incorporates dynamic parameterization, GLSL-based rendering and optimized data structure for input images
- Support simulation of camera effects: aperture and depth of field
- Improve the system performance: FPS: 200 → 700; GPU Mem: 2.9GB → 1.7GB

High-performance real-time ray tracing for inverse rendering

November 2021 - June 2022

- Implemented a differentiable high-performance real-time ray-tracing system that incorporates neural luminance cache based on Mitsuba2
- Suppress noise, increase the order of indirect lighting while support backward propagation