

I AM RWTH STUDENT AND
GEORGIA TECH ALUMNI
STUDYING COMPUTER SCIENCE AND MATH
DAVID STUTZ
COMPUTER VISION RESEARCH SCIENTIST

EDUCATION

RWTH Aachen University

M.Sc., Computer Science (GPA: 1.0)

B.Sc., Computer Science (with Distinction, GPA: 1.1)

Thesis: "Superpixel Segmentation using Depth Information"

Advisor: Prof. Dr. Bastian Leibe

10/2011 – today, Aachen, GER

Georgia Institute of Technology

Graduate Exchange Student (GPA: 4.0)

01/2015 – 05/2015, Atlanta, GA

Coursera, edX, Kadenze

Digital Image and Video Processing, Linear and Integer Programming, Control of Mobile Robots, Natural Language Processing, Social Network Analysis, Game Theory, Cryptography, Introduction to Finance, Learning from Data, Introduction to Natural Language Processing, Creative Applications of Deep Learning with TensorFlow

AWARDS

Accenture Future Technology Leaders 2015 – today

Hans Hermann-Voss Scholarship 2015

Germany Scholarship 2014 – today

RWTH Aachen University Dean's List 2012 – 2016

careerloft.de Online Scholarship 2012 – today

e-fellows.net Online Scholarship 2011 – today

German Physical Society Book Price 2011

PUBLICATIONS

[1] D. Stutz, A. Hermans, B. Leibe. *Superpixels: An Evaluation of the State-of-the-Art*. CVIU (accepted).

[2] D. Stutz. *Superpixel Segmentation: An Evaluation*. GCPR, 2015.

PROJECTS

Blog

Articles, reading notes and code snippets at davidstutz.de.

Computer Vision

Source code of my thesis and publications, including superpixel algorithms and the corresponding benchmark; implementations of graph-based image and video segmentation and iPiano for non-convex and non-smooth optimization.

Courses and Academia

Publications, thesis, seminar papers and slides, course exercises and course projects.

Web Development

Plugins and themes for the frontend framework Twitter Bootstrap, the content management systems Wordpress and CMSimple and the MVC framework Kohana.

SKILLS

C++ (OpenCV, Boost), Python (Caffe, TensorFlow), Lua (Torch), MatLab, LaTeX (PGFPlots, TikZ), PHP, JavaScript (jQuery, d3.js), SQL, HTML/CSS

Equipped with a unique set of skills from experience in industry and academia, I want to pursue original research in computer vision, particularly 3D scene understanding, to help autonomous cars navigate safely through our cities.

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EXPERIENCE

Max Planck Institute for Intelligent Systems

Student Research Assistant

In my master thesis, I am using generative deep models to complete 3D shapes in point clouds by leveraging CAD models.

01/2017 – today, Tübingen, GER

Microsoft Ireland Research Limited

Software Engineering Intern

In the Office Marketplace Experience Team, I worked on Centralized Deployment allowing administrators to distribute Office Add-Ins within organizations. The experience improved my software engineering and communication skills and taught me to continuously reflect and learn.

07/2016 – 09/2016, Dublin, IRL

MOBIS Parts Europe N.V.

Front Camera Intern

Development of an experimental prototype to evaluate deep learning techniques for pedestrian detection. I got first-hand insights on advanced driver assistance systems, their requirements and the problems faced during development.

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

Computer Vision Group, RWTH Aachen University

Student Research Assistant

Starting with the results from my bachelor thesis, published at GCPR 2015 [2], I worked towards a more comprehensive comparison of recent superpixel algorithms. I improved my academic writing and presentation skills and learned to value reproducible research.

05/2015 – 03/2016, Aachen, GER

Fyusion Inc.

Research Scientist

I developed experimental prototypes tackling various computer vision problems including line segment and keypoint tracking, statistical clustering and pedestrian detection. By working from home, I learned to communicate results and problems effectively and self-organize my work.

05/2015 – 03/2016, San Francisco, CA

MATHCCES, RWTH Aachen University

Tutor, "Calculus" and "Mathematical Foundations II"

Responsible for 30-50 students, I presented weekly exercises, graded homework and final exams, and acted as contact person. This experience improved my mathematical understanding as well as presentation skills.

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

RS Computer GmbH & Co. KG

Web Developer

I worked on projects including plugin and theme development for content management and e-commerce systems. Additionally, I completed several development projects for medium-sized companies. This greatly benefited my project management skills.

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

Fraunhofer FKIE

Student Employee

Working on user interfaces for web analytics, including data visualization, this work had major influence on my decision to pursue computer science and taught me proper programming, and software engineering.

10/2009, 05/2011 – 07/2011, 03/2012, 08/2012 – 09/2012, Wachtberg, GER

Grades given in their original grading systems. References upon request.

Last updated: April 17, 2017.