# RWTH STUDENT AND GEORGIA TECH ALUMNI STUDYING COMPUTER SCIENCE AND MATH

# DAVID STUTZ

## **CURRENTLY**

Front Camera Intern

**RWTH Aachen University** M.Sc. in Computer Science MOBIS Parts Europe N.V.

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CONTACT

I am passionate about computer science – its versability, its origins in mathematics, its applications. Focusing on computer vision and machine learning, I combine the depth of theory with the most interesting applications of todays world.

## **EDUCATION**

#### **RWTH Aachen University**

M.Sc. in Computer Science (expected 2017, GPA: 1.0) B.Sc. in Computer Science (with distinction, GPA: 1.1)

Coursework: Computer Vision, Machine Learning, Data Mining, Numerical Analysis, Convex Optimization, Mathematical Image processing, Data Science, Complexity Theory

MOOCs: Linear and Integer Programming, Social Network Analysis, Game Theory, Cryptography, Introduction to Finance, Introduction to Operations Management

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)

Coursework: Statistical Techniques in Robotics, Probabilistic Graph-

ical Models, Special Problems in Computer Vision

Advisor: Prof. Irfan Essa, Ph.D.

01/2015 - 05/2015, Atlanta, GA

## **AWARDS**

#### Accenture Future Technology Leaders 2015 - today

Development program including workshops, networking events and individual mentoring awarded to excellent STEM students.

Hans Hermann-Voss Scholarship 2015

Study abroad scholarship worth €1800 awarded for excellent grades.

Germany Scholarship 2014 - today

Scholarship worth €3600/year awarded for excellent grades.

RWTH Aachen University Dean's List 2012, 2013, 2014

Awarded to the top 5% in each discipline.

careerloft.de Online Scholarship 2012 - today e-fellows.net Online Scholarship 2011 - today

PROJECTS on github.com/davidstutz

#### SEEDS Revised and Superpixels Revisited

Efficient implementation of SEEDS superpixels bundled with recent superpixel algorithms including an extended version of the Berkeley Segmentation Benchmark for evaluation.

#### Graph-Based Hierarchical Video Segmentation

Efficient implementation of graph-based hierarchical image and video segmentation.

iPiano: Non-Convex and Non-Smooth Optimization Implementation of iPiano for non-convex and non-smooth optimization by combining forward-backward splitting with an inertial force.

Various Twitter Bootstrap, Wordpress, Kohana and **CMSimple Plugins** 

# **PUBLICATIONS**

Stutz, D.: Superpixel Segmentation: An Evaluation. In: German Conference on Pattern Recognition (GCPR), 2015.

### EXPERIENCE

MOBIS Parts Europe N.V. Front Camera Intern

04/2016 - today, Frankfurt (a.M.), GER

Computer Vision Group, RWTH Aachen University Student Research Assistant, Computer Vision

Evaluation and comparison of state-of-the-art superpixel algorithms.

05/2015 - 03/2016, Aachen, GER

Fyusion Inc.

Research Scientist, Computer Vision

05/2015 - 03/2016, San Francisco, CA

Computational Perception Lab, Georgia Institute of Technology Visiting Graduate Student

Video segmentation using intrinsic characteristics and semantic segmentation of weakly-labeled video.

01/2015 - 05/2015, Atlanta, GA

#### MATHCCES, RWTH Aachen University

Tutor

"Fundamentals of Mathematics II", "Calculus for Computer Science"

Responsibilities include presenting exercises to a group of 30-50 students and grading weekly homework as well as final exams.

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

# **RS** Computer

Web Developer

Development of themes and plugins for CMSimple and Wordpress; and conception, development as well as maintenance of individual web applications for mediumsized companies.

01/2009 - 03/2014, 10/2014 - 04/2015, Sinzig, GER

#### Fraunhofer FKIE Student Employee

Introduction to C++ and 3D modeling using Blender; development of an interactive web application based on PHP and JavaScript for complex database queries based on SQL; plugin development for Piwik; and data visualization using d3.js.

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

## SKILLS

C/C++ (OpenCV), MatLab, PHP, JavaScript (jQuery, d3.js), HTML/CSS (Twitter Bootstrap), SQL, LaTeX (PGFPlots, TikZ), Git, Mercurial