

Hi, I'm Lars. I'm a software engineer and researcher, passionate about neural rendering and computational photography. I have experience with mobile camera image signal processing, as well as 3D computer vision and graphics and love working on challenging problems together with a great team.

EDUCATION

- Stanford University, Stanford, CA** *Sep 2017 – Jun 2019*
Master of Science (M. Sc.) in Electrical Engineering, Final GPA: 4.13 / 4.00
Relevant classes (all A+): Machine Learning (CS 229), CNNs for Visual Recognition (CS 231N), Digital Image Processing (EE 368), Computational Imaging (EE 367), Intro to Computer Graphics (CS 148)
- RWTH Aachen University, Aachen, Germany** *Oct 2013 – Mar 2017*
Electrical Engineering, Information Technology, Computer Engineering B. Sc.
Final Grade: 1.1, **Best student out of 603 graduates in the program**

WORK AND PRACTICAL EXPERIENCE

- Research Engineer (Computational Photography), Adobe, San Jose, CA** *since Apr 2021*
 - Leading the design of a highly efficient mobile RAW image processing pipeline (C++, Halide)
 - Developing VisionTransformer (ViT)-based models to parametrize mobile RAW pipeline (PyTorch, C++)
 - Publishing innovative work in top-tier computer vision and graphics conferences and journals
 - Driving the integration of advanced AI technologies into products such as Lightroom or Photoshop
 - Mentoring interns and providing guidance on research projects
- Sr. Member of Technical Staff (Compute Team) at Raxium, Fremont, CA** *Sep 2019 – Jan 2021*
 - Research in 3D Vision and Computer Graphics (3D Reconstruction and Novel View Synthesis)
 - Creation of Neural Rendering models in Tensorflow and PyTorch, published at CVPR 2021
 - Design and calibration of a synchronized multi-view RGBD capture system (Python, SolidWorks)
 - Creation of automated image analysis scripts to support material science teams (Python)
- Course Assistant (CA) for CS231N: Convolutional Neural Networks for Visual Recognition, Stanford** *Apr - Jun 2019*
- Computational Imaging Intern, Light, Palo Alto** *Oct - Dec 2018*
- Research Assistant at IVMS Research Lab (Prof. Girod), Stanford University** *Apr - Sep 2018*
 - 3D point cloud registration algorithms and 3D shape description (MATLAB)
- Research Assistant at Computational Imaging Lab (Prof. Wetzstein), Stanford University** *Jan - Jun 2018*
 - Robust Feature Detection in Light Field Images for Structure from Motion (C++, Python)
- Intern for Modelling and Control of Electrical Drives at Daimler AG, Stuttgart, Germany** *May - Aug 2017*
- Research Assistant at Institute for Power Electronics and Electrical Drives (ISEA)** *Apr 2016 - Apr 2017*
 - Research on instantaneous voltage measurements, published at IEEE INTELEC 2016
 - Final bachelor thesis research on online sensor calibration, published at IEEE PEDS 2017
- Student Assistant (TA) at Institute of Imaging & Computer Vision and IENT, RWTH Aachen University**
 - Classes taught: "Mathematical Methods in Electrical Engineering", "Signals and Systems" *2014 - 2016*

RELEVANT PUBLICATIONS

DiffusionRig: Learning Personalized Priors for Facial Appearance Editing Zheng Ding, Xuaner Zhang, Zhihao Xia, Lars Jebe , Zhuowen Tu, Xiuming Zhang <i>CVPR 2023</i>	2023
Neural Photo Finishing Ethan Tseng, Yuxuan Zhang, Lars Jebe , Xuaner Zhang, Zhihao Xia, Yifei Fan, Felix Heide, Jiawen Chen <i>ACM SIGGRAPH ASIA 2022 (Journal Track)</i>	2022
Neural Lumigraph Rendering Petr Kellnhofer, Lars Jebe , Andrew Jones, Kari Pulli, Gordon Wetzstein <i>CVPR 2021, Oral, Best Paper Candidate</i>	2021

LEADERSHIP AND ENGAGEMENT

Reviewer Duty: ACM SIGGRAPH, ACM Transactions on Graphics (TOG), Eurographics, CVPR, ICCV	<i>since 2021</i>
Vice President of the <i>Stanford German Student Association (SGSA)</i>	<i>Jun 2018 – Jun 2019</i>
Group Leader (Marketing) at <i>AC.E – Aachener Entrepreneurship Team e.V.</i>	<i>Apr 2016 - Apr 2017</i>
Course instructor of the computer science project group " <i>IT4Kids</i> "	<i>Feb 2015 - Jul 2015</i>
Student Engineer at <i>Ecurie Aix – Formula Student Team der RWTH Aachen e.V.</i>	<i>Jul 2014 - Aug 2015</i>

ACHIEVEMENTS AND AWARDS

German Academic Exchange Service (DAAD) Fellowship for Graduate Studies	<i>Sept 2017 – Jun 2019</i>
Scholarship of the German Academic Scholarship Foundation	<i>Jul 2015 – Jun 2019</i>
Award of the Association of German Electrical Engineers (VDE)	<i>Feb 2016</i>
MATLAB Team Award for the best student project in robotics at RWTH Aachen University	<i>Feb 2014</i>

You can learn more about me and about selected projects on my website: <https://lcjebe.github.io/>. Looking forward to connecting!