

Huzhiyuan Long

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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.

Honors and scholarships

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

Awards

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| 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

API

WebGPU, Vulkan

Languages

Chinese, English, Japanese(JLPT N2)