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### Education

- Sept. 2011 - June 2019 **Abitur (A-Levels)**, *Gymnasium Bruckmühl*.
- Oct. 2019 - Mar 2023 **B.Sc., Electrical and Computer Engineering**,  
*Technical University of Munich*,  
Thesis Title: Evaluation of Differentiable Inverse Rendering using Multi-View RGB Data.
- Since Apr. 2023 **M.Sc., Electrical and Computer Engineering**,  
*Technical University of Munich*.

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### Internships

- Aug 23 - Feb 24, 2023 **Intern, Neural Rendering Researcher**, *Huawei Technologies*, Munich.
- July 26 - Aug 28, 2021 **Developer**, *Aurum GmbH*, Munich.  
Development of an RFID/NFC interface Device for writing to protectable memory of IoT sensors.
  - NFC protocol standard e.g. iso14443
  - OOP like programming in C99
- July 10 - July 14, 2017 **Intern, client support**, *Electronic Theater Controls (ETC)*, Holzkirchen.
- July 17 - July 21, 2017 , *Lauterbach GmbH*, Höhenkirchen-Siegertsbrunn.

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### Technical Experience

- AI controlled model car Implementation of a neural network framework in C++ for controlling a model car with a Raspberry Pi for a school project.
- Vulkan-rt Path tracer written in Rust using the scene-13 library as a Vulkan abstraction. It supports the Disney BSDF with Next Event Estimation.
- VkJit Prototype Just In Time Compiler (JIT) with SPIRV/Vulkan as a backend, inspired by Dr.Jit
- Large Steps in Mitsuba3 Implementation of the Large Steps in Inverse Rendering paper in Mitsuba3 using its PyTorch integration
- Paper for EG2024 Paper on real time neural rendering using multidimensional hash grid encodings. Based on NeRad, written in Mitsuba3. (Conditionally accepted)

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### Programming Languages

- C++ Experience in modern C++ as well as C89 and C99. I have written Several projects in C/C++ from high level graphics applications to low level embedded software.
- Python Experience using Python with PyTorch, Tensorflow and Mitsuba for ML.
- Rust Experience using Rust for GPGPU and computer graphics. As Rust seems to be a promising new language for low and high level programming without some caveats of C++, I use it for my personal projects.

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### Other Abilities and Skills

#### Languages

German native speaker  
English B2+/C1