

Wenjian Zhou

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SKILLS	CUDA, DirectX, OpenGL, Pytorch, C++, C, Python.
EDUCATION	<p>University of Utah, Salt Lake City, Utah, USA</p> <ul style="list-style-type: none">▪ M.S. in Computing (dropped) Aug 2023 – Jan 2024▪ Core courses: Interactive Computer Graphics, Visualization of Scientific Data, Deep Learning, Machine Learning <p>Guangdong University of Technology, Guangzhou, Guangdong, China</p> <ul style="list-style-type: none">▪ B.S. in Computer Science Sep 2019 – Jul 2023
EXPERIENCE	<p>Booming Tech, Hangzhou, Zhejiang, China</p> <ul style="list-style-type: none">▪ Graphics Engineer (Rendering) Feb 2025 – Now<ul style="list-style-type: none">• Developing real-time rendering techniques in our leading MMO: Conqueror's Blade• Implementing rendering algorithms for in-house engine Chaos Engine, implemented Brent Burley's subsurface scattering algorithm for better skin rendering. <p>Nankai University, Tianjin, China</p> <ul style="list-style-type: none">▪ Undergraduate Research Intern Mar 2022 – Dec 2022<ul style="list-style-type: none">• Supervisor: Prof. Beibei Wang• Working on physics-based material appearance, specifically microfacet theory and its multiple scattering application, which originates from the Boltzmann transport equation.• Developed a 2D to 3D pytorch tensor kernel to help reduce the storage of the 3D occupancy map. <p>University of Utah, Salt Lake City, UT, USA</p> <ul style="list-style-type: none">▪ Teaching Assistant Aug 2024 – Dec 2024<ul style="list-style-type: none">• TA for: Introduction to Computer Graphics, Image Processing.
PROJECTS	<p>CUDA-Accelerated ReSTIR DI [Github]</p> <ul style="list-style-type: none">▪ Interactive Computer Graphics Jan 2024 – May 2024<ul style="list-style-type: none">• An interactive ray tracing renderer that implements ReSTIR DI. Implemented with OpenGL and CUDA.• Implemented GRIS(Generalized Resampled Importance Sampling), spatiotemporal reuse of GRIS samples, CUDA acceleration on rendering. <p>BSDF Visualization [Github]</p> <ul style="list-style-type: none">▪ Visualization for Scientific Data Jan 2024 – May 2024<ul style="list-style-type: none">• An interactive WebGL application for visualizing various BSDF (Bidirectional Scattering Distribution Function) lobes, which provides better intuitive understanding of these BSDFs and how lights interact with them.• Implemented BSDF lobes: diffuse, specular, microfacet BRDF and BSDF (rough conductor/dielectric surface). <p>Tiny-NeRF [Github]</p> <ul style="list-style-type: none">▪ Deep Learning Aug 2023 – Dec 2023<ul style="list-style-type: none">• A tiny version of NeRF, which is a neural network based volume rendering algorithm for novel view synthesis.• Implemented the original NeRF model structure, trained, and then did optimization to make it smaller. <p>Physically-Based Renderer [Github]</p> <ul style="list-style-type: none">▪ Individual Project during my undergrad Sep 2021 – Jan 2022<ul style="list-style-type: none">• A physically based renderer based on Ray Tracing in One Weekend and Physically-based Rendering: From Theory to Implementation. It was developed to solidify my understanding of Monte Carlo path tracing and volumetric path tracing.• Supported integrators: path tracing, volumetric path tracing.• Supported BSDFs: diffuse, (rough) dielectric, (rough) conductor, microfacet model.
AWARDS & SCHOLARSHIPS	<ul style="list-style-type: none">▪ HPG 2024 Student Competition 2nd Prize. [Link] [Entry] 2024▪ Tuition Waive Scholarship, Kahlert School of Computing 2024 Fall
LANGUAGES	<ul style="list-style-type: none">▪ Chinese: Native.▪ English: Fluent.

