

EDUCATION

Technical University of Munich PhD Student at Visual Computing & AI Lab Supervisor: Matthias Niessner – Research Topic: Relightable Avatars	Munich, Germany May 2024 – Present
Technical University of Munich M.Sc. in Informatics Final Grade: 1.6 (1.0) – Thesis: Leveraging Foundation Models for Material Generation.	Munich, Germany April 2021 – January 2024
University of South Australia Semester Abroad Final Grade: HD (High-Distinction)	Adelaide, Australia February 2020 – July 2020
University of Erlangen-Nuremberg B.Sc. in Computer Science Final Grade: 2.1 (1.0)	Erlangen, Germany October 2017 – March 2021

PUBLICATIONS

BecomingLit: Relightable Gaussian Avatars with Hybrid Neural Shading <u>Jonathan Schmidt</u> , Simon Giebenhain, Matthias Nießner Project Page: https://jonathsch.github.io/becominglit/	NeurIPS 2025
LiDAR View Synthesis for Robust Vehicle Navigation Without Expert Labels <u>Jonathan Schmidt</u> , Qadeer Khan, Daniel Cremers Project Page: https://jonathsch.github.io/lidar-synthesis/ Best Paper Award Candidate	ITSC 2023

EXPERIENCE

Technical University of Munich PhD Student Supervision of 2 Master Students – Teaching 3D Vision Seminar and Advanced Deep Learning Course – Reviewer at Eurographics 2026	Munich, Germany May 2024 – Present
University of Erlangen-Nuremberg Student Assistant Researcher - IT Security Infrastructures Lab Creation of a dataset for ML-based web-tracking detection. – Implemented a web crawler to index known web trackers and their behavior to Browser APIs.	Erlangen, Germany September 2020 - March 2021

SELECTED UNIVERSITY PROJECTS

Leveraging Foundation Models for Material Generation

Learning to synthesize PBR materials for untextured shapes – Usage of synthetic images from pre-trained diffusion models instead of real-world data.

Inverse Rendering with Neural Shading

Image-based 3D reconstruction using differentiable Monte-Carlo rendering – Introduction of a neural material model and diffusion-based denoising.

Weakly-supervised 3D Semantic Scene Reconstruction

Learning to reconstruct object instances in a scene without annotated shape pairs – achieved similar quality as state-of-the-art supervised methods.

SKILLS

- **Languages:** English (C1: Full Professional Proficiency), German (Native)
- **Technical Skills:** Python, PyTorch, C/C++/CUDA, Computer Vision, Relighting, (Dynamic) 3D Reconstruction, Avatars, Inverse Rendering, Gaussian Splatting