

Huzhiyuan Long

huzhiyuan.long@outlook.com • c-none.github.io

Citizenship: China

Research interests

Computer graphics, Rendering

Education

2020 – 2024 **Tongji University** – Shanghai
BA in Software Engineering

Publications

2023 **SRSSIS: Super-Resolution Screen Space Irradiance Sampling for Lightweight Collaborative Web3D Rendering Architecture**
Huzhiyuan Long, Yufan Yang, Chang Liu, Jinyuan Jia.
CAD/graphics 2023.

Research experience

12 2021 – 6 2024 **Smart3D Media Lab**
Mentor: Professor Jinyuan Jia (Tongji University).

- 1) Web3D huge model transmission based on visibility precomputation.
- 2) Collaborative rendering. A rendering architecture that distributes real-time rendering tasks to both client and server simultaneously.
- 3) Ray tracing on WebGPU. Real time ray traced global illumination on browser based on ReSTIR DI&GI.

7 2024 – now **Multimedia Computing Group**
Mentor: Professor Jie Guo (Nanjing University).
ReSTIR for caustics path.

Honors and scholarships

- 2022 Undergraduate School-level Scholarship Third Prize (Tongji University)
- 2021 Undergraduate School-level Scholarship Third Prize (Tongji University)

Awards

- 2022 China Collegiate Programming Contest - Shanghai Collegiate Programming Contest Bronze Medal
- 2022 Group Programming Ladder Tournament Individual Third Prize
- 2021 “Dream-it” CUP Tongji University Programming Contest Third Place Award
- 2021 Tongji University Mathematical Modeling Competition Third Prize

Technical skills

Programming languages

modern C++, JavaScript, Python

Tools

WebGPU, Falcor, Vulkan, Blender, UE

Languages

Chinese, English, Japanese(JLPT N2)