

Christian Döring

Curriculum Vitae

Education

2023 – present
April

M.Sc. Electrical and Computer Engineering, *Technical University of Munich*.

2019 – 2023
October March

B.Sc. Electrical and Computer Engineering, *Technical University of Munich*.

Thesis Title: Evaluation of Differentiable Inverse Rendering using Multi-View RGB Data

2011 – 2019
September June

Abitur (A-Levels), *Gymnasium Bruckmühl*.

Publications

Real-time Neural Rendering of Dynamic Light Fields,

Arno Coomans, Edoardo A. Dominici, Christian Döring, Joerg H. Mueller, Jozef Hladky, Markus Steinberger

Computer Graphics Forum (EG), 2024

Work Experience

2024 – present
April

Research Working Student, *Huawei Technologies*.

- Development on Dr.Jit/Mitsuba3

2023 – 2024
August February

Research Intern, *Huawei Technologies*.

- Researched Real-time Neural Rendering algorithms
- Gained experience with Mitsuba3

2021 – 2021
July August

Embedded Systems Developer, *Aurum GmbH*.

- Developed NFC library for STM32 in C

2017 – 2017
July July

Embedded systems development, *Lauterbach GmbH*.

2017 – 2017
July July

Support, *Electronic Theater Controls (ETC), Holzkirchen*.

Side Projects

Hephaestus-jit, Just In Time Compiler (JIT) for Vulkan, inspired by Dr.Jit. Implemented with own render graph solution. Includes cooperative matrix multiplication (KHR) and a port of tiny-cuda-nn in GLSL.

Vulkan-rt, Path tracer written in Rust using the screen-13 library. It supports the Disney BSDF with Next Event Estimation.

Mitsuba3 Experiments, Implementation of forward and Differentiable path tracing algorithms in Mitsuba3, such as *ReSTIR GI* and *Large Steps in Inverse Rendering*.

Skills

Programming

- **Rust**, C/C++
- **Vulkan**, CUDA
- **Python**, Lua
- LaTeX, Typst

Languages

- German (native)
- **English** (fluent B2+/C1)