

# David Stutz

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## Education

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### MPI for Informatics & Saarland University

Ph.D. Computer Science

Advisors: *Bernt Schiele, Matthias Hein*

10/2017 – today, Saarbrücken, GER

### RWTH Aachen

M.Sc. Computer Science, Minor in Mathematics

GPA: 1.0/1.0, Graduated with Distinction

Thesis: *“Shape Completion from Bounding Boxes with CAD Shape Priors”*

Advisors: *Andreas Geiger, Bastian Leibe*

10/2014 – 09/2017, Aachen, GER

### Georgia Institute of Technology

Graduate Exchange Student

GPA: 4.0/4.0

Advisor: *Irfan Essa*

01/2015 – 05/2015, Atlanta, USA

### RWTH Aachen

B.Sc. Computer Science, Minor in Mathematics

GPA: 1.1/1.0, Graduated with Distinction

Thesis: *“Superpixel Segmentation using Depth Information”*

Advisors: *Alexander Hermans, Bastian Leibe*

10/2011 – 09/2014, Aachen, GER

### Gymnasium Calvarienberg

Abitur (A-Levels)

GPA: 1.2/1.0

Majors: *Physics, English, Geography*

08/2002 – 03/2011, Ahrweiler, GER

## Summer Schools

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### Heidelberg Laureate Forum

09/2019, Heidelberg, GER

### DeepLearn Summer School

07/2019, Warsaw, POL

### Machine Learning Summer School

Universidad Autónoma de Madrid

09/2018, Madrid, ESP

### Pre-Doc Summer School on Learning Systems

MPI for Intelligent Systems & ETH Zürich

07/2017, Zürich, CHE

## Scholarships & Awards

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Qualcomm Innovation Fellowship Europe 2019

STEM Award IT 2018

Springorum-Denk Münze 2018

RWTH Aachen Dean's List 2012 – 2017

Germany Scholarship 2014 – 2017

Accenture Future Technology Leaders 2015 – 2017

Hans Hermann-Voss Scholarship 2015

careerloft.de Scholarship 2012 – 2017

e-fellows.net Scholarship 2011 – 2017

German Physical Society Book Price 2011

German Junior Academy 2005

Last updated: April 19, 2021.

Grades given in their original grading system.

## Selected Publications

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- [1] [D. Stutz](#), M. Hein, B. Schiele. *Relating Adversarially Robust Generalization to Flat Minima*. ArXiv, 2021.
- [2] [D. Stutz](#), N. Chandramoorthy, M. Hein, B. Schiele. *Random and Adversarial Bit Error Robustness: Energy-Efficient and Secure DNN Accelerators*. ArXiv, 2021.
- [3] [D. Stutz](#), N. Chandramoorthy, M. Hein, B. Schiele. *Bit Error Robustness for Energy-Efficient DNN Accelerators*. MLSys, 2021.
- [4] [D. Stutz](#), M. Hein, B. Schiele. *Confidence-Calibrated Adversarial Training: Generalizing to Unseen Attacks*. ICML, 2020.
- [5] [D. Stutz](#), M. Hein, B. Schiele. *Disentangling Adversarial Robustness and Generalization*. CVPR, 2019.
- [6] [D. Stutz](#), A. Geiger. *Learning 3D Shape Completion under Weak Supervision*. IJCV, 2018.
- [7] [D. Stutz](#), A. Geiger. *Learning 3D Shape Completion from Laser Scan Data with Weak Supervision*. CVPR, 2018.
- [8] [D. Stutz](#), A. Hermans, B. Leibe. *Superpixels: An Evaluation of the State-of-the-Art*. CVIU, 2018.

## Research Experience

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### DeepMind, Research Scientist Intern

04/2021 – today, London, UK (remote)

### MPI for Informatics, Research Assistant

Research regarding the robustness of deep neural networks against adversarial examples [5, 4, 1] and random/adversarial bit errors in accelerators [3, 2].

10/2017 – today, Saarbrücken, GER

### MPI for Intelligent Systems, Student Research Assistant

Research on weakly-supervised shape completion of point clouds [6, 7]; implementation of KITTI's 3D object detection benchmark.

01/2017 – 09/2017, Tübingen, GER

### VCI, RWTH Aachen, Student Research Assistant

Comprehensive comparison of state-of-the-art superpixel algorithms [8].

05/2015 – 03/2016, Aachen, GER

## Teaching Experience

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### MATHCCES, RWTH Aachen, Tutor

Weekly tutorials/grading of exercises for mathematics lectures.

10/2013 – 01/2014, 04/2014 – 09/2014, Aachen, GER

## Industry Experience

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### Microsoft, Software Engineering Intern

Development of features for “Centralized Deployment”, allowing to easily distribute Microsoft Office add-ins within organizations.

07/2016 – 09/2016, Dublin, IRL

### Hyundai MOBIS, Research Engineering Intern

Development of an experimental prototype to evaluate deep neural networks for pedestrian detection and tracking.

04/2016 – 06/2016, Frankfurt am Main, GER

### Fyusion, Research Scientist

Development of experimental prototypes for line segment detection/tracking, keypoint tracking, statistical clustering and pedestrian detection/tracking.

05/2015 – 03/2016, San Francisco, USA (remote)

### RS Computer, Student Employee

Development of web applications.

01/2009 – 03/2014, 10/2014 – 04/2015, 10/2016 – 12/2016, Sinzig, GER

### Fraunhofer FKIE, Student Employee

Development of web analytics and data visualization tools.

05/2011 – 07/2011, 03/2012, 08/2012 – 09/2012, Wachtberg, GER