# Christian Döring

# Graduate Student

# Education

2023-present M.Sc. Electrical and Computer Engineering, Technical University of Munich

2019–2023 B.Sc. Electrical and Computer Engineering, Technical University of Munich

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

2011–2019 Abitur (A-Levels), Gymnasium Bruckmühl

# Publications

## 2024 Real-time Neural Rendering of Dynamic Light Fields

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

🖺 Project 🕅n Computer Graphics Formum (EG), 2024

# Work Experience

#### 2025 Research Intern NVIDIA, Zurich

- Differentiable Rendering
- Development on Dr.Jit/Mitsuba3

### 2024-2025 Research Working Student Huawei Technologies, Munich

- Development on Dr.Jit/Mitsuba3
- Real-time Neural Rendering Research

# 2023-2024 Research Intern Huawei Technologies, Munich

O Real-time Neural Rendering Research

# 2021 Embeded Systems Intern Aurum GmbH, Munich

Developed NFC library for STM32 in C

2017 Intern Lauterbach GmbH

2017 Intern Electronic Theater Controls (ETC), Holzkirchen

# Side Projects

Hephaestus, 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.

Source

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

Source

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

# Skills

- Programming: O Rust, C/C++
  - Vulkan, CUDA
  - Python, Lua
  - LaTeX, Typst

Languages: O German (native)

English (fluent B2+/C1)