# Lars Jebe

<u>lcjebe.github.io</u> linkedin.com/in/larsjebe

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 / 4.30

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

#### PRACTICAL AND VOCATIONAL EXPERIENCE

### Research Engineer (Computational Imaging), Adobe, San Jose, CA

since Apr 2021

- Development of mobile RAW pipeline / software ISP (C++, Halide)
- Research on differentiable photographic rendering pipelines, to appear at ACM SIGGRAPH ASIA 2022
- Research on creating multi-perspective photographs using NeRF

#### 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

- Automated evaluation of measurement data (MATLAB)
- Implemented control algorithm for multiphase electrical drives (Simulink)

### 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**

# **Neural Lumigraph Rendering**

2021

Petr Kellnhofer, Lars Jebe, Andrew Jones, Kari Pulli, Gordon Wetzstein

CVPR 2021, Oral, Best Paper Candidate

# **Neural Photo Finishing**

2022

Ethan Tseng, Yuxuan Zhang, **Lars Jebe**, Xuaner Zhang, Zhihao Xia, Yifei Fan, Felix Heide, Jiawen Chen to appear in ACM SIGGRAPH ASIA 2022 (Journal Track)

# LEADERSHIP AND ENGAGEMENT

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

# **ACHIEVEMENTS AND AWARDS**

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

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