

# MARK BOSS

RESEARCH SCIENTIST  
COMPUTER VISION/GRAPHICS

## CONTACT

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## ABOUT ME

I am a researcher at Unity Technologies. Before that, I was a Ph.D. student at the University of Tübingen in the computer graphics group of Prof. Hendrik Lensch. My research interests lie at the intersection of machine learning and computer graphics, with the main focus on inferring physical properties (shape, material, illumination, etc.) from images.

## EDUCATION

### Ph.D. Student

*Jun. 2018 - Jun. 2022*

University of Tübingen, Germany  
Advisor: Prof. Hendrik Lensch

### Master of Science (M.Sc.)

*Feb. 2016 - Apr. 2018*

University of Tübingen, Germany

### Bachelor of Science (B.Sc.)

*Sep. 2012 - Feb. 2016*

Osnabrück University of Applied  
Sciences, Germany

## WORK EXPERIENCE

### Senior Research Scientist - Unity Technologies - Germany

*Sep. 2022 - present*

### Student Researcher - Google - Germany

*Jun. 2021 - Apr. 2022*

### Research Intern - NVIDIA - Westford, MA

*Apr. 2019 - Jul. 2019*

### Android Developer - zahlz - Osnabrück, Germany

*Jul. 2015 - Jun. 2017*

## SELECTED PUBLICATIONS

### SAMURAI: Shape And Material from Unconstrained Real-world Arbitrary Image collections

*May 2022 - arXiv - Mark Boss, Andreas Engelhardt, Abhishek Kar, Yuanzhen Li, Deqing Sun, Jonathan T. Barron, Hendrik P. A. Lensch, Varun Jampani*

### Neural-PIL: Neural Pre-Integrated Lighting for Reflectance Decomposition

*Dec. 2021 - NeurIPS - Mark Boss, Varun Jampani, Raphael Braun, Ce Liu, Jonathan T. Barron, Hendrik P. A. Lensch*

### NeRD: Neural Reflectance Decomposition from Image Collections

*Oct. 2021 - ICCV - Mark Boss, Raphael Braun, Varun Jampani, Jonathan T. Barron, Ce Liu, Hendrik P. A. Lensch*

### Two-shot Spatially-varying BRDF and Shape Estimation

*Jun. 2020 - CVPR - Mark Boss, Varun Jampani, Kihwan Kim, Hendrik P. A. Lensch, Jan Kautz*